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# SESSIONAL PAPERS

VOLUME 12

THIRD SESSION OF THE ELEVENTH PARLIAMENT

OF THE

DOMINION OF CANADA

SESSION 1911



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2. Public Accounts of Canada, for the fiscal year ended 31st March, 1910. Presented 21st November, 1910, by Hon. William Paterson.  
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3. Estimates for the fiscal year ending 31st March, 1912. Presented 2nd December, 1910, by Rt. Hon. Sir Wilfrid Laurier... ..*Printed for both distribution and sessional papers.*
4. Supplementary Estimates for the fiscal year ending 31st March, 1911. Presented 6th February, 1911, by Hon. W. S. Fielding.  
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5. Further Supplementary Estimates of sums required for the service of the Dominion for the year ending on 31st March, 1911. Presented 16th March, 1911, by Hon. W. S. Fielding.. ..*Printed for both distribution and sessional papers.*
- 5a. Further Supplementary Estimates for the year ending 31st March, 1911. Presented 8th May, 1911, by Hon. W. S. Fielding.  
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- 5b. Further Supplementary Estimates for the fiscal year ended 31st March, 1911. Presented 3rd May, 1911, by Hon. W. S. Fielding.  
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8. Report of the Superintendent of Insurance, for the year ended 31st December, 1910.  
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9. Abstract of Statements of Insurance Companies in Canada for the year ended 31st December, 1910. Presented 27th April, 1911, by Hon. W. S. Fielding.  
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- 10a. Report of the Department of Trade and Commerce, Part II. Canadian Trade with France, Germany, United Kingdom and United States. Presented 32nd November, 1910, by Rt. Hon. Sir Wilfrid Laurier.  
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- 10b. Report of the Department of Trade and Commerce, Part III. Canadian Trade with foreign countries, except France, Germany, the United Kingdom and United States Presented 22nd November, 1910, by Rt. Hon. Sir Wilfrid Laurier.  
*Printed for both distribution and sessional papers.*

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- 10c. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1910. Part IV, Canadian Trade, Miscellaneous. Presented 31st March, 1911, by Hon. W. S. Fielding...  
*Printed for both distribution and sessional papers.*
- 10d. Report of the Department of Trade and Commerce for the fiscal year ended March 31st 1910. Part V, Grain Statistics, including the crop year ended August 31st 1910, and the season of navigation ended December 6th, 1910. Presented 12th May, 1911, by Hon. William Paterson...  
*Printed for both distribution and sessional papers.*
- 10e. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1910, Part VI., Subsidized steamship services. Presented 20th April, 1911, by Hon. William Paterson...  
*Printed for both distribution and sessional papers.*
- 10f. Report of Trade and Commerce for the fiscal year ended 31st March, 1910, part VII.—Trade of foreign countries and Treaties and Conventions. Presented 31st March, 1911, by Hon. W. S. Fielding...  
*Printed for both distribution and sessional papers.*

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**CONTENTS OF VOLUME 7.**

11. Report of the Department of Customs, for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. William Pater-son.  
*Printed for both distribution and sessional papers.*

12. Reports, Returns and Statistics of the Inland Revenue for the Dominion of Canada, for the year ended 31st March, 1910. Presented 21st November, by Hon. William Templeman.. . . .*Printed for both distribution and sessional papers.*

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13. Inspection of Weights and Measures, Gas and Electric Light, for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. William Templeman.  
*Printed for both distribution and sessional papers.*

14. Report on Adulteration of Food, for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. William Templeman.  
*Printed for both distribution and sessional papers.*

15. Report of the Minister of Agriculture for the Dominion of Canada, for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. S. A. Fisher.  
*Printed for both distribution and sessional papers.*

15a. Report of the Dairy and Cold Storage Commissioner for the fiscal year ending the 31st March, 1910. Presented 12th January, 1911, by Hon. S. A. Fisher.  
*Printed for both distribution and sessional papers.*

15b. Report of the Veterinary Director General and Live Stock Commissioner, J. G. Rutherford, V.S., for the year ending 31st March, 1909.  
*Printed for both distribution and sessional papers.*

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16. Report of the Director and Officers of the Experimental Farms, for the year ending 31st March, 1910. Presented 21st November, 1910, by Hon. S. A. Fisher.  
*Printed for both distribution and sessional papers.*

17. Criminal Statistics for the year ended 30th September, 1909. Presented 21st November, 1910, by Hon. S. A. Fisher.. . . .*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 10.**

18. (1908). Return of the eleventh general election for the House of Commons of Canada, held on the 19th and 26th of October, 1908.. . . .*Reprinted.*

18. Return of By-Elections (Eleventh Parliament) House of Commons. 1910.  
*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 11.**

19. Report of the Minister of Public Works on the works under his control for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. William Pugsley.  
*Printed for both distribution and sessional papers.*

19a. Progress Report Ottawa River Storage, for the fiscal year 1909-1910 (supplementing investigations in regard to Georgian Bay Ship Canal project). Presented 6th March, 1911, by Hon. William Pugsley..*Printed for both distribution and sessional papers.*

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**CONTENTS OF VOLUME 12.**

- 19b. Report upon Reconnaissance Survey of the Nelson River, September-October, 1909. Presented 16th February, 1911, by Hon. William Pugsley.  
*Printed for both distribution and sessional papers.*
20. Report of the Department of Railways and Canals, for the fiscal year ended 31st March, 1910. Presented 21st November, 1910, by Hon. G. P. Graham.  
*Printed for both distribution and sessional papers.*
- 20a. (1909.) Canal Statistics for the season of navigation, 1909. Presented 21st March, 1910, by Hon. G. P. Graham . . . .*Printed for both distribution and sessional papers.*
- 20c. Canal Statistics for the season of navigation, 1910. Presented 10th April, 1911, by Hon. G. P. Graham. . . . .*Printed for both distribution and sessional papers.*
- 20b. Railway Statistics of the Dominion of Canada, for the year ended 30th June, 1910. Presented 16th December, 1910, by Hon. G. P. Graham.  
*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 13.**

- 20c. Fifth Report of the Board of Railway Commissioners for Canada, for the year ending 31st March, 1910. Presented 21st November, 1910, by Hon. G. P. Graham.  
*Printed for both distribution and sessional papers.*
21. Report of the Department of Marine and Fisheries (Marine, 1910. Presented 21st November, 1910, by Hon. L. P. Brodeur.  
*Printed for both distribution and sessional papers.*
- 21a. Report of the Geographic Board of Canada containing all decisions to 30th June, 1910.  
*Printed for both distribution and sessional papers.*

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- 21b. Report on Ice formation in the St. Lawrence River, and Report of the influence of Icebergs on the temperature of the Sea as shown by use of the Micro-Thermometer in a trip to Hudson Strait and Bay in July, 1910, by H. T. Barnes, D.Sc., F.R.S.C. Presented 16th May, 1911, by Hon. S. A. Fisher.  
*Printed for both distribution and sessional papers.*
- 21c. List of Shipping issued by the Department of Marine and Fisheries, being a list of vessels on the registry books of Canada, on 31st December, 1910. Presented 19th July, 1911, by Hon. L. P. Brodeur.  
*Printed for both distribution and sessional papers.*
22. Report of the Department of Marine and Fisheries (Fisheries), 1910. Presented 21st November, 1910, by Hon. L. P. Brodeur.  
*Printed for both distribution and sessional papers.*

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23. Report of the Harbour Commissioners, &c., to 31st December, 1910.  
*Printed for both distribution and sessional papers.*
- 23a. Report of the Chairman of the Board of Steamboat Inspection, for the fiscal year 1910. Presented 21st November, 1910, by Hon. L. P. Brodeur.  
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**CONTENTS OF VOLUME 15—*Concluded.***

- 24.** Report of the Postmaster General for the year ended 31st March, 1910. Presented 22nd November, 1910, by Rt. Hon. Sir Wilfrid Laurier.  
*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 16.**

- 25.** Report of the Department of the Interior, for the fiscal year ending 31st March, 1910. Presented 21st November, 1910, by Hon. Frank Oliver.  
*Printed for both distribution and sessional papers.*

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- 25a.** Report of the Chief Astronomer, Department of the Interior, for year ending 31st March, 1910. . . . .*Printed for both distribution and sessional papers.*
- 25b.** Annual Report of the Topographical Surveys Branch, Department of the Interior, 1909-10. Presented 31st March, 1911, by Hon. Frank Oliver.  
*Printed for both distribution and sessional papers.*
- 25c.** Report of Dr. P. H. Bryce, Chief Medical Officer, Appendix to Report of Superintendent of Immigration. Presented 9th. December, 1910, by Hon. Frank Oliver.  
*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 18.**

- 25d.** Report of the Hydrographic Survey (Streams measurement). Department of the Interior. . . . .*Printed for both distribution and sessional papers.*
- 26.** Summary Report of the Geological Survey Branch, Department of Mines, for Calendar year 1910. Presented 19th. July, 1911, by Hon. William TeTempleman.  
*Printed for both distribution and sessional papers.*
- 26a.** (1909) Summary Report of the Mines Branch of Department of Mines, for the calendar year, 1909. Presented 26th. January, 1911, by Hon. William Templeman.  
*Printed for both distribution and sessional papers.*
- This is bound in Vol. XVI, 1910.

**CONTENTS OF VOLUME 19.**

- 27.** Report of the Department of Indian Affairs, for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. Frank Oliver.  
*Printed for both distribution and sessional papers.*
- 28.** Report of the Royal Northwest Mounted Police, 1910. Presented 2nd December, 1910, by Rt. Hon. Sir Wilfrid Laurier.*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 20.**

- 29.** Report of the Secretary of State of Canada for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. Charles Murphy.  
*Printed for both distribution and sessional papers.*
- 29a.** (No issue).

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**CONTENTS OF VOLUME 20—Concluded.**

- 29b.** Report of the Secretary of State for External Affairs, for the year ended 31st March, 1910. Presented 21st November, 1910, by Hon. Charles Murphy.  
*Printed for both distribution and sessional papers.*
- 30.** Civil Service List of Canada, 1910. Presented 21st November, 1910, by Hon. Charles Murphy... ..*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 21.**

- 31.** Second Annual Report of the Civil Service Commission of Canada, for the period from 1st September, 1909 to 31st August, 1910. Presented 1st December, 1910, by Hon. Charles Murphy... ..*Printed for both distribution and sessional papers.*
- 32.** Annual Report of the Department of Public Printing and Stationery, for the fiscal year ended 31st March, 1910. Presented 22nd November, 1910, by Hon. Charles Murphy... ..*Printed for both distribution and sessional papers.*
- 33.** Report of the Joint Librarians of Parliament for the year 1910. Presented 17th November, 1910, by the Hon. the Speaker... ..*Printed for sessional papers.*
- 34.** Report of the Minister of Justice as to Penitentiaries of Canada, for the fiscal year ended 31st March, 1910. Presented 30th November, 1910, by Hon. A. B. Aylesworth.  
*Printed for both distribution and sessional papers.*
- 35.** Report of the Militia Council, for the fiscal year ending 31st March, 1910. Presented 21st November, 1910, by Hon. Sir Frederick Borden.  
*Printed for both distribution and sessional papers.*
- 35a.** Report of General Sir John French, G.C.B., Inspector General of the Imperial Forces, upon his Inspection of the Canadian Military Forces. Presented 22nd November, 1910, by Hon. Sir Frederick Borden.  
*Printed for both distribution and sessional papers.*
- 35b.** Report upon the best method of giving effect to the recommendations of General Sir John French, regarding the Canadian Militia, by Major General Sir P. H. N. Lake, K.C.M.G., Inspector General. Presented 22nd November, 1910, by Hon. Sir Frederick Borden... ..*Printed for distribution and sessional papers.*
- 35c.** Interim Report of the Militia Council for the Dominion of Canada on the Training of the Militia during the season of 1910. Presented 31st March, 1911, by Hon. Sir Frederick Borden... ..*Printed for distribution.*
- 36.** Report of the Department of Labour, for the fiscal year ending 31st March, 1910, including Report of Proceedings under the Industrial Disputes Investigation Act, 1907. Presented 21st November, 1910, by Hon. W. L. Mackenzie King.  
*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 22.**

- 36a.** Report on Industrial Disputes in Canada up to 31st March, 1911.  
*Printed for both distribution and sessional papers.*
- 36b.** Comparative prices of Agricultural, Fisheries, Lumber and Mine products in Canada and the United States, 1906-1911. Presented 28th July, 1911, by Hon. W. L. Mackenzie King... ..*Printed for both distribution and sessional papers.*

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**CONTENTS OF VOLUME 22—Concluded.**

- 37.** Sixth Report of the Commissioners of the Transcontinental Railway, for the year ending 31st March, 1910. Presented 21st November, 1910, by Hon. G. P. Graham.  
*Printed for both distribution and sessional papers.*
- 38.** Report of the Royal Commission on Trade Relations between Canada and the West Indies, together with Part II, Minutes of evidence taken in Canada and Appendices; Part III, Minutes of evidence taken in the West Indies, and Appendices; and also Part IV, Minutes of evidence taken in London and Appendices. Presented 21st November, 1910, by Ho. William Paterson... ..*Printed for Sessional Papers.*
- 39.** Report of the Honourable the Secretary of State, on the inquiry into the affairs of the Department of Public Printing and Stationery. Presented 21st November, 1910, by Hon. Charles Murphy... ..*Printed for both distribution and sessional papers.*

**CONTENTS OF VOLUME 23.**

- 40.** Ordinances of the Yukon Territory, passed by the Yukon Council in the year, 1909. Presented 21st November, 1910, by Hon. Charles Murphy... ..*Not printed.*
- 40a.** Ordinances of the Yukon Territory passed by the Yukon Council in the year 1910. Presented 4th April, 1911, by Hon. Charles Murphy... ..*Not printed.*
- 41.** General Orders issued to the Militia, between the 1st November, 1909, and the 18th October, 1910. Presented 22nd November, 1910, by Hon. Sir Frederick Borden.  
*Not printed.*
- 42.** Statement of Governor General's Warrants issued since the last session of Parliament, on account of the fiscal year 1910-11. Presented 22nd November, 1910, by Hon. William Paterson... ..*Not printed.*
- 43.** Statement in pursuance of section 17 of the Civil Service Insurance Act, for the year ending 31st March, 1910. Presented 22nd November, 1910, by Hon. William Paterson.  
*Not printed.*
- 44.** Statement of expenditure on account of miscellaneous unforeseen expenses, from the 1st April, 1910, to 17th November, 1910, in accordance with the Appropriation Act of 1910. Presented 22nd November, 1910, by Hon. William Paterson...*Not printed.*
- 45.** Statement of Superannuation and Retiring Allowances in the Civil Service during the year ending 31st December, 1910, showing name, rank, salary, service, allowance and cause of retirement of each person superannuated or retired, also whether vacancy filled by promotion or by new appointment, and salary of any new appointee. Presented 22nd November, 1911, by Hon. William Paterson... ..*Not printed.*
- 46.** Report of the proceedings of the preceding year, of the Commissioners of Internal Economy of the House of Commons, pursuant to Rule 9. Presented 1st December, 1910, by the Hon. the Speaker... ..*Printed for sessional papers.*
- 47.** Return, in pursuance of section 16, of the Government Annuities Act, 1908, containing statement of the business done during the fiscal year, ending 31st March, 1910. Presented 1st December, 1910, by Hon. S. A. Fisher... ..*Printed for sessional papers.*
- 48.** Return to an order of the House of Commons, dated 1st December, 1910, for a copy of the existing lobster fishery regulations, adopted by Order in Council on 30th September, 1910. Presented 1st December, 1910, by Hon. L. P. Brodenr.  
*Printed for sessional papers.*

CONTENTS OF VOLUME 23—*Continued.*

49. Detailed statement of all bonds or securities registered in the Department of the Secretary of State of Canada, since last return (25th November, 1909), submitted to the Parliament of Canada under Section 32 of Chapter 19, of the Revised Statutes of Canada, 1906. Presented 1st December, 1910, by Hon. Charles Murphy... *Not printed.*
50. Annual Return respecting Trade Unions, under chapter 125, R.S.C., 1906. Presented 1st December, 1910, by Hon. Charles Murphy... *Not printed.*
51. Regulations under "The Destructive Insect and Pest Act." Presented 1st December, 1910, by Hon. S. A. Fisher... *Not printed.*
52. First Annual Report of the Commission on Conservation, 1910. Presented 5th December, 1910, by Hon. S. A. Fisher... *Printed for sessional papers.*
53. Regulations established by Order in Council of 17th May, 1910, for the disposal of petroleum and gas on the Indian Reserves in the Provinces of Alberta and Saskatchewan and in the Northwest Territories. Presented 5th December, 1910, by Hon. Charles Murphy... *Not printed.*
54. Report of the International Waterways Commission on the regulation of Lake Erie, with a discussion of the regulation of the Great Lakes System. Presented 7th December, 1910, by Hon. William Pugsley... *Printed for sessional papers.*
- 54a. Return to an Address of the House of Commons, dated 12th December, 1910, for a copy of all orders in council or other authority, appointing members of the Canadian section of the Joint International Waterways Commission, together with all reports, recommendations and correspondence submitted to the Government, or any department thereof, by the said Canadian section, or any member thereof. Also a statement of the total expenses of such Canadian section up to date, with particulars thereof. Presented 8th May, 1911.—*Mr. Macdonell*... *Not printed.*
55. Return in so far as the Department of the Interior is concerned) of copies of all Orders in Council, plans, papers, and correspondence which are required to be presented to the House of Commons, under a Resolution passed on 20th February, 1882, since the date of the last return, under such Resolution. Presented 9th December, 1910, by Hon. Frank Oliver... *Not printed.*
- 55a. Return of lands sold by the Canadian Pacific Railway Company during the year which ended on the 31st October, 1910. Presented 4th May, 1911, by Hon. Frank Oliver... *Not printed.*
56. Regulations issued by the Department of the Naval Service regarding rates of Pay, pursuant to Section 47 of the Naval Service Act. Presented 9th December, 1910, by Hon. L. P. Brodeur... *Not printed.*
- 56a. Regulations issued by the Department of the Naval Service, regarding the issue of the existing Lobster Fishery Regulations, adopted by Order in Council on 30th September, 1910, by Hon. L. P. Brodeur... *Not printed.*
- 56b. Return to an order of the House of Commons, dated 5th December, 1910, for a statement showing the detailed expenditure to date out of the sum voted by the House in connection with the new Navy, giving in each case the amount paid, to whom paid and the object of the expenditure. Presented, 16th December, 1910.—*Mr. Monck*... *Not printed.*



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 CONTENTS OF VOLUME 23—*Continued.*

- 56c. Return to an order of the House of Commons dated 14th December, 1910, for a Return showing how many applications have been received from Canadian citizens for service in the proposed Canadian Navy, as officers, and able seamen or blue-jackets, respectively, and how many officers and men, respectively, of the British Navy have made application for such service. Presented 11th January, 1911.—*Mr. Jameson* . . . . . *Not printed.*
- 56d. Return to an address of the Senate dated 24th November, 1910, for the following information:—1. Has the Department of the Naval Service, which was erected by the legislation of last session, been regularly organized and put in operation? 2. Who has been appointed Deputy Minister by the Governor in Council? 3. Who are the other officials and clerks necessary for the proper administration of the affairs of the new department who have been appointed by the Governor in Council? 4. Who among these officials and clerks are those who have been transferred from the Department of Marine and Fisheries to the Department of the Naval Service? 5. Who among these officials and clerks come from elsewhere? 6. What is the salary of each of the officials? Presented 11th January, 1911.—*Hon. Mr. Landry* . . . . . *Not printed.*
- 56e. Return to an order of the House of Commons, dated 7th December, 1910, for a statement showing:—1. The names of all those engaged to date by the Government in connection with the new Naval Department, whether for service at sea or for work in connection with the department, either for inside or outside service. 2. The domicile of origin of those thus engaged, their previous occupation, rank or grade in the British Navy or elsewhere, and previous rate of pay or remuneration. 3. The duties assigned, rank or occupation of those thus engaged in the service of Canada, and present salary and allowances. Presented 18th January, 1911.—*Mr. Monk* . . . . . *Not printed.*
- 56f. Copy of an Order in Council approved by His Excellency the Governor General on the 22nd December, 1910, authorizing certain allowances to Petty Officers and men in the Naval Service. Presented 19th January, 1911, by Hon. L. P. Brodeur. . . . . *Not printed.*
- 56g. Copy of an Order in Council approved by His Excellency the Governor General on the 22nd December, 1910, and published in the *Canada Gazette* on the 14th January, 1911, authorizing increase in wages to certain ratings in the naval service. Presented 19th January, 1911, by Hon. L. P. Brodeur. . . . . *Not printed.*
- 56h. Return to an Address of the House of Commons, dated 11th January, 1911, for a return showing all rules and regulations passed by the Governor in Council under the provisions of the Navy Act, adopted at the last session of parliament. Presented 26th January, 1911.—*Mr. Monk* . . . . . *Not printed.*
- 56i. Return to an order of the Senate dated the 24th November, 1910, for a statement showing in as many distinct columns:—1. The name of the electoral district. 2. The name of the parish, township, town or city. 3. The name of the first signer, and mention of the additional number of signers of each of the petitions presented during the last session, either to the House of Commons or to the Senate, praying for the postponement of the adoption of the proposed Naval Act until the people have had the opportunity of expressing their will by means of a plebiscite. 4. The date of the presentation of each of these petitions. 5. The names, in each case, of the Member or Senator who presented these petitions. Presented 30th November, 1910.—*Hon. Mr. Landry* . . . . . *Not printed.*

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 CONTENTS OF VOLUME 23—*Continued.*

- 56j. Return to an order of the Senate dated February 1, 1911, calling for in as many columns:—1. The names of all the ships of which the Canadian fleet service is actually composed. 2. The tonnage of each of these ships. 3. How old, is each ship at present. 4. The purchase price, or cost of construction, or, in default thereof, the actual value of each ship. 5. The horse-power of each of them. 6. The motive power, side wheels, propeller or sails. 7. The number of persons of which the crew of each of these ships is composed. 8. The cost of annual maintenance of each ship with its crew. 9. The purpose for which each ship is used, specifying whether it is for the guarding of the coasts, the protection of fisheries, or for the what other purpose. 10. The waters on which each of these ships sails—the waters of the Atlantic or Pacific Oceans, the Great Lakes, of the St. Lawrence river, or elsewhere, with a short statement showing the number and the net tonnage of the ships of the Great Lakes service,—of the ships stationed on the shores of British Columbia, and of the ships sailing on the waters of the eastern portion of the American continent owned by us. Presented 14th February, 1911.—*Hon. Mr. Landry.*  
*Not printed.*
- 56k. Orders in Council published in *Canada Gazette* 11th February, 1911, No. 83/146. Regulations for entry of naval instructors. No. 91/146. Revised rates of pay for electricians. No. 86/146. Revised travelling allowances. Presented 23rd February, 1911, by Rt. Hon. Sir Richard Cartwright. . . . .*Not printed.*
- 56i. Return to an address of the House of Commons, dated 6th February, 1911, for a copy of the final protocol or agreement entered into at the International Naval Conference held in London, December, 1908, February, 1909, and of the general report presented to the said Naval Conference on behalf of its drafting committee, and of all correspondence exchanged between the Imperial Government and the Government of Canada in regard to the same. Presented 10th March, 1911.—*Mr. Monk.* . . . .*Not printed.*
- 56m. 1. Correspondence and documents respecting the International Naval Conference held in London, December, 1908, February, 1909. 2. Correspondence respecting the Declaration of London. 3. Final Act of the Second Peace Conference held at The Hague in 1907, and Conventions and Declarations annexed thereto. Presented 23rd March, 1911, by Rt. Hon. Sir Wilfrid Laurier. . . . .*Not printed.*
- 56n. Return to an order of the House of Commons, dated 27th February, 1911, for a Return showing:—1. How many Canadians have been accepted as members of the Canadian Navy. 2. What are the names and former residence of those who have been accepted. Presented 24th March, 1911.—*Mr. Taylor (Leeds).*. . . . .*Not printed.*
- 56o. Order in Council, approved by His Excellency the Governor General on the 31st March, 1911, and published in the *Canada Gazette* April 15th, 1911:—No. 358 revised regulations for entry of surgeons into the Naval Service. Presented 24th April, 1911, by Hon. L. P. Brodeur. . . . .*Not printed.*
57. Return to an Order of the House of Commons, dated the 7th December, 1910, for a copy of all correspondence between the Government of Canada or the Right Honourable, the First Minister, and the government of Manitoba, or the Premier of Manitoba, referring to the demand of Manitoba for an extension of boundaries and an increase in subsidy. Presented 14th December, 1910.—*Mr. Staples.*  
*Printed for sessional papers.*
58. Memorandum respecting the finances of the National Battlefields Commission, as on the 31st March, 1910. Presented 15th December, 1910, by Hon. William Paterson.  
*Printed for sessional papers.*

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**CONTENTS OF VOLUME 23—Continued.**

- 58a.** Report from The National Battlefields Commission. Presented 15th December, 1910, by Rt. Hon. Sir Wilfrid Laurier. . . . . *Printed for sessional papers.*
- 58b.** Return to an Address of the Senate dated 24th February, 1911, calling for a copy of the last report made to the Government by the members of the Quebec Battlefields Commission. Presented 10th March, 1911.—*Hon. Mr. Landry.* . . . . *Not printed.*
- 58c.** Return to an Order of the Senate dated 12th January, 1911, for copies of all Orders in Council relating to the appointment of members of the "National Battlefields Commission" of the Province of Quebec, as well as a statement showing the sums received by the said Commission, the sources whence received, the interest thereon, the expenses incurred, the nature of such expenses, distinguishing what has been paid for the acquisition of lands, the balance in hand, and the approximate cost, with the nature of the expenses to be incurred to attain the end which the Commission has proposed for itself. Presented 21st March, 1911.—*Hon. Mr. Landry.* . . . . *Not printed.*
- 58d.** Return to an order of the Senate dated 23rd February, 1911, for a statement showing the number of gold, silver, and bronze medals, which the Quebec Battlefields Commission has caused to be struck in commemoration of the three hundredth anniversary of the foundation of the City of Quebec, the cost of each of these series of medals, the names of the persons to whom, or the institutions to which, gold medals, silver medals, and bronze medals have been given. Presented 28th April, 1911.—*Hon. Mr. Landry.* . . . . *Not printed.*
- 59** Return to an address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty or reciprocity with the United States; and also if all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 15th December, 1910.—*Mr. Foster.* . . . . *Not printed.*
- 59a.** Supplementary return to an address of the House of Commons, dated 7th December 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 11th January, 1911.—*Hon. Mr. Foster.* . . . . *Not printed*
- 59b.** Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 3rd February, 1911.—*Hon. Mr. Foster.* . . . . *Not printed.*
- 59c.** Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents

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protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 8th February, 1911.—*Hon. Mr. Foster*. . . . . *Not printed.*

59d. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, boards of trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 27th February, 1911.—*Hon. Mr. Foster*,  
*Not printed.*

59e. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 8th March, 1911.—*Hon. Mr. Foster*.  
*Not printed.*

59f. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 14th March, 1911.—*Hon. Mr. Foster*.  
*Not printed.*

59g. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 22nd March, 1911.—*Hon. Mr. Foster*.  
*Not printed.*

59h. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 27th March, 1911.—*Hon. Mr. Foster*.  
*Not printed.*

59i. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, boards of trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents pro-



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**CONTENTS OF VOLUME 23—Continued.**

testing against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 25th March, 1911.—*Hon. Mr. Foster.*  
*Not printed.*

59j. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 28th March, 1911.—*Hon. Mr. Foster.*  
*Not printed.*

59k. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 31st March, 1911.—*Hon. Mr. Foster.*  
*Not printed.*

59l. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 7th April, 1911.—*Hon. Mr. Foster.*  
*Not printed.*

59m. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 19th April, 1911.—*Hon. Mr. Foster.*  
*Not printed.*

59n. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 19th April, 1911.—*Hon. Mr. Foster.*  
*Not printed.*

59o. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all petitions, memorials and resolutions from individuals, boards of trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States, and also of all similar documents pro-

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CONTENTS OF VOLUME 23—*Continued.*

testing against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 2nd May, 1911.—*Hon. Mr. Foster.*

*Not printed.*

- 59p. Further supplementary return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 5th May, 1911.—*Hon. Mr. Foster.*

*Not printed.*

- 59q. Return to an Order of the House of Commons, dated 19th April, 1911, for a Return showing what duties are imposed by Australia, New Zealand, Norway, France, Spain, Sweden, Switzerland, Austria-Hungary, Japan, Argentine, Venezuela and Russia, respectively, upon each of the articles included in the reciprocity agreement between the United States and Canada.

And also, a statement showing the import prices in 1910 on which duty was collected on the butter, eggs cheese, salt, beef, bacon, hams, mutton, lamb, pork in brine and other meat products detailed, barley, beans, oats, peas, wheat, hay, flaxseed, green apples, and animals, imported from the above named countries. Presented 8th May, 1911.—*Hon. Mr. Foster.* . . . . . *Not printed.*

- 59r. Return to an order of the House of Commons, dated 8th May, 1911, for a Return showing, taking the latest Return of Commerce and Navigation of the United States as a basis, the advantage Canada will have in the United States market over her principal competitors, under the construction given at Washington by the United States Court of Customs Appeals on April 10th, 1911, regarding the favoured nation clause, by which the competitors of Canada in the United States market are denied the privileges granted to Canada by the reciprocal agreement in regard to the importation into the United States of the following goods and articles, namely: (a) Mackerel pickled or salted; (b) Herring, pickled; (c) Cod, Haddock, Hake and Pollock, dried, smoked, salted or pickled; (d) all other kinds of fish, salted or pickled; (e) Fish oils; (f) Butter; (g) Cheese; (h) Cattle; (i) Horses; (j) Oats; (k) Coke; (l) Mineral Waters; (m) Rolled Iron or Steel Sheets, coated with zinc, tin or other metal; (n) Mica; (o) Flax seed; (p) Beans and dried peas; (q) Onions; (r) Potatoes; (s) other vegetables in natural state.

Also showing the present rate of duty in the United States on the above goods and articles; the rate under the proposed reciprocal agreement of the said goods and articles; the value of goods; and the amount of duty collected on goods imported from said competitors on the trade of said year, which will be free under the agreement on goods from Canada. Presented 16th May, 1911.—*Mr. Sinclair.* *Not printed.*

- 59s. Further supplementary Return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all memorials and resolutions from individuals, Boards of Trade or other bodies and corporations, favouring or asking for a treaty of reciprocity with the United States; and also of all similar documents protesting against or unfavourable to the same, and a copy of all correspondence had with the Government, or any member thereof, concerning reciprocity with the United States, since the 1st January, 1910. Presented 19th May, 1911.—*Hon. Mr. Foster.* *Not printed.*

CONTENTS OF VOLUME 23—*Continued.*

- 59*t*. Statements relative to (1) The yearly imports, quantity and value, for the past six years into Canada from, respectively, Australia, New Zealand, Denmark, Holland, Belgium, France, Argentine Republic and the United States, of wheat, oats, horses, cattle, sheep, lambs, mutton, beef, eggs, butter, cheese, fowl, vegetables and fruit.
- (2) The average prices of butter and of eggs in London, England, for the past five years in comparison with the prices, respectively, in Eastern Provinces, in Montreal, in Toronto, in Minneapolis, in Chicago, in Detroit, in Buffalo, in Boston and in New York. Presented 28th July, 1911, by Hon. S. A. Fisher. . . . .*Not printed.*
60. Return of orders in council passed between the 1st of November, 1909, and the 30th September, 1910, in accordance with the provisions of section 5 of the Dominion Lands Survey Act, Chapter 21, 7-8 Edward VII. Presented 11th January, 1911, 1911, by Hon. Frank Oliver. . . . .*Not printed.*
- 60*a*. Return of Orders in Council which have been published in the *Canada Gazette* and in the *British Columbia Gazette*, between 1st November, 1909, and 30th September, 1910, in accordance with provisions of subsection (d) of section 38 of the regulations for the survey, administration, disposal and management of Dominion Lands within the 40-mile railway belt in the province of British Columbia. Presented 11th January, 1911, by Hon. Frank Oliver. . . . .*Not printed.*
- 60*b*. Return called for by section 77 of the Dominion Lands Act, chapter 20 of the Statutes of Canada, 1908, which is as follows:—
- “77. Every regulation made by the Governor in Council, in virtue of the provisions of this Act, and every order made by the Governor in Council, authorizing the sale of any land or the granting of any interest therein, shall have force and effect only after it has been published for four consecutive weeks in the *Canada Gazette*, and all such orders or regulations shall be laid before both Houses of Parliament within the first fifteen days of the session next after the date thereof, and such regulations shall remain in force until the day immediately succeeding the day of prorogation of that session of Parliament, and no longer, unless during that session they are approved by resolution of both Houses of Parliament.” Presented 11th January, 1911, by Hon. Frank Oliver. . . . .*Not printed.*
61. Return of Orders in Council passed between the 1st November, 1909, and the 30th September, 1910, in accordance with the provisions of the Forest Reserve Act, sections 7 and 13 of Chapter 56, Revised Statutes of Canada. Presented 11th January, 1911, by Hon. Frank Oliver. . . . .*Not printed.*
62. Return to an order of the House of Commons, dated the 7th December, 1910, for a copy of Sir John Thompson's memorandum on the question of the rights of fishing in the bays of British North America, prepared for the use of the British Plenipotentiaries at Washington in 1888, and a copy of the Treaty agreed to and approved by the President. Presented 11th January, 1911.—*Hon. Mr. Foster.*
- Printed for sessional papers.*
63. Return to an Address of the House of Commons, dated 7th December, 1910, for a copy of any memorials, correspondence, &c., between His Excellency the Governor General and the Colonial Office, or between any member of the government, and the foreign consuls general in Canada, relative to the status of the latter, at official functions, such as the vice-regal drawing room. Presented 11th January, 1911.—*Mr. Sproule.*
- Printed for sessional papers.*

CONTENTS OF VOLUME 23—*Continued.*

64. Return to an order of the House of Commons, dated 6th December, 1910, for a return showing:—1. What newspapers or companies publishing newspapers in the cities of Montreal and Quebec have directly or indirectly received sums from the Government of Canada for printing, lithographing, binding or other work, between the 31st March, 1910, and the 15th November, following.  
2. What is the total amount paid to each of said newspapers or companies between the dates above stated. Presented 11th January, 1911.—*Mr. Monk*. . . . .*Not printed.*
65. Return to an Address of the House of Commons, dated 7th December, 1910, for a copy of all Orders in Council, correspondence, papers, maps or other documents, which passed between the Government of Canada or any member thereof, and the Government of Quebec, or any member thereof, or any other parties on their behalf, or between the Government of Canada and the Government of Ontario, or any members thereof, regarding the extension of the boundaries of the province of Quebec, as set forth in an Order in Council dated 8th July, 1896, establishing a conventional boundary, therein specified. And also any correspondence, papers, documents, &c., that may have passed between the aforesaid governments or members thereof, relative to the passing of an Act to confirm and ratify the aforesaid conventional boundary, which was passed in 1898. Presented 11th January, 1911.—*Mr. Sproule*.  
*Printed for sessional papers.*
66. Return to an Order of the House of Commons, dated 14th December, 1910, for a Return showing the names of manufacturers in Canada of turned kiln dried maple boot, last and shoe last blocks, in the rough, for making manufacturers' boot and shoe lasts. Presented 11th January, 1911.—*Mr. Hughes*. . . . .*Not printed.*
67. Return to an Order of the House of Commons, dated 5th December, 1910, for a copy of all correspondence, reports, memorials, surveys and other papers in the possession of the Government, and not already brought down, regarding the oyster industry of Canada; also a copy of all correspondence, reports and other papers regarding the ownership and control of Oyster beds and of barren bottoms suitable for Oyster culture, and regarding the consolidating of the ownership with the control and regulation of such beds and barren bottoms, and vesting the same in the hands of the Dominion Government; also a copy of all correspondence, reports, recommendations and other papers relating to the leasing or sale of such beds or barren bottoms or of portions of them, for the purpose of Oyster culture or cultivation. Also a copy of all correspondence and reports relating to the culture, cultivation and conservation of oysters and other mollusks. Presented 11th January, 1911.—*Mr. Warburton*.  
*Printed for sessional papers.*
68. Order of the House of Commons, dated 5th December, 1910, for a copy of all reports, evidence, correspondence, and other documents relating to an investigation into irregularities in the life saving station at Clayoquot, mentioned on page 353 of the Report of the Department of Marine and Fisheries for 1909 and 1910, sessional paper No. 22. Presented 11th January, 1911.—*Mr. Barnard*. . . . .*Not printed.*
69. Return to an Order of the House of Commons, dated 14th December, 1910, for a Return showing how many employees of the custom house at Montreal have left the service since the 1st July, 1896, up to this date, with their names, duties, salaries and ages, respectively, and date of their leaving; the names, ages, salaries and duties of those who have replaced them, the date of their entry and their present salaries. Presented 11th January, 1911.—*Mr. Wilson (Laval)*. . . . .*Not printed.*



CONTENTS OF VOLUME 23—*Continued.*

- 69a.** Return to an Order of the House of Commons, dated 8th February, 1911, for a Return showing the full names of the permanent or temporary employees appointed at Montreal since the 1st of January, 1904, in the Post Office Department, the Customs, Inland Revenue and Public Works; the age and place of residence of these employees at the time of their appointment, the dates and nature of changes, promotions or increases of salary granted these employees since their appointment. Presented 28th April, 1911.—*Mr. Gervais*.. . . .*Not printed.*
- 70.** Return to an Address of the House of Commons, dated 7th December, 1910, for a Return showing what arrangements have been made with foreign countries by the Governor General in Council under the provisions of the Customs Tariff Act of 1907, without reference to Parliament. Presented 11th January, 1911.—*Mr. Ames*.. . . .*Not printed.*
- 71.** Return to an Order of the House of Commons, dated 14th December, 1910, for a Return showing the total expenses in connection with the surrender of St. Peter's Indian Reserve, including moving the Indians to new reserve, sale of lands, and all the expense made necessary by the surrender. Presented 11th January, 1911.—*Mr. Bradbury*.. . . .*Not printed.*
- 71a.** Return to an Order of the House of Commons, dated 14th December, 1910, for a copy of all correspondence with Rev. John McDongall and all instructions given to him regarding St. Peter's Indians and their reserve; and of Rev. John McDongall's report of his investigations at St. Peter's Indian Reserve. Presented 11th January, 1911.—*Mr. Bradbury*.. . . .*Not printed.*
- 71b.** Supplementary Return to an Order of the House of Commons, dated 14th December, 1910, for a Return showing the total expenses in connection with the surrender of St. Peter's Indian Reserve, including moving the Indians to new Reserve, sale of lands, and all the expense made necessary by the surrender. Presented 18th January, 1911.—*Mr. Bradbury*.. . . .*Not printed.*
- 71c.** Return to an Address of the House of Commons, dated 11th January, 1911, for a copy of all correspondence, offers, agreements, orders in council, reports, records, regulations, or other papers or documents, relating to the grant or surrender to one Merrill, or some other person or corporation, of the concession or right to bore for and acquire natural gas, upon or under the Six Nation Reserve, at or near Brantford, Ontario; together with a statement of all monies paid for said concession or right, and also of all monies subsequently received by the Six Nation Indians, or by the government on their behalf for such concession or rights. Presented 2nd February, 1911.—*Mr. Osler*.. . . .*Not printed.*
- 72.** Return to an Order of the House of Commons, dated 14th December, 1910, for a copy of all correspondence, reports, documents and papers relating to the strike of the employees of the Cumberland Coal and Railway Company, Limited, not previously brought down. Presented 11th January, 1911.—*Mr. Rhodes*.. . . .*Not printed.*
- 72a.** Return to an Order of the House of Commons, dated 5th December, 1910, for a copy of the agreement of settlement of the late strike between the Grand Trunk Railway Company and the conductors and brakemen, and of all correspondence, documents and papers relating thereto, or in consequence thereof, between the said parties, or between either and any person or persons authorized or professing to act for either, or between the Government or any Minister or Deputy Minister or other person on its behalf, and said parties, or either of them, or any person authorized or professing to act for them or either of them before, during, or since said strike. Presented 11th January, 1911.—*Mr. Northrup*.. . . .*Not printed.*

CONTENTS OF VOLUME 23—*Continued.*

- 72b.** Return to an Order of the House of Commons, dated 25th January, 1911, for a copy of all correspondence, documents and papers relating to the late strike on the Grand Trunk Railway between the said railway and the striking conductors and trainmen, or between either and any person or persons authorized or professing to act for either, or between the Government or any Minister or Deputy Minister, or any one on his behalf, and either of said parties or any on professing to act on behalf of either, since the 29th day of November, A.D., 1910, and particularly all documents, papers, correspondence and agreements relating to the reinstatement of any of the men who had been on strike, and the appointment of Judge Barron. Presented 2nd February, 1911.—*Mr. Northrup*. . . . .*Not printed.*
- 73.** Return to an Order of the House of Commons, dated 7th December, 1910, for a Return implementing for the year 1910, the information brought down in answer to an Order of the House of Commons referring to the operations of the mint, dated January 19, 1910. Presented 11th January, 1911.—*Hon. Mr. Foster*. . . . .*Not printed.*
- 74.** Supplementary Return to an Order of the House of Commons, dated 24th November, 1909, for a return showing the total amounts paid by the government in each year since 1896, for all printing, advertising and lithographing done outside of the Government Printing Bureau; the total amount so paid by each department of the Government or such purposes during each year; the names and addresses of each individual, firm or corporation to whom any such moneys have been so paid, and the total amount paid to each such individual, firm or corporation in each year since 1896. What portion of the said sums, if any, so paid since 1896 was expended after public advertisement, tender and contract, to whom such tenders were awarded, whether to the lowest tender in each case, what portion was expended otherwise than by public advertisement, tender and contract, and to whom it was paid in each instance. Presented 11th January, 1911.—*Mr. Armstrong*. . . . .*Not printed.*
- 74a.** Return to an Order of the Senate dated 1st February, 1911, for a Return showing year by year, from July 1st, 1896 up to date, the amounts paid to the *Montreal Herald*, by the several departments of the Government of this country. Presented 8th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 74b.** Return to an Order of the Senate dated 25th January, 1911, for the production of a statement showing, year by year, from the 1st July, 1896 up to this date, the sums of money paid to the newspaper, *Le Soleil*, by each of the different departments of the Government of this country. Presented 8th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 74c.** Return to an Order of the Senate dated 25th January, 1911, for the production of a statement showing, year by year, the sums of money paid the newspaper *La Vigie*, of Quebec, by each of the different departments of the Government of this country from the founding of that newspaper up to this date. Presented 8th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 74d.** Return to an Order of the Senate dated 1st February, 1911, for a Return showing, year by year, from 1st July, 1896, up to date, the amounts paid to *La Presse* of Montreal, by the several departments of the Government of this country. Presented 8th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 74e.** Return to an Order of the Senate dated 1st February, 1911, for a Return showing, year by year, from July 1st, 1896, up to date, the amounts paid to *La Presse* of Montreal, by the several departments of the Government of this country. Presented 8th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*

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**CONTENTS OF VOLUME 23—Continued.**

- 74f.** Return to an Order of the Senate dated 24th January, 1911, for a Return showing, year by year, from the 1st July, 1896, up to date, the amounts paid to the paper *Le Canada*, of Montreal, by each of the departments of the government of this country. Presented 8th March, 1911.—*Hon. Mr. Landry*. . . . . *Not printed.*
- 74g.** Return to an Order of the Senate dated 31st January, 1911, showing, year by year, from July the 1st, 1896, up to date, the amounts paid to the Martineau Company by the several departments of the country. Presented 4th April, 1911.—*Hon. Mr. Landry*. . . . . *Not printed.*
- 74h.** Return to an Order of the Senate dated the 31st January, 1911, showing, year by year, from 1st July, 1896, up to date, the amounts paid to Mr. Jean Drolet, of Quebec, by the several departments of the country. Presented 4th April, 1911.—*Hon. Mr. Landry*. . . . . *Not printed.*
- 74i.** Return to an Order of the Senate dated 3rd February, 1911, showing, year by year, from the 1st July, 1896, to this date, the sums of money paid to O. Picard and Sons, of Quebec, by the different departments of the Government of this country. Presented 4th April, 1911.—*Hon. Mr. Landry*. . . . . *Not printed.*
- 74j.** Return to an Order of the Senate dated 24th January, 1911, showing, year by year from July 1, 1896, up to date, the amounts paid to Mr. De Courcy, contractor, by each of the departments of this country. Presented 4th April, 1911. *Hon. Mr. Landry*. . . . . *Not printed.*
- 74k.** Return to an Order of the House of Commons, dated the 23rd February, 1911, for a Return showing:—1. All sums of money paid by the Government since 31st March last to *Le Canada* newspaper of Montreal or the publishers of the same respectively, for advertising or printing, for lithographing or other work; and directly or indirectly for copies of the newspaper.
2. Is the said newspaper executing any work of any kind for the Government at present.
3. Have tenders been called publicly for any of the work done by said newspaper for the government during the past year. Presented 6th April, 1911.—*Mr. Monk*. . . . . *Not printed.*
- 74l.** Supplementary Return to an Order of the Senate dated 24th January, 1911, for a Return showing year by year, from 1st July, 1896, up to date, the amounts paid to Mr. De Courcy, contractor, by each of the departments of this country. Presented 27th April, 1911.—*Hon. Mr. Landry*. . . . . *Not printed.*
- 74m.** Return to an Order of the House of Commons, dated 15th May, 1911, for a Return showing how much was paid by the Government to the proprietors or publishers of the *Essex Record*, a daily and weekly paper published in Windsor, Ontario, for printing and advertising, during the fiscal year ending 31st March, 1907, 1908, 1909, 1910 and 1911. Presented 18th July, 1911.—*Mr. Boyce*. . . . . *Not printed.*
- 75.** Return to an Order of the House of Commons, dated 12th December, 1910, for a Return showing the average value for duty in 1896 and in 1910, respectively, of the unit of each article or commodity enumerated in the schedules of the Customs Act, on which in both years an ad valorem duty was payable. Presented 12th January, 1911.—*Mr. Borden (Halifax)*. . . . . *Not printed.*

CONTENTS OF VOLUME 23—*Continued.*

76. Return to an Order of the House of Commons, dated 14th December, 1910, for a Return showing all applications made to the Government during the period of agreement with Japan concerning Japanese immigrants, to admit such immigrants for special purposes, together with a copy of all correspondence in connection with the same. Presented 12th January, 1911.—*Mr. Taylor (New Westminster)*.. . . .*Not printed.*
- 76a. Return to an Order of the House of Commons, dated 7th December, 1910, for a Return giving a list of the special immigration agents appointed by the government since the 31st March, 1909, in what portions of Great Britain and Ireland, the European Continent, or other country they are severally located, their addresses when they were so appointed the date of their appointment in each case their respective salaries and expenses, and any commissions that may have been paid to each or any since their appointment. Presented 12th January, 1911.—*Mr. Wilson (Lennox and Addington)*.. . . .*Not printed.*
- 76b. Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing the number of immigrants who have come to Canada since the 31st March last up to the present time, the countries from which they came, the number from each such country, the number of males and the number of females in each case, the number under fourteen years of age, between fourteen and twenty-one years, between twenty-one and forty, and between forty and sixty in each case, their occupations before coming to Canada, their religion, their destination in Canada, their occupation when they arrived at such destination; also the number who have been prevented from landing, and the number deported. Presented 6th February, 1911.—*Mr. Wilson (Lennox and Addington)*.. . . .*Not printed.*
- 76c. Return to an Order of the Senate dated 24th January, 1911, calling for the production in detail of the accounts and claims filed at the Department of the Interior or the Immigration Office, Quebec, by Mr. Jacques Dery; restaurant keeper, during the navigation season of 1910. Presented 7th February, 1911.—*Hon. Mr. Landry.*  
*Not printed.*
- 76d. Return to an Order of the Senate dated 20th January, 1911, calling for the report received by the Immigration Department on the subject of the complaints brought against Mr. Jacques Dery, the keeper of the restaurant established in the immigration buildings at Quebec, and also of the correspondence exchanged and the inquiry held by the immigration agent with regard to the overcharges by the restaurant keeper, and of the refund which he had to make to immigrants of the price obtained for goods of bad quality. Presented 7th February, 1911.—*Hon. Mr. Landry.*  
*Not printed.*
- 76e. Return to an Order of the Senate dated 25th January, 1911, for the production of a complaint, signed by a large number of persons employed at the Immigration Office and Immigration buildings at Quebec and addressed to the agent of the Department at that place, against Mr. Jacques Dery, the restaurant keeper, and also of the reply of the latter. Presented 7th February, 1911.—*Hon. Mr. Landry*.. . . .*Not printed.*
- 76f. Return to an Order of the Senate dated 25th January, 1911, that an Order of this House do issue for the production of a letter dated 1st June, 1910, written by Mr. L. Stein, of Quebec, addressed to Mr. W. D. Scott, Superintendent of Immigration. Presented 10th February, 1911.—*Hon. Mr. Landry*.. . . .*Not printed.*



CONTENTS OF VOLUME 23—Continued.

- 76g. Return to an Order of the House of Commons, dated 3rd April, 1911, for a Return showing the itemized accounts, vouchers, statements, reports and other papers relating to the salary and expenses of and payments to W. O. Creighton, farmer delegate to Great Britain in 1910. Presented 28th April, 1911.—*Mr. Stanfield*. . . . .*Not printed*
- 76h. Return to an Order of the House of Commons, dated 3rd April, 1911, for a Return showing all itemized accounts, vouchers, statements, reports and other papers relating to the salary of and payments to W. A. Hickman, immigration agent to Great Britain in 1902 and 1903. Presented 28th April, 1911.—*Mr. Stanfield*. . . . .*Not printed.*
- 77. Return to an Order of the House of Commons, dated 5th December, 1910, for a Return showing:—1. The estimated quantity of each class of material required for the construction.
  - 2. The rates or prices agreed upon and the estimated cost of each class of material, based on rates on accepted tender.
  - 3. The total estimated cost based on these quantities and rates in each case of the several bridges let to contract during the fiscal year ended March 31, 1910, referred to on pages 3 and 4 of the Sixth Annual Report of the Commissioners of the Transcontinental Railway.
  - 4. A copy of the specifications and contract in each case, the number of the contract and the name of the contractor.
  - 5. The number of bridges yet to be let to contract, location and character, and the estimated quantity of the different kinds of material in each case.
  - 6. Why these bridges have not been let to contract and when contracts will probably be entered into as to these.
  - 7. The bridges let to contract before March 31, 1909, identified by locality, name of each contractor and number, the estimated cost of each of these bridges at the time the contract was let, based on contract prices, the changes made in the plans, specifications or contracts if any, and claims or allowances for alterations or extras, if any, the percentage of the work done, the payments made to date, the amounts retained as contract reserve, and the ascertained or estimated amount required to complete in each case.
  - 8. The bridges that have been completed, identified as above, the estimated cost at the time of awarding the contract, the nature and extent of changes in plans, specifications, or contract, if any, the increase or decrease of cost thereby occasioned, and the actual total cost of each of those bridges. Presented 13th January, 1911.—*Mr. Lennox*. . . . .*Not printed.*
- 77a. Return to an Order of the House of Commons, dated 5th December, 1910, for a copy of the Tender and contract of Haney, Quinlan & Robertson for construction of locomotive and other shops about six miles east of Winnipeg, and the total estimated cost based on contract prices. Also a copy of the several other tenders sent in and a statement of the total estimated cost based upon each of these tenders as moneyed out at the time of awarding the contract. Presented 13th January, 1911.—*Mr. Lennox*. . . . .*Not printed*
- 77b. Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing as to each contract district of the National Transcontinental Railway between Moncton and Winnipeg, respectively, what was the original departmental estimate of quantities of solid rock, broken stone, earth, sand, &c., and the quantities of each kind of excavation, as above, already paid for. Presented 24th January, 1911.—*Mr. Ames*. . . . .*Not printed.*

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**CONTENTS OF VOLUME 23—Continued.**

- 77c.** Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing in all cases where finished structures on the National Transcontinental Railway, have differed materially, to an extent involving a difference in cost of more than \$10,000, from the original standard plans; the original estimated cost of the structure; the cost according to altered plans; the nature of the change; the name of the resident engineer, and of the contractor or sub-contractor; the reason, if any, given for the alteration of plans; and a copy of the correspondence exchanged thereon between the headquarters staff and the engineer on the ground. Presented 24th January, 1911.—*Mr. Ames*... ..*Not printed.*
- 77d.** Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing the clause in the standard contract on the National Transcontinental Railway having reference to train hauled filling, with a statement showing what amounts have been paid to date, and to whom, for services of this nature. Presented 24th January, 1911.—*Mr. Ames*... ..*Not printed.*
- 77e.** Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing what amounts to date have been paid on force account to each and to all contracts connected with the National Transcontinental railway, setting forth the district affected thereby. Presented 24th January, 1911.—*Mr. Ames*... ..*Not printed.*
- 77f.** Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing all cases where in construction work on the National Transcontinental Railway a richer mixture of concrete was used than that indicated in the standard specification, to an extent affecting the cost of the work to the amount of \$5,000 or more; also the original estimated cost and the actual cost in each of such cases. Presented 24th January, 1911.—*Mr. Ames*... ..*Not printed.*
- 77g.** Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing a list of the members of the engineering staff who have been dismissed, or have resigned or left the service of the National Transcontinental Railway Commission since 1904, with position formerly held, the date of leaving, and the assigned cause in each instance. Presented 7th February, 1911.—*Mr. Ames*... ..*Not printed.*
- 77h.** Return to an order of the House of Commons, dated 26th January, 1911, for a Return showing:—1. In those cases in which an agreement was come to last autumn between Mr. Killiker and Mr. Gordon as to overbreak on the eastern Division of the Transcontinental Railway, what quantities of material, and of what class, and what sums of money were taken from or added to the progress Estimates.  
2. In the cases where measurements had to be made, have they been made, and with what result. Presented 17th February, 1911.—*Mr. Lennor*... ..*Not printed.*
- 77i.** Return to an Order of the House of Commons, dated 11th January, 1911, for a Return showing, in respect of all cases on the National Transcontinental Railway, where the original specifications have not been adhered to; the estimated cost as per original plan; the actual or estimated cost as per amended plan; the name of the contractor and the resident engineer, and the reason given by the latter for such change. Presented 24th February, 1911.—*Mr. Ames*... ..*Not printed.*
- 77j.** Return to an Order of the House of Commons, dated 16th January, 1911, for a Return showing what will have been the total expenditure upon, in connection with or in consequence of, the National Transcontinental Railway up to the 31st of December, 1910, and what amount it is estimated will be required to complete and fully equip the said road between Winnipeg and Moncton. Presented 27th February, 1911.—*Mr. Ames*... ..*Not printed.*

CONTENTS OF VOLUME 23—Continued.

77k. Interim Report of the Commissioners of the Transcontinental Railway for the nine months ended December 31, 1910. Presented 27th February, 1911, by Hon. G. P. Graham... ..Not printed.

77l. Return to an Order of the Senate dated 18th January, 1911, for a Return showing:—A. As relates to the main line of the Transcontinental:—

1. The respective length in miles of each of the divisions of the Transcontinental, named Division A, Division B, &c., from Moncton to Winnipeg, and specifying in which province each of the divisions is located.

2. The estimated cost, at the outset, of the construction of the road in each division.

3. The actual price paid, on the 15th January instant, for the building of the line, sidings, bridges and other necessary works in each division.

4. The approximate cost in each division of the Transcontinental, of what remains to be constructed for the completion of the road.

B. As relates to the branch lines of the Transcontinental:—

1. The respective length of each of the said branch lines, specifying the district and the province within which the said branch lines are located.

2. The estimated cost, at the start, of the construction of each of the said branch lines.

3. The actual cost up to the 15th January instant of the construction of said branch lines.

4. The probable cost of the works to be executed on each of the said branch lines.

5. The indication of the special section of the Act which each branch line has been constructed.

6. The mention of all other branch lines proposed to be constructed by the Transcontinental Railway Commission or the Government, showing the length and probable cost thereof. Presented 8th March, 1911.—Hon. Mr. Landry... ..Not printed.

77m. Return to an Order of the House of Commons, dated 23rd February, 1911, for a Return showing:—

1. What contracts outside of those numbered 1 to 21, inclusive, have been let for construction on the Transcontinental Railway at Winnipeg and St. Boniface of bridges, station buildings, freight houses, sheds, engine houses, turn tables, water tanks, section houses, work shops, or other buildings, erections, structures or plant.

2. Were these contracts all let after advertisement and upon tender.

3. What is the cost or estimated cost according to schedule or bulk tender in each case, and who is the contractor in each case.

4. Were tenders asked for both by schedule and on bulk tender basis, on which system was the contract awarded and for what reason in each case.

5. What alterations have been made in any of the works since letting of contract, and at what increased or decreased cost. Presented 9th March, 1911.—Mr. White (Renfrew)... ..Not printed.

77n. Return to an Order of the House of Commons, dated 6th March, 1911, for a copy of the report of the engineers who investigated overclassification, overbreak, or other alleged over allowances on progress or final estimate, on the Eastern Division of the Transcontinental Railway, the evidence taken, or other data collected, and of all letters, instructions, agreements, plans, drawings, photographs, memoranda and writings sent, given, had or used in connection with said investigation, not already brought down, together with a reference to the previous return where papers are already down; also a copy of the previous report made by Messrs. Schreiber, Kelligher and Lumsden immediately before Mr. Lumsden's resignation. Presented 16th March, 1911.—Mr. Lennox... ..Not printed.

## CONTENTS OF VOLUME 23—Continued.

- 77*o*. Return to an Order of the House of Commons, dated 13th March, 1911, for a Return prepared upon the lines of Sessional Papers No. 46*i* of the 26th April, 1909, relating to the Eastern Division of the Transcontinental Railway, showing the actual expenditure upon each of the scheduled items upon each of the 21 contracts for construction of this division, down to the latest estimate made upon each contract, and the estimated quantity of work to be done and material to be furnished as to each of these items, and the estimated cost to complete the contract in each case. Presented 10th April, 1911.—*Mr. Lennox*... ..*Not printed.*
- 77*p*. Return to an Address of the Senate dated 23rd March, 1911, for a copy of the Order in Council dated 23rd June, 1910, transferring from the Government to the National Transcontinental Railway Commission, the spur line between the Quebec bridge and the city of the same name. Presented 19th April, 1911.—*Hon. Mr. Landry*.  
*Not printed.*
78. For approval by the House under section 17 of the Yukon Act, Chapter 63 of the Revised Statutes of Canada, 1906, a copy of an ordinance made by His Excellency the Governor General in Council, in virtue of the provisions of Section 16 of the said Chapter 63, on the 9th day of December, 1909, and intitled: "An ordinance to rescind an Ordinance respecting the imposition of a tax upon ale, porter, beer or lager beer imported into the Yukon Territory Presented 13th January, 1911, by Hon. Frank Oliver... ..*Not printed.*
79. Return under Section 88 of the Northwest Territories Act, Chapter 62, Revised Statutes of Canada. Presented 16th January, 1911, by Hon. Frank Oliver... ..*Not printed.*
80. Return to an Order of the House of Commons, dated 5th December, 1910, for a copy of all correspondence between the mover and any other persons, corporations and municipal as well as other public bodies, and the Department of Railways and Canals, respecting the reconstruction and alteration of the Canadian Pacific Railway Company's bridge across the St. Lawrence river at Lachine, P.Q. Presented 16th January, 1911.—*Mr. Monk*... ..*Not printed.*
81. Report of the Commissioner, Dominion Police Force, for the year 1910. Presented 17th January, 1911, by Sir Allen Aylesworth... ..*Not printed.*
82. Return to an order of the House of Commons, dated 7th December, 1910, for a copy of all correspondence exchanged between the government and the Phoenix Bridge Company in connection with the payment by said company of \$100,000 in discharge of claims *re* contract. Presented 16th January, 1911.—*Mr. Amos*... ..*Not printed.*
83. Return to an order of the House of Commons, dated 14th March, 1910, for a return showing the number of accidents to trains of the I.C.R. for ten months, from 1st April, 1908, to 31st December, 1908; the number of persons killed or injured in each of such accidents for ten months, from 1st April, 1908, to 31st December, 1908; and the cost of each of such accidents to the I. C. R., respectively, for repairs, property destroyed, compensation to passengers, and for compensation to shippers for freight and baggage. Presented 16th January, 1911.—*Mr. Stanfield*... ..*Not printed.*
- 83*a*. Return to an order of the House of Commons, dated 14th March, 1910, for a return showing the number of accidents to trains on the I. C. R. between 1st April, 1909, and present date, and the location and particulars of each; the number of persons killed or injured in each of such accidents since 1st April, 1909, to date; and the cost of each of such accidents to the I. C. R., respectively, for repairs, property destroyed, compensation to passengers, and for compensation to shippers for freight and baggage. Presented 16th January, 1911.—*Mr. Stanfield*... ..*Not printed.*



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**CONTENTS OF VOLUME 23—Continued.**

- 83b.** Return to an order of the House of Commons, dated 5th December, 1910, showing all data, statements, estimates, recommendations and reports with regard to an Intercolonial railway renewal equipment account, and as to the initiation of such account and the operation thereof to the present time.
2. A copy of all correspondence with the Auditor General and other persons in regard thereto.
  3. A copy of all correspondence, inquiries and investigations by or on behalf of the Auditor General as to the need for such account, and as to the sufficiency or otherwise of moneys carried to such account, and also as to the application of such moneys.
  4. The same returns as to the maintenance of rails account; and the same returns as to a maintenance of bridges account, also as to any other items of maintenance, and as to any recommendations regarding the adoption of such accounts. Presented 16th January, 1911.—*Mr. Barker* . . . . . *Not printed.*
- 83c.** Return to an order of the Senate dated 4th May, 1910, calling for the following information:—
1. Were tenders asked for, in 1908 and 1909, for the purchase of railway sleepers for the use of the Intercolonial railway, and were contracts awarded to the lowest tenderer?
  2. Who had these contracts, and what is the name of each tendered, and also the amount of each tender?
  3. Did the Department of Railways and Canals, in 1908 and 1909, award any contracts whatsoever for the purchase of the said sleepers and what price was paid to each contractor, and who had these contracts?
  4. In 1908 and 1909, did the Department of Railways and Canals ask for tenders for the purchase of sleepers made of spruce, white, gray and yellow, as well as of birch, ash, poplar, &c.?
  5. What quantity of these sleepers, for each kind of wood, was accepted and paid for in 1908 and 1909, and does the department propose to continue the system of purchasing these kinds of wood?
  6. Who bought these sleepers of spruce, birch, ash, poplar, &c., and who gave the orders to receive these kinds of sleepers, and who received them and stamped them for the Intercolonial railway?
  7. In 1909, did the department ask for tenders for sleepers of cedar, cyprus and hemlock? If so, who had these contracts and were these contracts granted to the lowest bidders, and what quantities were actually furnished by each contractor?
  8. What quantity of sleepers has been furnished up to this date—
    - (a) by the contractors for New Brunswick; and
    - (b) by the contractors for Nova Scotia and for the province of Quebec, respectively?
  9. Did the government by order in council authorize Messrs. Pottinger, Burpee or Taylor of Moncton, to purchase sleepers of spruce of all kinds and dimensions, and to cause those kinds of sleepers to be distributed in the district of Quebec, and notably in the district of River du Loup and Isle Verte?
  10. What price did the department pay for the sleepers of spruce, hemlock, cedar, birch and poplar, &c.? Who is the contractor therefor? Who received and inspected the said sleepers?
  11. Does the department know that these sleepers are absolutely unfit to be used in a railway, and that these sleepers are at the present time distributed along the Intercolonial railway to be used upon the main track?



CONTENTS OF VOLUME 23—*Continued.*

12. How much a carload does the freight of sleepers sent from New Brunswick cost in the district of Quebec? Presented 3rd February, 1911.—*Hon. Mr. Landry.*  
*Not printed.*
84. Return to an order of the House of Commons, dated 11th January, 1911, for a return showing the respective quantities of each of the staple varieties of fish landed by Canadian Atlantic fishermen yearly, since 1870, and the respective yearly values thereof. Presented 16th January, 1911.—*Mr. Jameson.* . . . . .*Not printed.*
85. Return to an order of the House of Commons, dated 7th December, 1910, for a copy of all letters, telegrams, correspondence, resolutions, memorials, reports, and all other papers in the possession of the government, not already brought down, regarding otter, beaver, or steam trawling, and the operations of the trawlers *Wren* and *Coquette* in the waters of the Northumberland strait, or elsewhere, in Nova Scotia. Presented 16th January, 1911.—*Mr. Chisholm (Antigonish).* . . . . .*Not printed.*
86. Return to an order of the House of Commons, dated 7th December, 1910, for a return showing the revenue of the post offices of Acton Vale, Upton and St. Pie, in the county of Bagot, province of Quebec, since the year 1903 up to 1910 inclusively. Presented 17th January, 1911.—*Mr. Monk.* . . . . .*Not printed.*
- 86a. Return to an order of the House of Commons, dated 16th January, 1911, for a copy of all instructions or communications from the Department of Public Works or any officer thereof, or the minister of public works, to the chief architect, or any other architect, with respect to the preparation of plans for the construction of a post office building at Parrsboro, Nova Scotia, and all other post office buildings or public buildings to be used wholly or in part by the Post Office Department, for which votes have been passed during the period from 1st January, 1908, to 31st December, 1910. Presented 20th April, 1911.—*Mr. Rhodes.* . . . . .*Not printed.*
87. Return to an address of the Senate dated 22nd April, 1910, for:—
1. Copies of all orders in council or of every order of the Department of Justice and of the Department of Public Works, and of all the correspondence exchanged between the government, the Departments of Justice and Public Works, the Bank of Montreal, the firm of Carrier & Lainé, of Lévis, and all other persons, on the subjects of—
    - (a) The acquisition by the government of the property of the firm of Carrier & Lainé, at the time of the sale thereof by the sheriff in 1908;
    - (b) the subsequent expropriation, for purposes of public utility, of the same property, which had fallen into the hands of the bank of Montreal;
    - (c) its definite purchase from the Bank of Montreal by the government;
    - (d) the appointment of an agent to represent the government at the sale by the sheriff;
    - (e) the appointment of experts for proceeding with the expropriation of the lauds in question;
  2. Copies of all reports submitted, directly or indirectly, to the government, or in its possession, by the experts hereibefore mentioned, or by the arbitrators to whom the Bank of Montreal and the firm of Carrier & Lainé had submitted their differences, or by the various advocates or agents acting in the name and in the interests of the government.
  3. Copies of the various contracts entered into between La Banque du Peuple and the People's Bank of Halifax in 1905, between the government and the bank of Montreal, in 1909, between the government and Mr Ernest Cann, who had become the

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**CONTENTS OF VOLUME 23—Continued.**

lessee of the government, for a period of thirty years, of the lands and buildings formerly the property of Carrier & Lainé.

4. Copies of all documents whatsoever and of a correspondence relating to the various transactions aforesaid, and also a statement showing all the sums of money paid by the government with respect to such transactions, with the names of the persons to whom such sums were paid, and the amounts paid to each of them, and for what particular object. Presented 11th January, 1911.—*Hon. Mr. Landry*—

*Not printed.*

**87a.** Supplementary return to an address of the Senate dated 22nd April, 1910, for:—

1. Copies of all orders in council or of every order of the department of justice and of the department of public works, and of all the correspondence exchanged between the government, the department of justice and public works, the bank of Montreal, the firm of Carrier & Lainé, of Lévis, and all other persons, on the subject of—

(a) The acquisition by the government of the property of the firm of Carrier & Lainé, at the time of the sale thereof by the sheriff in 1908;

(b) the subsequent expropriation, for purposes of public utility, of the same property, which had fallen into the hands of the Bank of Montreal;

(c) its definite purchase from the bank of Montreal by the government;

(d) the appointment of an agent to represent the government at the sale by the sheriff;

(e) the appointment of experts for proceeding with the expropriation of the lands in question;

2. Copies of all reports submitted, directly or indirectly, to the government, or in its possession, by the experts hereinbefore mentioned, or by the arbitrators to whom the bank of Montreal and the firm of Carrier & Lainé had submitted their differences, or by the various advocates or agents acting in the name and in the interests of the government.

3. Copies of the various contracts entered into between La Banque du Peuple, and the People's Bank of Halifax in 1905, between the government and the bank of Montreal, in 1909, between the government and Mr. Ernest Cann, who had become the lessees of the government, for a period of thirty years, of the lands and buildings formerly the property of Carrier & Lainé.

4. Copies of all documents whatsoever and of all correspondence relating to the various transactions aforesaid, and also a statement showing all the sums of money paid by the government with respect to such transactions, with the names of the persons to whom such sums were paid, and the amounts paid to each of them, and for what particular object. Presented 18th January, 1911.—*Hon. Mr. Landry*.

*Not printed.*

**87b.** Further supplementary return to an address of the Senate dated 22nd April, 1910, for:—

1. Copies of all orders in council or of every order of the Department of Justice and of the Department of Public Works, and of all the correspondence exchanged between the government, the Departments of Justice and Public Works, the Bank of Montreal, the firm of Carrier & Lainé, of Lévis, and all other persons, on the subjects of—

(a) The acquisition by the government of the property of the firm of Carrier & Lainé, at the time of the sale thereof by the sheriff in 1908;

(b) the subsequent expropriation, for purposes of public utility, of the same property, which had fallen into the hands of the bank of Montreal;

(c) its definite purchase from the Bank of Montreal by the government;

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**CONTENTS OF VOLUME 23—Continued.**

(d) the appointment of an agent to represent the government at the sale by the sheriff;

(e) the appointment of experts for proceeding with the expropriation of the lands in question;

2. Copies of all reports submitted, directly or indirectly, to the government, or in its possession, by the experts hereinbefore mentioned, or by the arbitrators to whom the Bank of Montreal and the firm of Carrier & Lainé had submitted their differences, or by the various advocates or agents acting in the name and in the interests of the government.

3. Copies of the various contracts entered into between La Banque du Peuple and the People's Bank of Halifax in 1905, between the government and the Bank of Montreal in 1909, between the government and Mr. Ernest Cann, who had become the lessee of the government, for a period of thirty years, of the lands and buildings formerly the property of Carrier & Lainé.

4. Copies of all documents whatsoever and of all correspondence relating to the various transactions aforesaid, and also a statement showing all the sums of money paid by the government with respect to such transactions, with the names of the persons to whom such sums were paid, and the amounts paid to each of them, and for what particular object. Presented 27th January, 1911.—*Hon. Mr. Landry.*

*Not printed.*

87c. Supplementary return to an address of the Senate dated 22nd April, 1910, for copies:—

1. Copies of all orders in council or of every order of the Department of Justice and of the Department of Public Works; and of all the correspondence exchanged between the government, the Departments of Justice and Public Works, the Bank of Montreal, the firm of Carrier & Lainé, of Lévis, and all other persons, on the subjects of—

(a) The acquisition by the government of the property of the firm of Carrier & Lainé, at the time of the sale thereof by the sheriff in 1908;

(b) the subsequent expropriation, for purposes of public utility, of the same property, which had fallen into the hands of the bank of Montreal;

(c) its definite purchase from the Bank of Montreal by the government;

(d) the appointment of an agent to represent the government at the sale by the sheriff;

(e) the appointment of experts for proceeding with the expropriation of the lands in question;

2. Copies of all reports submitted, directly or indirectly, to the government, or in its possession, by the experts hereinbefore mentioned, or by the arbitrators to whom the Bank of Montreal and the firm of Carrier & Lainé had submitted their differences, or by the various advocates or agents acting in the name and in the interests of the government.

3. Copies of the various contracts entered into between La Banque du Peuple and the People's Bank of Halifax in 1905, between the government and the Bank of Montreal in 1909, between the government and Mr. Ernest Cann, who had become the lessee of the government, for a period of thirty years, of the lands and buildings formerly the property of Carrier & Lainé.

4. Copies of all documents whatsoever and of all correspondence relating to the various transactions aforesaid, and also a statement showing all the sums of money paid by the government with respect to such transactions, with the name of the persons to whom such sums were paid, and the amounts paid to each of them, and for what particular object. Presented 7th February, 1911.—*Hon. Mr. Landry.*

*Not printed.*

CONTENTS OF VOLUME 23—*Continued.*

- 87<sup>d</sup>** Return to an order of the Senate dated 9th March, 1911, for a return of copy of the contract entered into between the Bank of Montreal and the People's Bank of Halifax, in 1905, in connection with the financial situation and with the obligations of the firm of Carrier-Laine, a copy of which contract was handed over to the government at the time of the financial transactions concluded between the Bank of Montreal and the government in 1909. Presented 4th April, 1911.—*Hon. Mr. Landry.*  
*Not printed.*
- 88.** Return to an address of the Senate dated 24th November, 1910, for copies of all orders in council, memoranda or other correspondence respecting the resignation of the present Lieutenant Governor of the province of Quebec, the appointment of his successor, the application for leave of absence, and the appointment of an administrator during the absence from the country of His Honour Sir Pantaleon Pelletier. Presented 11th January, 1911.—*Hon. Mr. Landry.* . . . . .*Not printed.*
- 88a.** Return to an address of the Senate dated 8th February, 1911, for a copy of the order in council extending, for a period of two months, the leave of absence already obtained by Sir Pantaleon Pelletier, together with copy of all the correspondence on the subject between the government, His Honour the Lieutenant Governor of the province of Quebec, and the present administrator of the said province. Presented 14th February, 1911.—*Hon. Mr. Landry.* . . . . .*Not printed.*
- 89.** Return to an order of the House of Commons, dated 16th January, 1911, for a copy of all correspondence, letters, telegrams, reports and papers of every description between the liquidators of the Charing Cross Bank or of A. W. Carpenter or anyone on their behalf, and any member of the government, or official thereof, regarding the affairs of the Atlantic, Quebec and Western railway, the Quebec Oriental railway, or the new Canadian Company, limited. Presented 18th January, 1911.—*Mr. Ames.*  
*Not printed.*
- 90.** Return to an order of the House of Commons, dated 14th December, 1910, for a return showing how many wireless telegraph stations are owned by the government where are they located, the cost of each, and the revenue derived from each; what stations are leased, to whom they are leased, the amount of rental received each year and the period covered by said lease. Presented 18th January, 1911.—*Mr. Armstrong.*  
*Not printed.*
- 91.** Return to an order of the House of Commons, dated 15th March, 1910, for a return showing the names of all persons who have been fined for breach of fisheries regulations in the coast waters of the counties of Pictou and Cumberland, Nova Scotia, and Westmorland, New Brunswick, during the years 1907, 1908 and 1909, together with a full statement of the penalties inflicted, moneys collected, and fines or portion thereof remitted, if any, in each case, and for a copy of all instructions issued, reports, correspondence and documents relating in any manner thereto. Presented 18th January, 1911.—*Mr. Rhodes.* . . . . .*Not printed.*
- 91a.** Return to an order of the House of Commons, dated 11th January, 1911, for a return showing the names of all persons who have been fined for breach of fishery regulations in the coast waters of Prince Edward Island since the year 1900 up to this date, together with a statement of the penalties inflicted, moneys collected, and fines or portions thereof remitted, in each case; and for a copy of all instructions issued, reports, correspondence and documents relating in any manner thereto. Presented 6th March, 1911.—*Mr. Fraser.* . . . . .*Not printed.*



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 CONTENTS OF VOLUME 23—Continued.

- 92.** Return to an order of the House of Commons, dated 16th January, 1911, for a copy of the mailing list, and names of all parties to whom the Department of Labour mailed or otherwise sent copies of the *Labour Gazette* during the year 1910, and of the names of all correspondents that report to the department on labour topics for the purposes of the *Labour Gazette*. Presented 18th January, 1911.—*Mr. Currie (Simcoe)*.  
 Not printed.
- 93.** Return to an order of the House of Commons, dated 7th December, 1910, for a copy of all correspondence and other papers and documents that have passed between the government and any party or parties during the past year in connection with the dredging of the Napanee river; also any instruction given by the minister in connection therewith? Presented 18th January, 1911.—*Mr. Wilson (Lennox and Addington)*... ..Not printed.
- 93a.** Return to an address of the House of Commons, dated 12th December, 1910, for a copy of all correspondence, specifications, tenders, orders in council, and other papers relating to a contract or contracts entered into by the Department of Public Works for dredging in Miramichi Bay, New Brunswick, since the close of the last fiscal year. Presented 13th February, 1911. *Mr. Crocket*... ..Not printed.
- 93b.** Return to an order of the House of Commons, dated 23rd January, 1911, for a summary report on the state of the dredging works executed in the River Des Prairies up to the present time, making specially known the length, depth and width of the canal dredged up to date, and the amount expended on this work. Presented 22nd March 1911.—*Mr. Wilson (Laval)*... ..Not printed.
- 93c.** Return to an order of the House of Commons, dated 23rd January, 1911, for a return showing:—1. A copy of the report of the engineer who made the survey and estimate of the Back River or Rivière des Prairies, between the eastern end of the Island of Montreal and the Lake of Two Mountains, in the province of Quebec, in view of the dredging and deepening of said river.  
 2. Details of work and expenditure to date in connection with the said work.  
 3. Estimate of cost of work remaining to be done and especially of the part between Bourde à Plouffe and the Lake of Two Mountains. Presented 22nd March, 1911.—*Mr. Monk*... ..Not printed.
- 93d.** Return to an order of the House of Commons, dated 11th January, 1911, for a return showing during the seasons 1904, 1905, 1906, 1907, 1908, 1909 and 1910, what amounts were paid to Messrs. Dussault & Lemieux, dredging contractors, for work done by the *International*, the government dredge, leased to the said contractors, as far as the same can be ascertained. Presented 28th March, 1911.—*Mr. Sharpe (Ontario)*.  
 Not printed.
- 94.** Return to an order of the House of Commons, dated 5th December, 1910, for a return showing the names and dates of first appointment of all lighthousekeepers, from Quebec to the sea, in the river and Gulf of St. Lawrence; also their present salaries, with an indication in each case of what they are obliged to provide for the lighthouse or signal service, and the amount of indemnity granted them for such provision. Also the rules or regulations which provide for the regular increase of their salaries. Presented 19th January, 1911.—*Mr. Monk*... ..Not printed



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 CONTENTS OF VOLUME 23—*Concluded.*

- 94a. Return to an order of the House of Commons, dated 26th January, 1911, for a return giving the names of the lighthouse keepers on the St. Lawrence, between Quebec and Montreal, since the 12th April, 1887, and what yearly salary has been paid them respectively since that date. Presented 27th February, 1911.—*Mr. Blondin.*  
*Not printed.*
95. Return to an address of the House of Commons, dated 5th December, 1910, a copy of a Report by Mr. W. T. R. Preston, Commissioner of Trade and Commerce in Holland re the establishment of a Netherland loan company in Canada; of all communications between the Department of Trade and Commerce and any other department of the government and Mr. Preston on the subject matter of this report; a copy of all correspondence between Mr. Preston and any person or persons in Holland regarding proposed operations of a Dutch Loan Company in Canada, and a copy of correspondence or communications of any nature whatsoever between the government or the department with any persons relating to this question. Presented 19th January, 1911.—*Mr. Monk.* . . . . .*Not printed.*
- 95a. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all correspondence, petitions, reports written representations in the hands of the government, or any department of the same, concerning the commercial or trade mission to Japan of W. T. R. Preston, as Canadian Trade Commissioner for Canada, and of the reports of said commissioner, as well as all other reports and despatches received by the government in connection with the execution of said mission. Presented 6th February, 1911.—*Monk.* . . . . .*Not printed.*
- 95b. Supplementary return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all correspondence, petitions, reports, written representations in the hands of the government, or any department of the same, concerning the commercial or trade mission to Japan of W. T. R. Preston, as Canadian Trade Commissioner for Canada, and of the reports of said commissioner, as well as all other reports and despatches received by the government in connection with the execution of said mission. Presented 13th February, 1911.—*Mr. Monk.* . . . . .*Not printed.*
- 95c. Return to an order of the House of Commons, dated 6th February, 1911, for a copy of all correspondence between any department of the government and Mr. W. T. R. Preston, Trade Commissioner in Holland, regarding the Netherlands Land Company, since the date of the last resolution adopted by this House, calling for the same at the present session; also a copy of the official document issued by the government respecting the high regard in which western farm lands are held by some of the principal loan and investment companies. Presented 23rd February, 1911.—*Mr. Monk.* . . . . .*Not printed.*

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- 95d. Copy of the Treaty of Commerce and Navigation between Great Britain and Japan, signed at London, 3rd April, 1911. Presented 20th April, 1911, by Hon. W. S. Fielding.  
*Printed for sessional papers.*
- 95e. Papers with reference to treaty with Japan. Presented 17th May, 1911, by Hon. W. S. Fielding. . . . .*Printed for sessional papers.*
96. Return to an order of House of Commons, dated 11th January, 1911, for a copy of all applications, reports, records, correspondence, &c., in connection with the entry or cancellation proceedings in respect of the s.w.  $\frac{1}{4}$  section 10, township 38, range 15, west 2nd meridian. Presented 19th January, 1911.—*Mr. Lake.* . . . . .*Not printed.*

CONTENTS OF VOLUME 24—*Continued.*

- 96a.** Return to an order of the House of Commons, dated 7th December, 1910, for a copy of all applications, correspondence, and other documents in reference to sections 11, 12, 14, 22, 24, 28, 30, 32, 34, and 36 in township 10, range 22, west of the 4th meridian. Presented 1st February, 1911.—*Mr. Wallace*. . . . . *Not printed.*
- 96b.** Return to an order of the House of Commons, dated 8th February, 1911, for a copy of all letters, telegrams and correspondence between the Department of the Interior or any of its officials and Mr. J. Krenzer, or their solicitor, or one Mr. Wolf, and of all reports of the officials of the said department respecting the south half section 28, township 27, range 18, west of the 2nd principal meridian, and also all correspondence, letters and telegrams between the department and one Thomas Greenway or his brother respecting the said lands; and all correspondence between the department and its officials respecting the said lands; and all papers, reports, correspondence and documents put in the files of the department, since the 1st of April, in relation to the dispute between said Krenzer and said Greenway. Presented 22nd February, 1911.—*Mr. Staples*. . . . . *Not printed.*
- 97.** Minutes of conference held at Washington the 9th, 10th, 11th and 12th January, 1911, as to the application of the award delivered on the 7th September, 1910, in the North Atlantic coast fisheries arbitration to existing regulations of Canada and Newfoundland. Presented 19th January, 1911, by Sir Allen Aylesworth.  
*Printed for both distribution and sessional papers.*
- 97a.** Copy of order in council approved by His Excellency the Governor General in Council on the 21st January, 1911, relating to changes in the fishery regulations under section 54 of "The Fisheries Act," chapter 45 of the revised statutes of Canada, 1906, in conformity to the agreement made at the conference held at Washington, January, 1911. Also dispatch from Mr. Bryce to Lord Grey. Presented 25th January, 1911, by Hon. L. P. Brodeur. . . . . *Printed for both distribution and sessional papers.*
- 97b.** (1) Copy of Hague Tribunal Award concerning Atlantic fisheries given 7th September, 1910;  
(2) Extracts from the special fishery regulations for the province of Quebec;  
(3) Protocol 30 containing statements of the acts of Newfoundland and Canada objected to by the United States authorities.  
On motion of Mr. Brodeur, it was ordered, That Rule 74 be suspended, and that the foregoing papers in connection with the "Hague Tribunal Award," be printed forthwith, and put under the same cover as the documents the printing of which was ordered at the sitting of the House on the 25th January, 1911. Presented 27th January, 1911, by Hon. L. P. Brodeur.  
*Printed for both distribution and sessional papers.*
- 98.** Return to an order of the House of Commons, dated 11th January, 1911, for a copy of all memorials, petitions and requests received by the government since last session advocating the enlargement of the Welland canal, as well as all memorials, petitions, resolutions, &c., favouring the construction of the Montreal and Georgian Bay canal. Presented 20th January, 1911.—*Mr. Hodgins*. . . . . *Not printed.*
- 98a.** Return to an order of the House of Commons, dated 11th January, 1911, for a copy of the lease made between the government and the Canadian Light and Power Company relating to the Beauharnois canal. Presented 20th January, 1911.—*Mr. Lortie*.  
*Not printed.*

CONTENTS OF VOLUME 24—*Continued.*

- 98b.** Return to an order of the House of Commons, dated 23rd January, 1911, for a return showing in detail:—1. All sums paid by the concessionaires or grantees of the Beauharnois canal as rental or royalties upon the rights conveyed to them by the Crown on the Beauharnois canal, or paid by their assigns in the enjoyment of the said rights, since the concession.  
2. Of all sums paid or expended by the government upon the said canal since the date of the said concession.  
3. Of all sums actually due the Crown by the grantees or assigns for the use of the said canal or in connection therewith. Presented 7th February, 1911.—*Mr. Monk.*  
*Not printed.*
- 98c.** Supplementary return to an order of the House of Commons, dated 11th January, 1911, for a copy of all memorials, petitions and requests received by the government since last session advocating the enlargement of the Welland canal, as well as all memorials, petitions, resolutions, &c., favouring the construction of the Montreal and Georgian Bay canal. Presented 10th February, 1911.—*Mr. Hodgins.* ..*Not printed.*
- 98d.** Return to an order of the House of Commons, dated 1st February, 1911, for a copy of all leases, agreements and contracts made with any person, persons, company or corporations, granting by way of lease or otherwise, any water powers on or along the Trent Valley canal; together with any correspondence in connection with same. Presented 9th March, 1911.—*Mr. Roche.* . . . . .*Not printed.*
- 98e.** Return to an address of the House of Commons, dated 23rd January, 1911, for a copy of all correspondence concerning the lease or alienation of the Beauharnois canal, of all reports called for by the government and made concerning the said alienation by experts, officers of the departments or others, of all orders in council respecting said alienation and of the deed or deeds between the Crown and the concessionaires embodying the said lease or alienation and respecting also any transfers of their rights and privileges by the original grantees. Presented 14th March, 1911.—*Mr. Monk.* . . . . .*Not printed.*
- 99.** Return to an order of the House of Commons, dated 12th December, 1910, for a statement showing the amounts paid by the several government departments since 1st January, 1908, to the following law firms, or to any member thereof, and what has been in each case the nature of the service rendered; Messrs. Dandurand, Hibbard & Company, Montreal; Stewart, Cox & McKenna, Montreal; Smith, Markay & Company, Montreal; Hibbard, Boyer & Gosselin, Montreal. Presented 23rd January, 1911.—*Mr. Reid (Greville).* . . . . .*Not printed.*
- 100.** Return to an order of the House of Commons, dated 14th December, 1910, for a return showing the cost of the Senate of Canada for each year since the fiscal year 1896, under the headings of number of senators, indemnity, travelling expenses, printing, staff, and contingencies. Presented 23rd January, 1911.—*Hon. Mr. Foster.*  
*Not printed.*
- 101.** Return to an order of the House of Commons, dated 16th January, 1911, for a return showing the names of the United States consuls or consular officers in the Dominion, the districts over which each has consular authority, the scale of fees which is exacted by them for certification of exports to the United States and the number of certified lots of goods exported under certificate during the year 1910. Presented 24th January, 1911.—*Mr. Rhodes.* . . . . .*Not printed.*

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**CONTENTS OF VOLUME 24—Continued.**

- 102.** Return to an order of the House of Commons, dated 7th December, 1910, for a copy of all customs entries made at Vancouver, British Columbia, for goods entered free of duty by each of the following parties during each of the years 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909 and 1910:—Robert Kelly, by himself, agent, or broker for him; Kelly, Douglas & Company, or agent, or broker, for them; and by any or all of the departments of the Dominion government; also by any other person, firm or firms, or broker, having been allowed to make free entry at Vancouver, British Columbia, during above years, declared as for supply to the Dominion government. Presented 24th January, 1911.—*Mr. Barnard*. . . . .Not printed.
- 102a.** Return to an order of the House of Commons, dated 23rd January, 1911, for a return showing the average value for duty in 1896 and 1910, respectively, of the unit of each article or commodity enumerated in the schedules of the Customs Act, on which an ad valorem duty was payable together with the rate of duty, the amount on which duty was paid, and the amount of duty paid for each year, with the totals, respectively. Presented 13th February, 1911.—*Hon. Mr. Foster*. . . . .Not printed.
- 103.** Return to an order of the House of Commons, dated 7th December, 1910, for a return showing the names, respective ages, when appointed, and pay received, by the sessional employees of the House of Commons. Presented 25th January, 1911.—*Mr. Sproule*. . . . .Not printed.
- 103a.** Return to an order of the House of Commons, dated 13th February, 1911, for a return showing the names and addresses of all sessional employees of the House of Commons, beginning with the session immediately subsequent to the elections of 1896, and for each year succeeding, to and including the present session, their duties in each case, their home addresses, their salaries, their transfers in each and every case to either other appointments of the sessional staff or to permanent employment in any department, the dates of each such appointment or transfer, upon whose recommendation each such appointment was made, their dismissals, if any, and the reasons therefor. Presented 28th March, 1911.—*Mr. Sharpe (Ontario)*. . . . .Not printed.
- 104.** Return to an order of the House of Commons, dated 5th December, 1910, for a return showing the date of the opening and closing of parliament for each year from 1896 to 1910, and the number of days the House and Senate was in session for each of these years. Presented 27th January, 1911.—*Hon. Mr. Foster*. . . . .Not printed.
- 105.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all letters, telegrams, correspondence, petitions and communications referring in any manner to the establishment or maintenance of the mail route from Athol post office to South Athol, county of Cumberland, N.S. Presented 27th January, 1911.—*Mr. Rhodes*. . . . .Not printed.
- 106.** Return to an order of the House of Commons, dated 11th January, 1911, for a copy of all correspondence, telegrams or memoranda had between this government, or any member thereof, and the provincial government of Alberta and Saskatchewan, or either of them, or any of their members, in reference to securing control by such provincial governments of the lands, timber, water powers, coal and other minerals, or any of the natural resources which exist within the respective boundaries of said provinces. Presented 27th January, 1911.—*Mr. Herron*. . . . .Not printed.
- 106a.** Return to an order of the House of Commons, dated 13th February, 1911, for copies of any correspondence between the government of the Dominion, or any member thereof, and the provincial governments of Alberta and Saskatchewan, or either of



CONTENTS OF VOLUME 24—*Continued.*

them, or any of their members, in reference to securing control by such provincial governments of the lands, timber, water powers, coal and other minerals, or any of the natural resources which exist within the respective boundaries of said provinces, other than school lands. Presented 20th February, 1911.—*Mr. Lake*. . . . .*Not printed.*

- 107.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all correspondence between the Minister of Justice and the Attorney General of Nova Scotia in respect to the proposed change in the constitution of the Admiralty Court for that province. Presented 30th January, 1911.—*Mr. McKenzie*. . . . .*Not printed.*
- 108.** Return to an address of the House of Commons, dated 5th December, 1910, for a copy of the proclamation of the Governor in Council naming a day for the coming into force of an Act intituled "An Act to amend the Railway Act, 1903," chapter 31 of the Statutes of Canada of 1904 as provided for by Section 2 of that Act. Presented 30th January, 1911.—*Mr. Lennox*. . . . .*Not printed.*
- 109.** Return to an address of the House of Commons, dated 11th January, 1911, for a statement giving a concise history of the negotiations in regard to reciprocal trade carried on since 1900 between the governments of Canada and of the Australian Commonwealth, together with a copy of official telegrams upon the same subject exchanged between the two governments, or between the official representatives thereof, since the Imperial Conference of 1907. Presented 31st January, 1911.—*Mr. Ames*. . . . .*Not printed.*
- 109a.** Tariff relations between the United States and the Dominion of Canada, 1911. Presented 1st February, 1911, by Hon. W. S. Fielding. . . . .*Not printed.*
- 109b.** Tariff relations between the United States and the Dominion of Canada, correspondence and statements, 1911. Presented 6th February, 1911, by Hon. W. S. Fielding. *Printed for both distribution and sessional papers.*
- 109c.** Return to an order of the House of Commons, dated 27th February, 1911, for a return showing respectively, the total trade, the imports, the exports for each year from 1846 to 1876, both inclusive, between the British North American possessions, except Newfoundland, and the United Kingdom, the United States of America and other countries respectively. Presented 14th March, 1911.—*Mr. Barden*. . . . .*Not printed.*
- 110.** Return to an order of the House of Commons, dated 16th January, 1911, for a copy of all correspondence between the Finance Department, or any of its officers or any members of the government, and any persons or corporations with reference to the incorporation of the Farmer's Bank, or to circumstances in connection therewith. Presented 1st February, 1911.—*Hon. Mr. Foster*. . . . .*Not printed.*
- 110a.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all correspondence between the government or any member thereof, or any official of the Department of Finance, and any person or association, with reference to the conduct and affairs of the Farmer's Bank since the date of its organization. Presented 1st February, 1911.—*Hon. Mr. Foster*. . . . .*Not printed.*
- 110b.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of the full report and finding of the curator of the Farmer's Bank, up to the time of his appointment as liquidator of the same by the shareholders for the requisition of which, authority is given to the Minister of Finance by Section 122 of the Bank Act. Presented 1st February, 1911.—*Hon. Mr. Foster*. *Printed for both distribution and sessional papers.*



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- 110c.** Return to an address of the House of Commons, dated 16th January, 1911, for a copy of all applications, petitions, letters, telegrams and other documents and correspondence, and all orders in council and certificates, relating to or connected with the establishment of the Farmer's Bank of Canada and its operations. Presented 1st February, 1911—*Mr. Taylor (Leeds)*.  
*Printed for both distribution and sessional papers.*
- 111.** Return to an order of the House of Commons, dated 7th December, 1910, for a return showing the total cost to date of wharves at North Bay, Burks Falls and Maganatawan, Ontario; the name, date of appointment and salary of wharfinger in each case; the schedule of fees charged to public or others for use of wharf in each case; and a detailed statement of receipts for each wharf for the years 1907, 1908, 1909, giving name of party paying and for what. Presented 2nd February, 1911.—*Mr. Arthurs*.  
*Not printed.*
- 112.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all correspondence since the 1st January, 1909, with the Department of Justice or any officers of that department, making or supporting request for increase of pay to employees of the penitentiary at New Westminster; and of all reports or recommendations in that connection made by any officer of the department. Also a copy of all reports made during the period indicated, by the grand jury at New Westminster with reference to the conditions at said penitentiary. Presented 3rd February, 1911. *Mr. Taylor (New Westminster)*. . . . .*Not printed.*
- 113.** Report of proceedings between the Farmers' Delegation and the Prime Minister and members of the government held in the House of Commons chamber on the 16th December, 1910, with corresponding preliminary to the meeting. Presented 6th February, 1911, by Rt. Hon. Sir Wilfrid Laurier.  
*Printed for both distribution and sessional papers.*
- 113a.** Report of proceedings of the deputation of fruit and vegetable growers and the Prime Minister and members of the government held in the House of Commons on the tenth February instant. Presented 21st February, 1911, by Rt. Hon. Sir Wilfrid Laurier.  
*Printed for both distribution and sessional papers.*
- 113b.** Memorandum presented by the meat packers of Ontario and Quebec at a meeting held with members of the government on Monday, February 13, 1911. Presented 21st February, 1911, by Rt. Hon. Sir Wilfrid Laurier.  
*Printed for both distribution and sessional papers.*
- 114.** Return to an address of the Senate dated 12th January, 1911, for a copy of the order in council appointing His Honour Judge Jetté, administrator of the province of Quebec during the absence of Sir Pantaléon Pelletier, as well as a copy of any instruction whatsoever in connection with such appointment. Presented 19th January, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 115.** Return to an address of the Senate dated 17th January, 1911, calling for dates of publication and distribution to members of parliament of the English and French editions of the debates of the Senate and of the House of Commons from the year 1900 to date. Presented 25th January, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 115a.** Return to an order of the Senate dated 17th January, 1911, for a copy of a return showing, year by year, from 1900, up to the present day, the date of the publication and distribution to members of parliament:—
1. Of the English edition of the Journals of the Senate.

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**CONTENTS OF VOLUME 24—Continued.**

2. Of the French edition of the same.
3. Of the English edition of the Journals of the House of Commons.
4. Of the French edition of the same. Presented 14th February, 1911.—*Hon. Mr. Landry*.. . . . *Not printed.*
- 115b.** Return to an order of the Senate dated 17th January, 1911, for a copy of a return showing, year by year, from 1900, up to the present day, the date of the publication and distribution to members of parliament:—
1. Of the English edition of the Journals of the Senate.
2. Of the French edition of the same.
3. Of the English edition of the Journals of the House of Commons.
4. Of the French edition of the same. Presented 14th February, 1911.—*Hon. Mr. Landry*.. . . . *Not printed.*
- 116.** Return to an address of the Senate dated 17th January, 1911, for a statement of the number of applications for and number of divorces granted by the parliament of Canada from 1894 to 1910 inclusive. Presented 24th January, 1911.—*Hon. Mr. McSweeney*.. . . . *Not printed.*
- 117.** Return to an address of the Senate dated 22nd April, 1910, showing the expenses incurred, and the date of each of the payments made by the government for the electric installation in each of the rooms of the immigration officer at Quebec during the years 1908 and 1909. Presented 31st January, 1911.—*Hon. Mr. Landry*. 1911.—*Mr. Lennox*.. . . . *Not printed.*
- 118.** Return to an order of the House of Commons, dated 16th January, 1911, for a return showing what amount the government paid Mr. F. H. Chrysler, K.C., for professional services between May, 1896, and 31st March, 1909, and what amount during the financial year ending 31st March, 1910; what amount since 31st March, 1910; what amount is now due by the government to Mr. Chrysler; and in what transactions or cases Mr. Chrysler is now engaged in for the government. Presented 6th February, 1911.—*Mr. Blain*.. . . . *Not printed.*
- 119.** Return to an order of the House of Commons, dated 25th January, 1911, for a statement showing:—
1. How much wheat was exported from Canada for the crop years ending 31st August, 1908, 1909 and 1910.
2. How much wheat was exported from Canada through United States ports during 1908, 1909 and 1910, naming said ports, and amount exported from each port.
3. How many terminal grain elevators are there at Port Arthur and Fort William, and what is the name of each.
4. How much grain was shipped through each elevator at Port Arthur and Fort William during each year 1908, 1909 and 1910, and what are the names of the elevators respectively.
5. How much wheat was exported from Canada during each crop year 1908, 1909 and 1910, not passing through the terminal elevators at Port Arthur and Fort William.
6. How many men are employed by the government in connection with the terminal elevators at Port Arthur and Fort William, and what is the total salary paid the men per year. Presented 7th February, 1911.—*Mr. Schaffner*.  
*Printed for sessional papers.*
- 120.** Return to an order of the House of Commons, dated 18th January, 1911, for a return showing how many appointments have been made by the government from the con-

CONTENTS OF VOLUME 24—*Continued.*

stituency of South Grey since 1904, their names, to what positions appointed, and the salary or remuneration in each case. Presented 9th February, 1911.—*Mr. Blain.*

*Not printed.*

- 120a.** Return to an order of the House of Commons, dated 25th January, 1911, for a return showing the full names of the permanent and temporary employees appointed at Quebec since the first of January, 1905, in the following departments: Post Office, Customs, Inland Revenue and Public Works; the age and place of residence of each of these employees at the time of their appointment, the dates and nature of changes, promotions or increases of salary granted them since their appointment. Presented 15th February, 1911.—*Mr. Lachance.* . . . . .*Not printed.*
- 120b.** Supplementary return to an order of the House of Commons, dated 18th January, 1911, for a return showing how many appointments have been made by the government from the constituency of South Grey since 1904, their names, to what positions appointed, and the salary or remuneration in each case. Presented 20th February, 1911.—*Mr. Blain.* . . . . .*Not printed.*
- 120c.** Return to an order of the House of Commons, dated 23rd January, 1911, for a return showing how many appointments have been made by the government from the constituency of Wentworth since 1904, together with their names, to what positions appointed, and the salary or remuneration in each case. Presented 27th February, 1911.—*Mr. Blaine.* . . . . .*Not printed.*
- 121.** Return to an address dated the 24th November, 1910, for copies of all orders in council, of all decisions rendered by the Military Council or some of its members, and of all correspondence concerning the guard and escort of honour applied for in August and September last on the occasion of the visit in Quebec and Montreal of His Excellency Cardinal Vannotti. Presented 10th February, 1911.—*Hon. Mr. Landry.*  
*Not printed.*
- 122.** Return to an address of the Senate dated 1st February, 1911, calling for copies of petitions presented by the Quebec Board of Trade, or of the resolutions adopted by it during November and December last, and transmitted to the Right Honourable the Prime Minister of this country, together with all correspondence exchanged on the subject of these resolutions. Presented 7th February, 1911.—*Hon. Mr. Landry.*  
*Not printed.*
- 123.** Return to an order of the House of Commons, dated 11th January, 1911, for a copy of all letters, agreements, telegrams, or memoranda with respect to the application for water-power license on the Elbow river west of Calgary. Presented 13th February, 1911.—*Mr. McCarthy.* . . . . .*Not printed.*
- 123a.** Return to an order of the House of Commons, dated 18th January, 1911, for a copy of all correspondence had between the government, or any member thereof, and the Municipal Council of the City of Calgary, or any member thereof, regarding the conserving of the water flow of the Elbow river above the intake established by the said city in connection with their water works system. Presented 16th February, 1911.—*Mr. McCarthy.* . . . . .*Not printed.*
- 124.** Return to an order of the House of Commons, dated 26th January, 1911, for a statement showing the amounts paid by the various departments of the government to the Sherwin-Williams Company for paints and other goods in the years 1906, 1907, 1908, 1909 and 1910. Presented 14th February, 1911.—*Mr. Boyce.* . . . . .*Not printed.*

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**CONTENTS OF VOLUME 24—Continued:**

- 125.** Return to an order of the Senate dated 18th January, 1911, showing —
1. In 1884, did a federal statute (47 Vict., ch. 78) confirm the legal existence of the Quebec Bridge Company?
  2. In 1901, did not another federal statute (1 Edward VII, ch. 81), give birth to a company known as "The Quebec Terminal and Railway Company"?
  3. In 1903, after having been, for two years, completely distinct from one another, did not the two above-mentioned companies amalgamate, constituting a new company, to which a federal statute (3 Edward VII, ch. 177) gave the name of "The Quebec Bridge and Railway Company"?
  4. Was it not during the same year 1903, that were signed between the Quebec Bridge and Railway Company, the agreements which gave to the government the power to substitute itself to the bridge company and to complete at a certain date the colossal enterprise of the construction of a bridge over the St. Lawrence near Quebec?
  5. Was not this substitution of the government to a private company confirmed by federal legislation in 1908 at the time of the adoption by parliament of chapter 59 of 7-8 Edward VII?
  6. Under the said legislation, has the government passed an order in council enacting that it take hold of the whole of the undertaking, assets, properties and concessions of the said Quebec Bridge and Railway Company?
  7. When was this order in council passed?
  8. What composes the whole of the undertaking, assets, properties and concessions of the said company mentioned in the laws?
  9. Has any part of the said whole of the undertaking, assets, properties and concessions of the company been transferred to the Grand Trunk Pacific Railway Company, or to the National Transcontinental Commission?
  10. What was the part so transferred?
  11. Does it comprise the bridge or some of the railway lines from the bridge and ending at the city of Quebec or at some place on the line of the Canadian Pacific railway, on the north, and of the Grand Trunk railway on the south of the river?
  12. Are not the construction of the bridge and of the railway lines from the bridge, north and south of the St. Lawrence river, under the exclusive jurisdiction of the government who have kept the entire control thereof? Presented 14th February, 1911.—*Hon. Mr. Landry* . . . . . *Not printed.*
- 125a.** Return to an address of the Senate dated 22nd February, 1911, for a copy of the order in council, dated 17th August, 1908, authorizing the transfer to the government of the Quebec bridge, and of all the assets, franchises and privileges then the property of the Quebec Bridge and Railway Company. Presented 8th March, 1911.—*Hon. Mr. Landry* . . . . . *Not printed.*
- 126.** Return to an order of the House of Commons, dated 7th December, 1910, for a copy of all papers, reports, valuations, plans, documents, contracts, advertisements, tenders, offers, and letters, relating to the sale and disposition of the property purchased by the government for a barracks site at Toronto, and recently sold by the government, generally known as the Baby Farm or property; and more particularly, all correspondence, valuations or opinions as to the value of the said property, and as to the method of disposal thereof; and also a copy of advertisements, number of insertions, and names of papers in which same appeared, in the possession of the Department of Militia, or any other department of the government. Presented 10th February, 1911.—*Mr. Macdonell* . . . . . *Not printed.*



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**CONTENTS OF VOLUME 24—Continued.**

**127.** Return to an order of the Senate dated 17th January, 1911, for a return showing, in as many distinct columns:—

1. The names of all departments obliged by law to lay before parliament reports of their annual operations.

2. The date fixed by law for the laying of the said reports before parliament.

3. The date on which the said reports have been laid for the fiscal year ending 31st March, 1910, stating whether it was the English or the French edition which was so laid.

4. The date of the publication and distribution of the French edition of the said reports.

5. The title of the reports which, up to the 15th January, 1911, nine months and a half, after the fiscal year ending the 31st March, 1910, have not yet been published in French.

6. The titles of the reports which, up to the 15th January, 1911, twenty-one months and a half after the fiscal year ending the 31st March, 1909, have not yet been published in French. Presented 16th February, 1911.—*Hon. Mr. Landry. . . . .Not printed.*

**128.** Return to an order of the House of Commons, dated 9th January, 1911, for a return showing the date of incorporation, a copy of the Act of incorporation, and any subsequent amendments thereto, all petitions, correspondence, applications and other papers or data asking for or relating to the grant of subsidy thereto, a copy of all contracts for construction, the subsidies granted and the several payments of the same, the dates of payment and the persons to whom cheques were issued therefor, a copy of engineer's reports and certificates on which payment was authorized in each case, the number of miles completed, the number now being operated, the number of miles still to be finished, the total cost to date and the estimated cost of completion, and the present condition of the road, in the case of the Atlantic, Quebec and Western Railway Company, the Quebec and Oriental R. R. Company and the new Canadian company. Also the shareholders, directors and officers of each of these companies, the capital subscribed and paid up by each subscriber, the amounts paid out each year to directors and officers as fees and salaries, the amount paid for promotion or other expenses, in detail, for each of the above companies. In the case of any mileage operated, the yearly revenues and working expenses. Presented 17th February, 1911.—*Hon. Mr. Foster. . . . .Not printed.*

**128a.** Supplementary return to an order of the House of Commons, dated 23rd January, 1911, for a return showing the date of incorporation, a copy of the Act of incorporation, and any subsequent amendments thereto, all petitions, correspondence, applications and other papers for data asking for or relating to the grant of subsidy thereto, a copy of all contracts for construction, the subsidies granted and the several payments of the same, the dates of payment and the persons to whom cheques were issued therefor, a copy of engineer's reports and certificates on which payment was authorized in each case, the number of miles completed, the number now being operated, the number of miles still to be finished, the total cost to date and the estimated cost of completion, and the present condition of the road, in the case of the Atlantic, Quebec and Western Railway Company, the Quebec and Oriental R. R. Company and the new Canadian company. Also the shareholders, directors and officers of each of these companies, the capital subscribed and paid up by each subscriber, the amounts paid out each year to directors and officers as fees and salaries, the amount paid for promotion or other expenses, in detail, for each of the above expenses. In the case of any mileage operated, the yearly revenues and working expenses. Presented 17th March, 1911.—*Hon. Mr. Foster. . . . .Not printed.*



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- 128b. Further supplementary return to an order of the House of Commons, dated 23rd January, 1911, for a return showing the date of incorporation, a copy of the Act of incorporation, and any subsequent amendments thereto, all petitions, correspondence, applications and other papers or data asking for or relating to the grant of subsidy thereto, a copy of all contracts for construction, the subsidies granted and the several payments of the same, the dates of payment and the persons to whom cheques were issued therefor, a copy of engineer's reports and certificates on which payment was authorized in each case, the number of miles completed, the number now being operated, the number of miles still to be finished, the total cost to date and the estimated cost of completion, and the present condition of the road, in the case of the Atlantic, Quebec and Western Railway Company, the Quebec and Oriental R. R. Company, and the new Canadian company. Also the shareholders, directors and officers of each of these companies, the capital subscribed and paid up by each subscriber, the amounts paid out each year to directors and officers as fees and salaries, the amount paid for promotion or other expenses, in detail, for each of the above companies. In the case of any mileage operated, the yearly revenues and working expenses. Presented 23th March, 1911.—*Hon. Mr. Foster*... ..*Not printed.*
  
- 129. Return to an order of the House of Commons, dated 19th January, 1910, for a return showing in the construction of drill halls or armouries, or the leasing of sites for camps of instruction, in how many and what instances municipalities, regiments, or individuals, have contributed to the cost of the same in the way of concessions, sites, or moneys, and the amount in each case since 1904. Presented 20th February, 1911.—*Mr. Worthington*... ..*Not printed.*
  
- 130. Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all correspondence with the Department of the Interior or any officer thereof in regard to half-breed scrips numbers A. 8931 and A. 9970 issued to Joseph William Malbœuf, together with a copy of all documents in any way relating to the said scrips. Presented 20th February, 1911.—*Mr. Martin (Regina)*... ..*Not printed.*
  
- 130a. Return to an order of the House of Commons, dated 18th January, 1911, for a copy of all correspondence, reports, letters, telegrams and other documents, exchanged between the Right Reverend George Holmes, D.D., of Lesser Slave Lake, or anyone on his behalf, and the Minister of the Interior, or any official or temporary employee of the government, in reference to the issue or application of half-breed scrip. Presented 22nd February, 1911.—*Mr. Ames*... ..*Not printed.*
  
- 131. Return to an order of the Senate dated 9th February, 1911, for a return showing the importations by the Dominion from the United States in the year 1910 of the following commodities:—
  - 1. Beef and live cattle. 2. Sheep. 3. Poultry. 4. Ham. 5. Pork. 6. Bacon, 7. Flour. 8. Wheat. 9. Barley.
 With the value of the different articles.  
 Showing also the exportations from the Dominion to the United States of the corresponding products with their relative value. Presented 22nd February, 1911.—*Hon. Mr. Macdonald (B.C.)*... ..*Printed for sessional papers.*
  
- 131a. Return to an order of the Senate dated 10th February, 1911, for a return showing in as many distinct columns, for the last five years, with an additional column containing the average thereof:—
  - I. The quality and value of each of the following products.—

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 CONTENTS OF VOLUME 24—*Continued.*

1. Live stock. 2. Pork and bacon. 3. Potatoes. 4. Eggs. 5. Butter. 6. Cheese. 7. Maple sugar. 8. Fruit. 9. Garden products. 10. Hay. 11. Wheat. 12. Flour. 13. Oats. 14. Other natural products. 15. Agricultural implements.

Of Canadian origin exported to:—(a) the United States; (b) the English market; (c) other countries.

II. The quantity and quality of the same articles, together with the amount of duty collected on each of them for consumption and imported from:—(a) the United States; (b) the British Isles; (c) other countries. Presented 14th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*

**132.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all correspondence between the Department of the Interior, or any of its officers, and any other persons, respecting the timber on the Fanny Louise Irwin homestead in the District of Chilliwack, British Columbia, including any instructions to solicitors to issue a writ in Exchequer Court for cancellation of timber rights not reserved in Crown grant of the homestead. Presented 20th February, 1911.—*Mr. Taylor (New Westminster)*. . . . .*Not printed.*

**133.** Return to an order of the House of Commons, dated 18th January, 1911, for a return showing the total acreage of school lands sold in the provinces of Alberta and Saskatchewan in each of the years 1906, 1907 and 1908, with the average prices realized, also a statement of sales of such lands in each said province since 1st of January, 1909, to date, giving the places at which each sale was held and date of sale; the description of the land sold; the upset price at which it was offered and the price realized; and the area of land in each township, in which these school lands are located, that was under cultivation at the time it was decided to sell the school lands therein. Presented 20th February, 1911.—*Mr. McCarthy*. . . . .*Not printed.*

**134.** Return to an order of the House of Commons, dated 15th December, 1909, for a copy of all papers, letters, telegrams, documents, petitions, reports and correspondence with reference to, or in any way concerning the appointment of a government weigher at Montreal. Presented 20th February, 1911.—*Mr. Armstrong*. . . . .*Not printed.*

**135.** Supplementary return to an order of the House of Commons, dated 28th February, 1910, for a return showing the number of persons in the employ of each department of the government during the year 1909 under the following heads: (a) civil service employees at Ottawa; (b) civil service employees outside of Ottawa; (c) in stated and regular employ, but not under the Civil Service Act, giving the distinctive service of each group; (d) those in temporary or casual employment, giving the distinctive work of each group, and also showing the total amount paid under each head. Presented 20th February, 1911.—*Hon. Mr. Foster*. . . . .*Not printed.*

**136.** Return to an order of the House of Commons, dated 30th January, 1911, for a return showing the total quantity of coal delivered to ship at Picton, in each year during which the SS. *Stanley* has been engaged in the winter service between Prince Edward Island and Nova Scotia, and the cost thereof.

Also, statements showing the total cost of putting coal aboard: the quantity of freight handled at Picton, and the total cost of handling such freight. Presented 21st February, 1911.—*Mr. Stanfield*. . . . .*Not printed.*

**136a.** Return to an order of the House of Commons, dated 30th January, 1911, for a return showing the total quantity of coal delivered to ship at Picton, in each year during which the SS. *Earl Grey* has been engaged in the winter service between Prince Edward Island and Nova Scotia, and the cost thereof.

CONTENTS OF VOLUME 24—*Continued.*

Also, statements showing the total cost of putting coal aboard; the quantity of freight handled at Pictou, and the total cost of handling such freight. Presented 21st February, 1911.—*Mr. Stanfield*... ..*Not printed.*

- 136b.** Return to an order of the House of Commons, dated 30th January, 1911, for a return showing the total quantity of coal delivered to ship at Pictou, in each year during which the SS. *Stanley* has been engaged in the winter service between Prince Edward Island and Nova Scotia, and the cost thereof.

Also, statements showing the total cost of putting coal aboard; the quantity of freight handled at Pictou, and the total cost of handling such freight. Presented 21st February, 1911.—*Mr. Stanfield*... ..*Not printed.*

- 137.** Return to an order of the House of Commons, dated 6th February, 1911, for a copy of the last advertisement for tenders, and the specification and contract or proposed contract for the erection of the Quebec bridge. Presented 21st February, 1911.—*Mr. Lennox*... ..*Not printed.*

- 137a.** Return to an address of the House of Commons, dated 5th December, 1910:—

1. For a return showing the contract between the Quebec Bridge and Railway Company and M. P. Davis, dated July 27, 1903, providing for the construction of the lines of railway connecting the Quebec bridge with the city of Quebec and with certain other railways, the tender upon which the contract was based, and the estimated cost at the time of the contract based upon the scheduled quantities and prices.

2. The agreement transferring this undertaking to the government, and of all correspondence and documents in connection therewith and of the order in council of 16th February, 1909, transferring it to the commissioners of the Transcontinental railway.

3. And stating the mileage of the lines of railway embraced in this contract.

4. The sums paid on account by the Quebec Bridge and Railway Company, and the purposes for which it was paid.

5. The amount owing or claimed by the contractor for work done or material supplied up to the time the undertaking was taken over by the government, and the date of taking it over, the amount paid or undertaken to be paid by the government to the company or its members, the estimated amount at that time required to complete the work, the amount the government or commissioners have since paid and the estimated amount yet to be paid.

6. And setting forth the reasons for taking the undertaking out of the hands of the Bridge and Railway Company and for transferring it to the commissioners.

7. Any other sums paid, allowed or assumed for or on account of this company or its members, and the account on which paid, allowed or assumed. Presented 28th March, 1911.—*Mr. Lennox*... ..*Not printed.*

- 137b.** Return to an address of the House of Commons, dated 6th March, 1911, for a copy of the order in council appointing, or providing for the appointment of, the engineers to prepare and determine upon plans and specifications, and superintend the construction of the Québec bridge, and of all instructions, correspondence, writings and documents, in connection with these appointments, including the two additional engineers; and also a copy of any subsequent orders in council, or any instructions, correspondence, &c., relating to the refusal of any of the engineers to act, or continue in office, or the retirement, or substitutions of engineers. Presented 12th April, 1911.—*Mr. Lennox*... ..*Not printed.*

- 137c.** Return to an order of the House of Commons, dated 10th April, 1911, for a copy of all correspondence between the Department of Labour and various labour organizations,

CONTENTS OF VOLUME 24—*Continued.*

- or their officers, in connection with the Quebec bridge. Presented 20th April, 1911.—*Mr. Ames*. . . . .*Not printed.*
- 137*d*. Return to an order of the Senate dated 24th November, 1910, calling for a copy of all correspondence between the government, some of its members or employees, and the engineers appointed to prepare the plans of the new bridge to replace the one which collapsed at Quebec in the year 1907. Presented 20th April, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
138. Report of the Ottawa Improvement Commission for the fiscal year ending 31st March, 1910, &c. Presented 21st February, 1911, by *Hon. W. S. Fielding*. . . . .*Not printed.*
139. Fourth Joint Report of the Commissioners for the demarcation of the meridian of the 141st degree of west longitude (Alaskan boundary) appointed in virtue of the first article of the convention between Great Britain and the United States, signed at Washington on the 21st April, 1906. Presented 21st February, 1911, by *Rt. Hon. Sir Wilfrid Laurier*. . . . .*Printed for sessional papers.*
140. A return to an address of the Senate dated 20th January, 1911, calling for copies of all orders in council and ordinances, and of all correspondence exchanged between the parties interested in the subject:—
1. Of the lease, before 1896, to *Mr. Georges Tanguay* of a military property belonging to the government and situated on des Ramparts street at Quebec. .
  2. Of the requests made by other persons at that time, to purchase or lease the property in question.
  3. Of the sale of the same property to the same *Georges Tanguay*, agreed to by the present government about 1897. Presented 21st February, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
141. Return to an order of the House of Commons, dated 7th December, 1910, for a statement showing the disposition made by the government during the past year of the following:—public lands, timber limits, mineral areas, water-powers and fishing rights. Presented 22nd February, 1911.—*Mr. Sharpe (Lisgar)*. . . . .*Not printed.*
- 141*a*. Supplementary return to an order of the House of Commons, dated 7th December, 1910, for a statement showing the disposition made by the government during the past year of the following:—public lands, timber limits, mineral areas, water-powers and fishing rights. Presented 19th May, 1911.—*Mr. Sharpe (Lisgar)*. . . . .*Not printed.*
142. Return to an order of the House of Commons, dated 11th January, 1911, for a return showing the concessions granted to Canada by British countries, the products of which may be imposed into Canada under the preferential tariff. Presented 23rd February, 1911.—*Mr. Ames*. . . . .*Not printed.*
143. Order in council, correspondence, &c., in respect to a resolution of the Legislative Assembly of the province of Saskatchewan, declaring it desirable that the parliament of Canada should create out of the public domain within the province, a suitable land grant for the University of Saskatchewan. Presented 23rd February, 1911, by *Rt. Hon. Sir Wilfrid Laurier*. . . . .*Not printed.*
144. Return to an order of the House of Commons, dated 23rd January, 1911, for a return showing:—1. All grants, leases, licenses, and concessions given to individuals or corporations of water power rights or privileges on the Winnipeg river at present in force. 2. The names and descriptions of such power sites. 3. The terms and conditions upon which they are respectively held. 4. The dates upon which these powers



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or privileges were respectively given. 5. What constitutes forfeiture. 6. What grants, leases or licenses have been forfeited. 7. The general rules and regulations, if any, applying to the giving and holding of the water-powers on this river. 8. The amount of development effected by the grantees or lessees respectively. 9. What title or interest the Dominion claims in the running water, the bed of the river, and the banks thereof. Presented 24th February, 1911.—Mr Haggart (Winnipeg).

Not printed.

145. Return to an order of the House of Commons, dated 5th December, 1910, for a return showing the total number of accidents on railways in Canada since 1st April, 1909, and up to date; the number of fatal accidents; the number on each railway, and the causes of the same. Also, the number of accidents on construction work, fatal or otherwise, on the Canadian Northern and the Grand Trunk Pacific railways, and the causes of the same. Presented 24th February, 1911.—Mr. Smith (Nanaimo).

Not printed.

146. Return to an order of the Senate dated 24th January, 1911, showing, year by year, from 1st July, 1896, up to date, the amounts paid to Mr. J. B. Laliberté, of Quebec, merchant, by each of the departments of the government of this country. Presented 24th February, 1911.—Hon. Mr. Landry.. . . .Not printed.

147. Return to an order of the Senate dated 25th January, 1911, for the production of a statement showing, year by year, from the 1st July, 1896, up to this date, the sums of money paid to the newspaper, the Daily Telegraph, of Quebec, by each of the different departments of the government of this country. Presented 24th February, 1911.—Hon. Mr. Landry.. . . .Not printed.

148. Return to an order of the Senate dated 26th January, 1911, for a return showing, year by year, since 1st July, 1896, up to date, the amounts paid to Mr. Louis Letourneau, of Quebec, or to the Quebec Preserving Company, by each of the departments of the government of this country. Presented 24th February, 1911.—Hon. Mr. Landry.

Not printed.

149. Return to an order of the Senate dated 27th January, 1911, for the production of a return showing, year by year, from the 1st of July, 1896, to this date, the sums of money paid to Messrs. Samson and Filion, of Quebec, merchants, by each of the different departments of the government of this country. Presented 24th February, 1911.—Hon. Mr. Landry.. . . .Not printed.

150. Return to an order of the Senate dated 27th January, 1911, for the production of a return showing, year by year, from the 1st July, 1896, to this date, the sums of money paid to Mr. C. E. Taschereau, of Quebec, notary, by each of the different departments of the government of this country. Presented 24th February, 1911.—Hon. Mr. Landry.. . . .Not printed.

151. Return to an order of the Senate dated 27th January, 1911, for the production of a return showing, year by year, from the 1st July, 1896, to this date, the sums of money paid to Mr. George Tanguay, of Quebec, by each of the different departments of the government of this country. Presented 24th February, 1911.—Hon. Mr. Landry.. . . .Not printed.

152. Return to an order of the House of Commons, dated 6th February, 1911, for a copy of the curator's reports in the cases of all banks for which curators have been appointed. Presented 27th February, 1911.—Hon. Mr. Foster.. . . .Not printed



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- 152a.** Supplementary return to an order of the House of Commons, dated 6th February, 1911, for a copy of the curators' reports in the cases of all banks for which curators have been appointed. Presented 2nd May, 1911.—*Hon. Mr. Foster*. . . . .*Not printed.*
- 153.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of the by-laws, rules and regulations of the Canadian Bankers' Association as approved by the Treasury Board and now in effect. Presented 27th February, 1911.—*Hon. Mr. Foster*. . . . .*Printed for sessional papers*
- 154.** Return to an order of the House of Commons, dated 30th January, 1911, for a return showing the total amount of money that has been expended on the Seybold building for alterations and repairs, or in installation of elevators, heating apparatus or other fixtures, by the government during the term of the present lease, and also under the former lease, when used for census purposes.  
2. The particulars of expenditures and to whom were the several amounts paid. Presented 6th March, 1911.—*Mr. Goodeve*. . . . .*Not printed.*
- 155.** Return to an order of the House of Commons, dated 20th February, 1911, for a copy of all applications made by employees of the North Atlantic collieries for a conciliation board within the past six months, and of all letters, telegrams, documents, statements and other papers and documents touching the same, or having any relation thereto, including all correspondence received by the government or any department of the government from the said North Atlantic collieries or from the employees thereof touching the matter aforesaid. Presented 27th February, 1911.—*Mr. Maddin*. . . . .*Not printed.*
- 156.** Return to an order of the House of Commons, dated 2nd February, 1911, for a return showing the amount of money paid for provisions, supplies, repairs, work or any other service for the year ending 31st March, 1910, to the following firms in the city of Kingston, respectively: Elliott Brothers, McKelvey & Birch, C. Livingstone & Bros., R. Crawford, James Redden & Co., R. Carson, and James Crawford. Presented 27th February, 1911.—*Mr. Edwards*. . . . .*Not printed.*
- 157.** Orders in council, correspondence, &c., touching any proposal or Bill to erect dams, or other similar works across the River St. Lawrence, or part of the said river, at or near the Long Sault, or in the vicinity thereof. Presented 27th February, 1911, by Rt. Hon. Sir Wilfrid Laurier. . . . .*Printed for sessional papers.*
- 157a.** Partial return to an address of the House of Commons, dated 8th February, 1911, for a copy of all correspondence, memoranda, reports, memorials, plans, orders in council, treaties, conventions, agreements, documents and papers of every kind, touching any proposal or Bill to erect dams or other similar works across the River St. Lawrence, or part of the said river, at or near the Long Sault, or in the vicinity thereof; including all statutes of the state of New York and the United States of America relating thereto, and all Bills now before the Congress of the United States of America touching the same, and all the proceedings upon all such Statutes and Bills. Presented 9th March, 1911.—*Mr. Borden*. . . . .*Not printed.*
- 158.** Return to an order of the House of Commons, dated 6th February, 1911, for a return giving the names of all persons receiving fishery bounties, and the amount received by each, at each of the following ports:—Bauline, Little Lorraine, Main-à-Dieu and Scaterie, in the county of Cape Breton, Nova Scotia. Presented 28th February, 1911.—*Mr. Maddin*. . . . .*Not printed.*

CONTENTS OF VOLUME 24—*Continued.*

- 158a. Return to an order of the House of Commons, dated 16th April, 1911, for a return showing the names of all persons in the province of New Brunswick who have received fishing bounties during the year ending 31st March, 1911, with the amount received by each. Presented 2nd May, 1911.—*Mr. Daniel*. . . . .*Not printed.*
159. Return to an order of the House of Commons, dated 20th January, 1911, for a copy of all reports, correspondence, and documents, not already brought down, including report of survey made in 1909 of the harbour of Cape John and Tatamagouche Bay, in the counties of Pictou and Colchester, in the province of Nova Scotia, relating to the route of the winter steamers between Prince Edward Island and the mainland of Canada, and suggesting or recommending a change or changes on such route, and an increase in the number of trips daily of such winter steamers; also a copy of all similar papers, not already brought down, relating to the route of the summer mail steamers between Charlottetown and the mainland of Canada, and suggesting a change in that route and an increase in the number of trips daily; and also with regard to connecting such suggested route with a point on the Intercolonial railway. Also for a copy of all similar papers, if any, relating to or suggesting the route between Cape Traverse in Prince Edward Island and Cape Tormentine in the mainland, as a route for the winter and summer steamers. Also for a copy of all reports, papers and correspondence relating to additional or improved aids to navigation of the harbour of Charlottetown and entrance thereto and in Tatamagouche bay and harbour. Presented 6th March, 1911.—*Mr. Warburton*. . . . .*Not printed.*
160. Return to an address of the House of Commons, dated 20th February, 1911, for a copy of all correspondence, recommendations, orders in council, or other documents relating to the case of R. E. Curran, a railway mail clerk, who was fatally injured in an accident at Owen Sound, on the 29th May, 1908, and with regard to which application was made for a compassionate grant or allowance to his heirs or family. Presented 7th March, 1911.—*Mr. Macdonell*. . . . .*Not printed.*
161. Return to an address of the House of Commons, dated 27th February, 1911, for a copy of all orders in council, reports, correspondence, documents and papers touching the dismissal of the sub-collector of customs at Mahone bay, Nova Scotia. Presented 13th March, 1911.—*Mr. Taylor (Leeds)*. . . . .*Not printed.*
162. Return to an order of the House of Commons, dated 20th February, 1911, for a return showing:—1. The nature of the subsidy which has been granted to the Vancouver Dry Dock Company.  
2. The nature of payment of interest or of a guarantee of such subsidy. Presented 13th March, 1911.—*Mr. Barnard*. . . . .*Not printed.*
163. Return to an order of the House of Commons, dated 6th March, 1911, for a copy of all papers, reports of appraiser, letters and correspondence relating to the appraising and passing the customs of the vessel *Wanda*, owned by one William R. Travers, Toronto, on the 20th October, 1909. Presented 14th March, 1911.—*Mr. Sharpe (Ontario)*. . . . .*Not printed.*
164. Statement of the affairs of the British Canadian Loan and Investment Company (Limited) for the year ended 31st December, 1910.  
Also, a list of the shareholders on 31st December, 1910, in accordance with chapter 57 of 39 Victoria. Presented (Senate) 14th March, 1911, by the Hon. the Speaker.  
*Not printed*

CONTENTS OF VOLUME 24—*Continued.*

- 165.** Return to an order of the House of Commons, dated 27th February, 1911, for a return showing:—
1. How many fisheries officers have been appointed in connection with the Ontario fisheries service within the last year?
  2. What are their names, their rank, and the limits territorially of the jurisdiction of each?
  3. What is the salary of each, and what is the length of time or duration of such appointments?
  4. Do the duties of these officers in any, and in what cases duplicate the services if similar officers appointed by the Ontario legislature?
  5. Has anything been done, and what, to prevent the duplication of this service?
  6. What is the total revenue derived during the years 1909 and 1910 from fisheries for the province of Ontario, and what was the total expenditure?
  7. What will be the total expenditure for the year 1911?
  8. Is any, and what, system followed in making appointments to this service as to efficiency. Presented 17th March, 1911.—*Mr. Porter*. . . . .*Not printed.*
- 165a.** Return to an order of the House of Commons, dated 16th February, 1911, for a return showing how many wardens for the protection of fisheries were appointed in Victoria county, N.S., between July and December in the years 1906, 1907, 1909 and 1910.
2. Their names, length of service and amount paid to each. Presented 24th March, 1911.—*Mr. Maddin*. . . . .*Not printed.*
- 166.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all correspondence between the Post Office Department and any of the officials or other persons, relative to making an allowance for the transportation of letter carriers on the tramway system in New Westminster. Presented 17th March, 1911.—*Mr. Taylor (New Westminster)*. . . . .*Not printed.*
- 167.** Return to an address of the Senate dated 23rd February, 1911, for a copy of all the documents relating to the case of cholera reported in November last as to the Russian said Godlieb, to the quarantining of this person, and to his detention until this date on Grosse Isle, with a history of the case, day by day, up to this date. Presented 16th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 168.** Return to an address of the Senate dated 17th January, 1911, for a statement of the number of divorces granted by the parliament of Canada since 1894 to 1910 inclusive, together with the number of divorces granted by each of the courts of Nova Scotia, New Brunswick, Prince Edward Island, and British Columbia; also the population of each of those provinces according to census of 1901; and the aggregate population of Ontario, Quebec, Manitoba, and the Northwest Territories according to censuses in 1901. Presented 16th March, 1911.—*Hon. Mr. Power*. . . . .*Not printed.*
- 169.** Return to an order of the Senate dated 17th February, 1911, for a return showing the correspondence exchanged, the report made by the captain and the log kept by him relating to the trip just made by the steamer *Montcalm* in the lower St. Lawrence, the island of Anticosti and to the Baie des Sept Isles, &c. Presented 16th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 170.** Return to an address of the Senate dated 10th March, 1911, calling for a statement showing:—
1. Who are among the judges of the Superior Court of the province of Quebec, those whose place of residence is fixed by the commission appointing them, and what is, for each of these judges, the place so fixed.

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 CONTENTS OF VOLUME 24—*Continued.*

2. Who are the judges whose place of residence has been fixed or changed by order in council, and what is for each of these judges, the place of residence now fixed.
3. Who are the judges whose place of residence has never been fixed, neither in the commission nor by any subsequent order in council, and what is the judiciary district to which they were appointed. Presented 21st March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
171. Return to an order of the House of Commons, dated 30th January, 1911, for a copy of all advertisements, letters, contracts, complaints, reports of inspectors and other correspondence regarding mail routes Trout creek to Loring and Powassan to Nipissing or Restoule. Presented 24th March, 1911.—*Mr. Arthurs*. . . . .*Not printed*
173. Return to an order of the House of Commons, dated 27th February, 1911, for a return showing what ministers of the Crown were abroad in 1908, 1909 and 1910, on public business and on what business; what expenses were incurred by each while engaged on public business; what persons, if any, accompanied each minister on public business whose expenses were paid by the government, and the amount of such persons expenses. Presented 24th March, 1911.—*Mr. Sharpe (Ontario)*. . . . .*Not printed*
173. Return to a order of the House of Commons, dated 27th February, 1911, for a return showing the value, respectively, of the following products of the country, by provinces, during the years 1909 and 1910, agricultural products of all kinds, including field products of every kind, fruit, vegetables, live stock, &c., dairy products, &c.; timber of all kinds; minerals of all kinds; fish of all kinds; and manufactred goods of all kinds. Presented 24th March, 1911.—*Mr. Macdonell*. . . . .*Not printed.*
174. Report of the Manitoba Fisheries Commission, 1910-11. Presented 24th March, 1911, by Hon. L. P. Brodeur. . . . .*Not printed.*
175. Return to an order of the House of Commons, dated 14th December, 1910, for a return showing what amount has been paid by the government during the last fiscal year for cab hire and street railway fares in the city of Ottawa for the following persons, with the names and the amounts in each case: ministers of the Crown; speaker of the Senate and House of Commons; civil servants of all grades from deputy ministers down; all other persons employed in any government work or other service. Presented 27th March, 1911.—*Mr. Taylor (Leeds)*. . . . .*Not printed.*
- 175a. Return to an order of the House of Commons, dated 14th December, 1910, for a return showing what amount has been paid by the government dnring the last fiscal year for travelling expenses with the names and the expenditure 'in each case, under the following heads, viz.: railway, steamship, and other lines of transportation; private cars; Pullman cars; tips to waiters; meals and hotel expenses; for the following persons: Ministers of the Crown; civil servants of all grades; immigration agents; and other persons employed by the government on any special or other work. Presented 20th April, 1911.—*Mr. Taylor (Leeds)*. . . . .*Not printed.*
- 175b. Supplementary return to an order of the Honse of Commons, dated 14th December, 1910, for a return showing what amount has been paid by the government during the last fiscal year for travelling expenses with the names and the expenditure in each case, under the following heads, viz.: railway, steamship, and other lines of transportation; private cars; Pullman cars; tips to waiters; meals and hotel expenses, for the following persons: Ministers of the Crown; civil servants of all grades; immigration agents; and other persons employed by the government on any special or other work. Presented 20th July, 1911.—*Mr. Taylor (Leeds)*. . . . .*Not printed.*



CONTENTS OF VOLUME 24—*Continued.*

- 176.** Papers referring to the organization of a Secretariat, as follows:—1. Despatch to the governors of the self-governing colonies relative to the reorganization of the Colonial Office.  
 2. Note on a visit to Australia, New Zealand and Fiji in 1909, by Sir Charles Lucas, K.C.M.G., C.B., assistant under secretary of state for the Colonies.  
 3. Report of the Dominions Department of the Colonial Office for the year 1909-1910.  
 4. Imperial Copyright Conference, 1910, memorandum of the proceedings.  
 5. Further correspondence relating to the Imperial Conference.  
 6. Correspondence relating to the Imperial Conference, 1911. Presented, 28th March, 1911, by Rt. Hon. Sir Wilfrid Laurier. . . . .*Not printed.*
- 177.** Return to an order of the House of Commons, dated 20th February, 1911, for a copy of the application by or on behalf of the Glace Bay Bait Association, Glace Bay, N.S., for moneys in connection with the cold storage building for the storage of bait, at Glace Bay, N.S.; also a copy of all correspondence between the said association or anyone on its behalf and the government, any department of the government, or anyone on behalf of the government or any of its departments. Presented 28th March, 1911.—*Mr. Maddin*. . . . .*Not printed.*
- 177a.** Return to an order of the House of Commons, dated 3rd April, 1911, for a copy of all the correspondence in connection with the building of bait freezers at Lunenburg and Lingan in the riding of South Cape Breton. Presented 20th April, 1911.—*Mr. Mackenzie*. . . . .*Not printed.*
- 178.** Return to an address of the Senate dated 8th March, 1911, that an order of the Senate do issue for the production of a copy of the complaint made by the commandant of the 61st Regiment against the commandant of the 7th Military District, of the reply of the latter and of all correspondence on the subject between the authorities at Ottawa and those at Quebec and Montreal, together with a copy of the report of the Inspector General respecting the case. Presented 28th March, 1911.—*Hon. Mr. Landry*. . . . .*Not printed.*
- 179.** Return to an order of the House of Commons, dated 16th March, 1911, for a return showing the average prices of hutter and of eggs in London, England, for the past five years in comparison with the prices, respectively, in eastern provinces, in Montreal, in Toronto, in Minneapolis, in Chicago, in Detroit, in Buffalo, in Boston and in New York. Presented 30th March, 1911.—*Mr. Sharpe (Ontario)*. . . . .*Not printed.*
- 179a.** Return to an order of the House of Commons, dated 23rd March, 1911, for a return showing the quantity and value of hutter, eggs, poultry, chilled or frozen meat, bacon, lard, apples, vegetables, wheat, barley, cattle, horses and potatoes imported into Canada during the six months ending 1st March, 1911, the countries from which the same were imported and the duty collected thereon. Presented 6th April, 1911.—*Mr. Middlebro*. . . . .*Not printed.*
- 179b.** Supplementary return to an order of the House of Commons, dated 23rd March, 1911, for a return showing the quantity and value of hutter, eggs, poultry, chilled or frozen meat, bacon, lard, apples, vegetables, wheat, barley, cattle, horses and potatoes imported into Canada during the six months ending 1st March, 1911, the countries from which the same were imported and the duty collected thereon. Presented 8th May, 1911.—*Mr. Middlebro*. . . . .*Not printed.*
- 180.** Return to an order of the House of Commons, dated 14th December, 1910, for a return showing the total payments made by the government to the Eclipse Manufacturing



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**CONTENTS OF VOLUME 23—Continued.**

Company, Limited, for year 1909-10, and how these contracts were let; the total payments made by the government to the Office Specialty Manufacturing Company, Limited, for year 1909-10, and how these contracts were let; the total payments made by the government to Messrs. Ahearn & Soper for year 1909-10, and how these contracts were let. Presented 3rd April, 1911.—*Mr. Sharpe (Lisgar)*. . . . .*Not printed.*

**181.** Return to an order of the Senate dated 22nd February, 1911, for a copy of all orders in council and of all orders issued by the Minister of the Interior giving, from time to time, to the commissioner for the Northwest Territories, since his appointment as such, the instructions which he is to follow in the exercise of his executive in so far as concerns the government of the Northwest Territories. Presented 4th April, 1911. *Hon. Mr. Landry*. . . . .*Not printed.*

**182.** Return to an order of the Senate dated 16th March, 1911, calling for a copy of all correspondence relating to the stranding in August, 1910, of the ship *Manchester Engineer* near the Strait of Belle Isle, and of the investigation held with reference thereto at Quebec during the month of September or October last. Presented 4th April, 1911. —*Hon. Mr. Landry*. . . . .*Not printed.*

**183.** Return to an order of the House of Commons, dated 15th February, 1911, for a return showing all communications, telegrams, letters, petitions or plans relating to the rifle range at Bear River, N.S., received since January, 1909.  
2. From whom received and upon what dates respectively? Presented 5th April, 1911. —*Mr. Jameson*. . . . .*Not printed.*

**184.** Return to an order of the House of Commons, dated 14th December, 1910, for a return showing what total amount has been annually expended in each province since 1880 by the Department of Public Works for harbours and rivers, together with the annual totals of said expenditure for the whole of Canada; also that the Department of Public Works prepare and lay upon the Table of this House with this Return a map for each province, showing the location of all wharves, piers, breakwaters, &c., constructed or purchased by the federal government, and presently owned by the Dominion of Canada. Presented 6th April, 1911.—*Mr. Ames*. . . . .*Not printed.*

**185.** Return to an order of the Senate dated 22nd February, 1911, for:—  
1. Copies of all papers relating to the appointment of Martin Dickie to the command of the 76th Regiment of the counties of Colchester and Hants.  
2. Copies of all papers relating to the recommendation of Major J. L. Barnhill by Lieut. General Drury and others to the command of the said regiment.  
3. Copies of all documents relating in any way to the reasons or causes why the said Major Barnhill as the senior officer of said regiment should not have been appointed to the command of the same.  
4. Copies of all correspondence and other papers and documents relating to the recent reorganization of the 78th Colchester, Hants and Picton Regiment of "Highlanders." Presented 4th April, 1911.—*Hon. Mr. Lougheed*. . . . .*Not printed.*

**186.** Return to an order of the House of Commons, dated 27th March, 1911, for a return showing the mileage of railways owned, controlled or operated in the United States by the Grand Trunk, the Canadian Pacific and other Canadian railway companies.  
2. Also the mileage of railways owned, controlled or operated by the United States railway corporations in Canada. Presented 10th April, 1911.—*Mr. Rutan*.  
*Not printed.*

**187.** Return to an order of the House of Commons, dated 3rd April, 1911, for a copy of all correspondence, declarations, telegrams, mailing lists, and other documents relating

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 CONTENTS OF VOLUME 24—*Continued.*

- to an application asking for the granting of statutory postal privileges to a newspaper published at New Glasgow, Nova Scotia, called the *Gnysborough Times*. Presented 10th April, 1911.—*Mr. Sinclair* . . . . . *Not printed.*
- 188.** Return to an order of the House of Commons, dated 23rd January, 1911, for a copy of all memorials, reports, correspondence and documents in the possession of the government, not already brought down, relating to a survey of a route for a tunnel under the Straits of Northumberland between the province of Prince Edward Island and the mainland of Canada, and also relating to the construction of such tunnel. Presented 12th April, 1911.—*Mr. Richards* . . . . . *Not printed.*
- 189.** Return to an order of the House of Commons, dated 27th February, 1911, for a copy of all enactments, regulations, documents, papers and information of every kind setting forth or showing the systems or method by which the census is taken in the United Kingdom, the British Dominions and foreign countries, respectively; and showing in what respect, if any, the principle, system or method adopted in the United Kingdom, the British Dominions, and foreign countries differs from that proposed for the approaching census in Canada. Presented 12th April, 1911.—*Mr. Borden* . . . . . *Not printed.*
- 189a.** Forms of schedules, &c., in connection with the census to be taken during the year 1911. Presented 21st April, 1911, by Hon. S. A. Fisher . . . . . *Not printed.*
- 189b.** Supplementary return to an order of the House of Commons, dated 27th February, 1911, for a copy of all enactments, regulations, documents, papers and information of every kind setting forth or showing the systems or method by which the census is taken in the United Kingdom, the British Dominions and foreign countries, respectively; and showing in what respect, if any, the principle, system or method adopted in the United Kingdom, the British Dominions, and foreign countries differs from that proposed for the approaching census in Canada. Presented 10th May, 1911.—*Mr. Borden* . . . . . *Not printed.*
- 190.** Return to an order of the House of Commons, dated 6th February, 1911, for a return showing:—
1. How many employees were connected with the Printing Bureau in 1896?
  2. The names of those employees connected with the Printing Bureau who were dismissed between 1896 and 1911, and the date of dismissal and the cause in each case?
  3. The names of those employees, who resigned or died between the years 1896 and 1911, and the date of resignation or death in each case.
  4. The names of those who have been appointed to positions in connection with the Printing Bureau between 1896 and 1911, and the date of appointment in each case.
- Presented 12th April, 1911.—*Mr. Edwards* . . . . . *Not printed.*
- 191.** Return to an address of the Senate dated 17th January, 1911, for the production of a copy of the agreements concluded between the government and the former proprietor of the Stadacona farm at St. Félix du Cap Rouge, with reference to the purchase of the said farm, and of operating the same in the future as an experimental farm, and of all correspondence on these two matters. Presented 19th April, 1911.—*Hon. Mr. Landry* . . . . . *Not printed.*
- 192.** Return to an order of the House of Commons, dated 27th March, 1911, for a copy of all the correspondence, contracts, assignments and other documents with regard to what is called the Percy Aylwin irrigation grant, granted to him under order in council dated 1st September, 1908. Presented 8th May, 1911.—*Mr. Campbell* . *Not printed.*

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**CONTENTS OF VOLUME 24—Continued.**

- 193.** Return to an order of the House of Commons, dated 27th February, 1911, for a copy of all letters, papers, telegrams, documents, vouchers and pay sheets, showing the names of all persons who supplied materials or worked, and the prices and rates of wages, and sums paid to each, in connection with the construction of a wharf at Deep Brook, N.S. Presented 28th April, 1911.—*Mr. Jameson* . . . . .*Not printed.*
- 194.** Return to an address of the House of Commons, dated 10th April, 1911, for a copy of all papers, documents, memoranda and correspondence relating to the parliament site in the city of Winnipeg for the province of Manitoba, including the reservations made in the Crown grants to the Hudson's Bay Company, and the purpose for which the same were made, and also a copy of the Dominion order in council, dated the 23rd January, 1872, and all subsequent orders in council and correspondence dealing with the site for both provincial and Dominion purposes. Presented 1st May, 1911.—*Mr. Haggart (Winnipeg)* . . . . .*Not printed.*
- 194a.** Supplementary return to an address of the House of Commons, dated 10th April, 1911, for a copy of all papers, documents, memoranda and correspondence relating to the parliament site in the city of Winnipeg for the province of Manitoba, including the reservations made in the Crown grants to the Hudson's Bay Company, and the purpose for which the same were made, and also a copy of the Dominion order in council, dated the 23rd January, 1872, and all subsequent orders in council and correspondence dealing with the site for both provincial and Dominion purposes. Presented 20th July, 1911.—*Mr. Haggart (Winnipeg)* . . . . .*Not printed.*
- 195.** Return to an address of the House of Commons, dated 23rd January, 1911, for a copy of all orders in council, regulations and rules of the several departments of the government respecting the participation by employees of the government in civic or municipal affairs, and especially with regard to their disability from serving in civic or municipal councils; and all correspondence, documents and papers since the first day of January, 1900, touching the operation of the said orders in council, rules and regulations. Also a list of all employees of the government who have been elected to or have served in city or municipal councils during the said period from the first day of January, 1900, up to the present time, including all those now so serving and those who have been prevented by the government from serving. Presented 1st May, 1911.—*Mr. Borden* . . . . .*Not printed.*
- 195a.** Supplementary return to an address of the House of Commons, dated 23rd January, 1911, for a copy of all orders in council, regulations and rules of the several departments of the government respecting the participation by employees of the government in civic or municipal affairs, and especially with regard to their disability from serving in civic or municipal councils; and all correspondence, documents and papers since the first day of January, 1900, touching the operation of the said orders in council, rules and regulations. Also a list of all employees of the government who have been elected to or have served in city or municipal councils during the said period from the first day of January, 1900, up to the present time, including all those now so serving and those who have been prevented by the government from serving. Presented 3rd May, 1911.—*Mr. Borden* . . . . .*Not printed.*
- 196.** Return to an address to His Excellency the Governor General of the 3rd April, 1911, for a copy of all orders in council, memoranda, papers and documents, relating to the transfer, or any negotiations concerning the transfer, of a charter known as the Manitoba and South Eastern Railway Company. Presented 2nd May, 1911.—*Mr. McCarthy* . . . . .*Not printed.*

CONTENTS OF VOLUME 24—*Continued.*

197. General rule and order of the Exchequer Court of Canada in regard to seals. Presented 2nd May, 1911, by Hon. Charles Murphy. . . . .*Not printed.*
198. Return to an order of the House of Commons, dated 18th January, 1911, for a return showing how many aliens there are in the service of the government of Canada who are residing out of Canada, their names, nationality, the nature of the service, term of service, residence, and salary.  
 2. The same information as to aliens now residing in Canada who have been in the service of the government of Canada for a period of three years or more, and the date and length of service.  
 3. The same information in regard to aliens in the service of the government of any province or provinces of Canada. Presented 9th May, 1911.—*Mr. Lennor.*  
*Not printed.*
199. Return to an order of the House of Commons, dated 1st May, 1911, for a return giving the names of the gentlemen appointed as judges by the present government of Canada since they came into power in 1896, the residences of these gentlemen at the time of appointments, the positions to which they were respectively appointed, and in each case where the appointee had a predecessor in the position, the time which the position was vacant. Presented 11th May, 1911.—*Mr. Lennor.* . . . . .*Not printed.*
200. Return to an order of the House of Commons, dated 16th January, 1911, for a copy of all correspondence, telegrams, reports, contracts, papers and memorials in the possession of the government relating to the establishment of a fast Atlantic service between Canada and any other country; also with reference to an all red route, cable, or telegraph service, between Canada and any other country, within the past fifteen years. Presented 16th May, 1911.—*Mr. Armstrong.* . . . . .*Not printed.*
201. Return to an order of the House of Commons, dated 18th May, 1911, for copies of any correspondence between the government of New Brunswick, or any member or members thereof, and the government of Canada, or any member thereof, with reference to changing the Subsidy Act, 1910, with respect to a subsidy for a line of railway from Grand Falls in the province of New Brunswick to the city of St. John in the same province. Presented 19th May, 1911.—*Mr. Carvell.* . . . . .*Not printed.*
202. Copy of report of Board of Conciliation and Investigation in the matter of the Western Coal Operators' Association and its employees. Presented 19th July, 1911, by Hon. W. L. Mackenzie King. . . . .*Not printed.*
203. Return to an order of the House of Commons, dated 23rd January, 1911, for a return—  
 1. Showing in tons the east-bound and the west-bound traffic on the Intercolonial railway for the five years ending 30th June, 1910.  
 2. The miles of main trunk line and branches of the Intercolonial railway in each province through which it passes, distinguishing the trunk line from the branches.  
 3. Showing in tons the west-bound traffic originating in each of the maritime provinces during the period of five years ending 30th June, 1910. Presented 18th July, 1911.—*Mr. Sinclair.* . . . . .*Not printed.*
204. Return to an order of the House of Commons, dated 13th March, 1911, for a copy of all correspondence, telegrams, &c., during the past twelve months between Mr. E. J. Walsh, C.E., and the Minister of Department of Railways and Canals in regard to the Newmarket Canal. Presented 18th July, 1911.—*Mr. Wallace.* . . . . .*Not printed.*



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CONTENTS OF VOLUME 24—*Concluded.*

- 205.** Return to an order of the House of Commons, dated 20th April, 1911, for a return showing:—1. The quantity of bituminous coal imported into Ontario transhipped into other provinces in 1910.  
 2. The quantity of bituminous coal imported into Ontario in 1910 imported by the different railway companies.  
 3. The quantity and value of slack coal imported into Ontario in 1910, what portion of this slack coal was transhipped to other provinces, and what imported by railway companies. Presented 18th July, 1911.—*Mr. Macdonell*... ..*Not printed.*
- 206.** Return to an order of the House of Commons, dated 24th April, 1911, for a return showing in detail the expenses incurred and paid for the Paris exposition in 1900, as payments of the Colonial committee on account of space, &c., \$87,000, as shown in the report of the Auditor General for 1899-1900, page D—15. Presented 21st July, 1911.—*Mr. Paquet*... ..*Not printed*
- 207.** Report of Mr. Justice Murphy, Royal Commissioner appointed to investigate alleged Chinese frauds and opium smuggling on the Pacific coast, 1910-11, together with copies of the evidence taken and exhibits produced before the said commissioner. Presented 21st July, 1911, by Rt. Hon. Sir Wilfrid Laurier... ..*Not printed.*
- 208.** Minutes of Proceedings of the Imperial Conference, 1911. Presented 27th July, 1911, by Rt. Hon. Sir Wilfrid Laurier.  
*Printed for both distribution and sessional papers.*
- 208a.** Despatches, &c., relative to the simultaneous publication of memorandum of conference on the subject of the status of Dominion navies. Presented 27th July, 1911, by Rt. Hon. Sir Wilfrid Laurier.  
*Printed for both distribution and sessional papers.*
- 208b** and **208c.** Memorandum of conferences between the British admiralty and representatives of the Dominions of Canada and Australia; and also copy of a cable despatch from Mr. Harcourt to Lord Grey. Presented 28th July, 1911, by Rt. Hon. Sir Wilfrid Laurier... ..*Printed for both distribution and sessional papers*
- 208d.** Report of a Committee of the Imperial Conference convened to discuss defence (military), of the War Office, 14th June and 17th June, 1911. Presented 28th July, 1911 by Hon. S. A. Fisher... ..*Printed for both distribution and sessional papers.*
- 209.** Memorandum respecting the printing of voters' lists. Presented 27th July, 1911, by Rt. Hon. Sir Wilfrid Laurier... ..*Not printed.*
- 210.** Text of Pelagic Sealing Treaty signed at Washington, 7th July, 1911. Presented 27th July, 1911, by Rt. Hon. Sir Wilfrid Laurier... ..*Printed for sessional papers.*
- 211.** Interim report, Alberta and Saskatchewan Fisheries Commission, 1910. Presented 28th July, 1911, by Hon. L. P. Brodeur... ..*Not printed.*















DEPARTMENT OF PUBLIC WORKS, CANADA

# NELSON RIVER

REPORT

UPON

# RECONNAISSANCE SURVEY

SEPTEMBER - OCTOBER, 1909



OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY



CHIEF ENGINEER'S OFFICE.

OTTAWA, February 1, 1910.

SIR,—I have the honour to transmit herewith a report by Mr. A. R. Dufresne, District Engineer, inclosing one by his Assistant, Mr. E. S. Miles, on an investigation made of the Nelson river, Man., to determine the practicability of establishing navigation on that river between Lake Winnipeg and the Hudson bay.

The examination made was one of the nature of a rapid reconnaissance, but Mr. Dufresne states that sufficient information has been obtained to show that any undertaking with a view to establishing navigation on the Nelson river would be a work of considerable magnitude.

I have the honour to be, sir,

Your obedient servant,

EUGENE D. LAFLEUR,

*Chief Engineer.*

JAS. B. HUNTER, Esq.,

Deputy Minister,

Dept. Public Works.

Ottawa.



DEPARTMENT OF PUBLIC WORKS, CANADA,  
DISTRICT ENGINEER'S OFFICE,

WINNIPEG, January 27, 1910.

SIR.—I beg to transmit herewith a report, in duplicate, of an investigation made of the Nelson river, to determine the practicability of establishing navigation on that river, between Lake Winnipeg and the Hudson bay.

This work was authorized by you in instructions contained in your telegram of August 20, 1909. The investigation has been entrusted to Mr. E. S. Miles, who was detached temporarily from the St. Andrews lock staff for this purpose.

Owing to the short time at our disposal, before the end of navigation, the examination in the field was of the nature of a rapid reconnaissance.

Notes have been made, from a general observation of the character of the river, and details worked out for some probable locations of structures.

Sufficient information has been obtained to show that, any undertaking having in view the establishing of navigation on the Nelson river, is one of considerable magnitude.

With the exception of a few diversions in the upper part of the river, it would appear that improvement would be necessary on the lines of raised levels by means of dams with locks in conjunction.

Owing to the width and volume of discharge of the river, dam construction would be expensive. For reasons mentioned above, an approximation of the cost of this undertaking is not possible, but it may be of interest, as an object of comparison, to note that the length of the river and total lift, 430 miles and 700 feet lift, are nearly the same as in the proposed Georgian bay canal; 440 miles and 758 feet lift.

I beg to remain, sir,

Your obedient servant,

A. R. DUFRESNE,  
*District Engineer.*

EUGENE D. LAFLEUR, Esq.,  
Chief Engineer,  
Dept. Public Works,  
Ottawa, Canada.





**NELSON RIVER INVESTIGATION.**

DEPARTMENT OF PUBLIC WORKS CANADA.

DISTRICT ENGINEER'S OFFICE.

WINNIPEG, January 14, 1910.

SIR.—I have the honour to submit the following report of reconnaissance work done on the Nelson river.

As instructed by you, I left Selkirk, with one assistant, on August 23, 1909, on ss. *Wolverine*, arriving at Warren's Landing on August 26 and at Norway House on August 27.

The limited time for travelling, before the freeze up, made it impossible for us to do more than rapid reconnaissance work. One aneroid was left at Norway House, to be read three times a day, while another was taken with the party. A hand level, fixed to a light tripod, was used to obtain the difference in water elevations at all rapids and falls, and a box-sextant was used for triangulation purposes. A small current meter was also taken along for gauging the river.

The party, made up of my assistant two Indians and myself, with one canoe, left Norway House on August 28 and travelling by the East Branch, reached Cross lake on August 30 and Split lake, 243 miles from Warren's Landing, on September 6.

The Norway House Indians not knowing the route from Split lake to the bay, other Indians had to be engaged and the Norway House Indians returned home. As the Indians at that time of year were leaving for their winter hunting grounds, it was very hard to secure men, but three were finally engaged on condition that we would return by way of Split lake and not by way of Oxford House.

We left Split lake on September 8 and arrived at the mouth of the Nelson river on September 15, having been delayed two days by bad weather.

On September 16 and 17 a visit was paid to York Factory where we found the stock of provisions, in the Hudson's Bay Company's Store, very low; the ship from England not having arrived up to that date, and indeed the officer in charge had given up all hope of seeing her this season.

While at York Factory, the aneroid with the party, was compared with the barometer there, and a copy of the readings since September 1 obtained.

The mouth of the Nelson river was left on September 18 and Split lake was reached on September 29. Having obtained fresh men, we left Split lake on October 1 and arrived at Cross lake on October 9, having stopped to get a gauging of the river below Sepewesk lake.

A visit was paid to Whisky Jack Portage on October 10 and leaving the north end of the Portage on October 11, we arrived at Norway House on October 13, via East river. On October 14 we proceeded to Warren's Landing and on October 15 left Warren's Landing on ss. *City of Selkirk* and arrived in Selkirk on October 17, 1909.

Distances from Warren's Landing were obtained from Otto Klotz's survey of 1884. The elevation of Split lake is 470 feet above mean sea level, actual levels, for which information I am indebted to Mr. Armstrong, Chief Engineer of the Hudson Bay Railway. Lake Winnipeg is about elev. 700 as obtained by barometer readings at Norway House and York Factory.

From the information gathered on the trip, I have obtained an approximate profile of the river, (see general plan), and come to the following conclusions:—



Norway House—From River Entrance.



Norway House—Looking towards River.

SESSIONAL PAPER No. 19b

*General Description of River.*

The rock formation from Lake Winnipeg to Limestone rapids, distance 230 miles, is principally granites. Limestone shows from the head of Limestone rapids, some 32 miles farther down the river. From that point to the mouth of the river no solid rock is seen, but the shores are strewn with small boulders and several deposits of gravel were seen. A very good deposit was noted on the north shore at the 'Extreme Head of Navigation.'

The country is all wooded, but the growth, excepting on the islands in the lakes, is all small. The growth is principally spruce with a mixture of birch and poplar in some places.

A gauging of the river just below Sepewesk lake was taken which gave the flow as 118,400 cubic feet per second. (See Plate No. 1). From information obtained from the Hudson's Bay Company's officers, the water was judged to be at the extreme low level. Old water marks were seen on the rock at that place, 4.75 feet higher. The difference between extreme high and extreme low water in this river, is never more than 6 feet.

No evidences of damage done by ice were noted, the bush in many places growing to the water's edge.

The East river, from Lake Winnipeg to Pipestone lake, is not well adapted for improvement, the channel in several places being as narrow as 150 feet, before Norway House is reached. The first rapid, Sea River Falls, is 43 miles from Warren's Landing and from this fall to Pipestone lake, the York boat route is through winding channels, in some places as narrow as 40 feet. The river is divided into several channels but none of any magnitude were seen.

The shores are low and rocky and not suitable for maintaining a higher level of water. The total fall from Lake Winnipeg to Pipestone lake is about 50 feet.

The west channel has already been navigated with a steam tug as far as the south end of Whisky Jack Portage.

The soundings taken in the channel, at present used in Cross lake, varied from 10 to 20 feet, the average being about 14 feet. The islands in the lake are from two to 14 feet above water and all wooded.

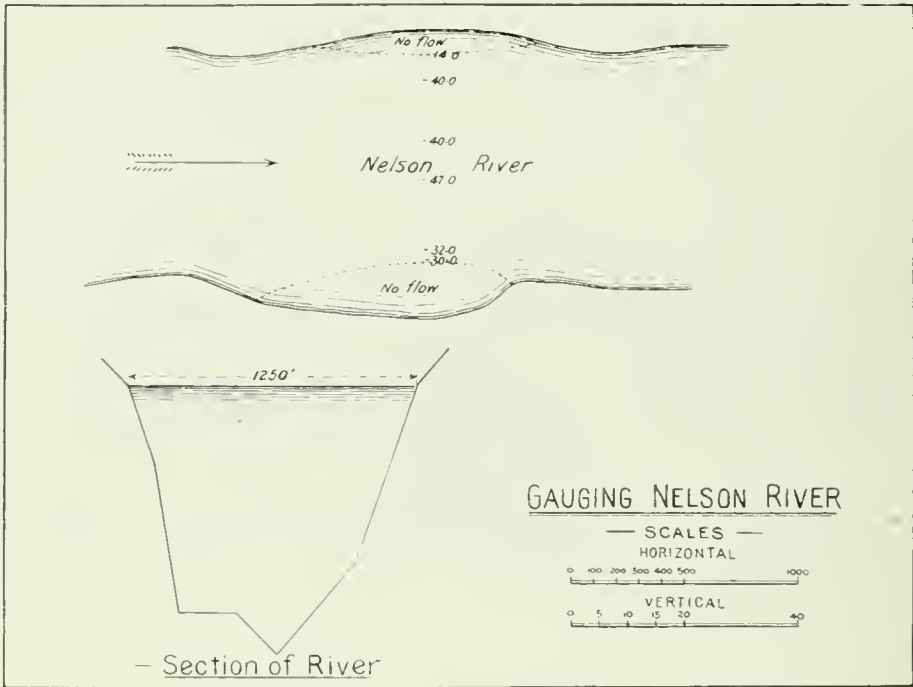
The outlet from Cross lake is blocked by two large islands, forming three distinct channels. The first rapid encountered on the channel, used as the York boat route, is Ebb and Flow rapid. The rapid is about 2,400 feet long and has a total fall of 11 feet. The channel at the head is about 500 feet wide and the banks are about 12 feet above the upper reach.

From the foot of Ebb and Flow rapids to White Mud falls, a distance of about four and a half miles, channel is 600 to 800 feet wide. No soundings were obtained less than 20 feet. The banks show 10 to 12 feet, and the current is not too strong for navigation.

White Mud falls are located at a bend in the river, where the channel is also divided by an island. The total drop is 30 feet.

From White Mud falls to Bladder rapids is a distance of eight miles. Channel about 500 feet wide, with deep water (over 20 feet). Side banks show 15 to 25 feet, gradually rising behind. In several places between these two rapids, the current exceeds four miles an hour. The total fall in Bladder rapids is 10.6 feet, and at this place the waters of the Nelson river are all in one channel for the first time.

About two miles below Bladder rapids the river divides, the west channel flowing to Sepewesk lake, by way of Duck lake. The York boat route follows the East river; the first rapid encountered being Over the Hill rapids which has a fall of 95 feet. The distance from Bladder to Over the Hill rapids, is about seven miles. All soundings taken were over 20 feet, the current in places exceeding four miles an hour. Side banks rocky, and from 25 to 35 feet high.



GAUGING NELSON RIVER, OUTLET TO SEPEWESK LAKE.

WEDNESDAY, OCT. 6, 1909.

Distance from Initial Point.			Depth.	Depth of Observations.	Time in Seconds.	Number of Revolutions.	Mean.	Revolutions per Second.	Velocity per Sec. in Feet.	Mean Velocity.	Width.	Mean Depth.	Mean Velocity at Mean Depth.	Area.	Discharge.
Deg.	Min.	Ft.	Ft.								Ft.			Sq. ft.	Cub. feet per sec.
16	34	30	4	30	0	0	0	0							
18	02	32	4	30	27-55-39	40.3	1.343	78	39	24.31	342	744			254.4
37	32	47	3	30	285-300-270	285	9.5	5.52	3.15	318.39	5.2	763	12561		34506.0
46	43	40	3	30	295-255-258-276	271	9.033	5.248	5.384	173.43	5.4	723	7525.5		35542.9
54	12	40	3	30	210-202-200	204	6.8	3.95	4.5.9	266.40	4.034	16640			42924.7
62	04	14	3	30	0	0	0	0	1.975	110.27	1.732	2970			5144.0
Total Discharge.....															118869.0

N.B. Old water marks, on rock, 4.75 ft. higher.





Sea River Falls. (West Fall.)



Typical Scenery through East Branch, south of Pipestone Lake

Red Rock rapids is the next large rapid, distant from Over the Hill, about three and one-half miles. A small chute of two feet fall is also found between the two. All soundings taken were over 20 feet, the channel is wide and the banks about 35 feet high. The total fall in Red Rock rapids is 10.5 feet.

Below Red Rock rapids, the channel is wide (about 2,000 feet) and all soundings were deep. The fall in the next rapid, Chain of Rocks, is 1.2 feet, the channel being blocked by a chain of small islands.

Leaving Chain of Rocks rapids, the channel gradually expands into Sepewesk lake. Cut clay shows on both sides from a few feet above water. East bank, about 50 feet high. Sepewesk lake is very picturesque, being dotted with small islands 10 to 12 feet above water and covered with evergreens. Some of the spruce on these islands are as large as 15 inches at the butt.

About half way down the lake, where the islands are numerous, the current becomes very strong, and again at the east end of the lake the current is bad.

The shallowest sounding obtained was 15 feet. Islands all show rock. At the east end of Sepewesk lake the Nelson river again comes into one channel of about 2,000 feet in width.

At the entrance to the river, the banks show +15 to +20 feet with higher ground behind, rock with clay on top on both shores. Three or four miles further down, the banks are higher, the west shore being principally rock, the east shore showing more clay, both running up to 50 or 60 feet. The soundings were all deep, but the channel in some places narrows to about 800 feet, and here the current exceeds four miles an hour.

From the outlet of Sepewesk lake to Devils Narrows rapids is a distance of 55 miles. Devils rapids and Devils Narrows rapids have a total fall of 5.7 feet. Devils rapids run through a rock gorge of about 400 feet at narrowest part.

From Devils rapids to Grand rapids, a distance of 16 miles, the water is deep, the banks are rocky on the west shore and clay on the east. Both shores are high (+70') a short distance back from the water.

At Grand rapids, the total fall is 20 feet and is found at a sharp bend in the channel. From Grand rapids to Chain of Islands rapids, the distance is four miles. The banks just below Grand rapids run up to about 70 feet on the west, the east shore being irregular, while just above Chain of Islands rapids the banks are rocky and about 30 feet above water. The fall in Chain of Islands rapids is 4.6 feet and about two miles below the rapid, the river expands into Split lake. The shallowest sounding obtained in the lake was 18 feet, but bad currents are found at the east end near the outlet. The Hudson's Bay Company's post is located on a sandy point (+35) about half-way down the lake, where the canoe route to Churchill leaves the Nelson. The islands in the lake all show rock.

About three miles from the outlet of Split lake the rapids begin again. The total fall, in rapids, to Gull lake is 29.4 feet, the distance being 15 miles. The shores, near the river, are low, but higher ground was found (+40) below Birthday rapids, a short distance back.

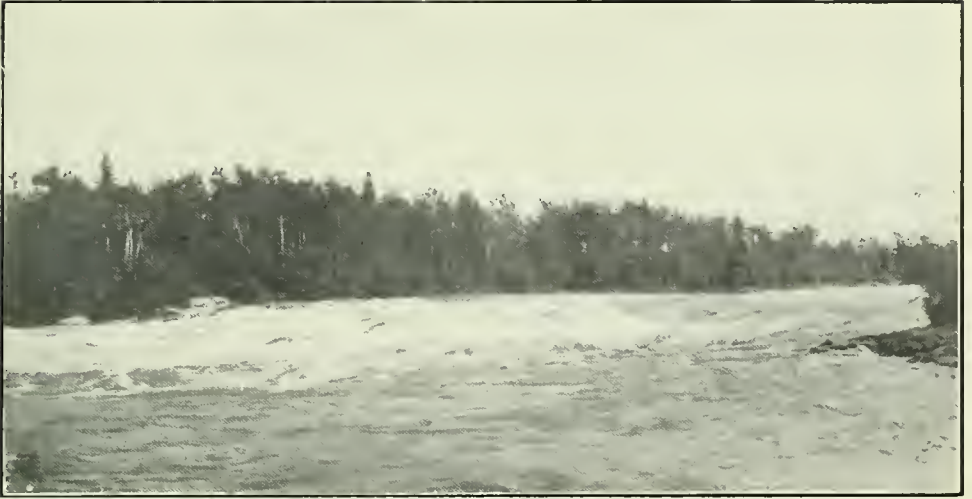
The current is strong all through Gull lake and at several places exceeds four miles an hour. All soundings taken were over 18 feet.

Gull Lake rapids are the first below Gull lake. At the beginning of the rapids the main channel is expanded and filled with islands, but narrows to about 2,000 feet farther down. The total fall is 67 feet.

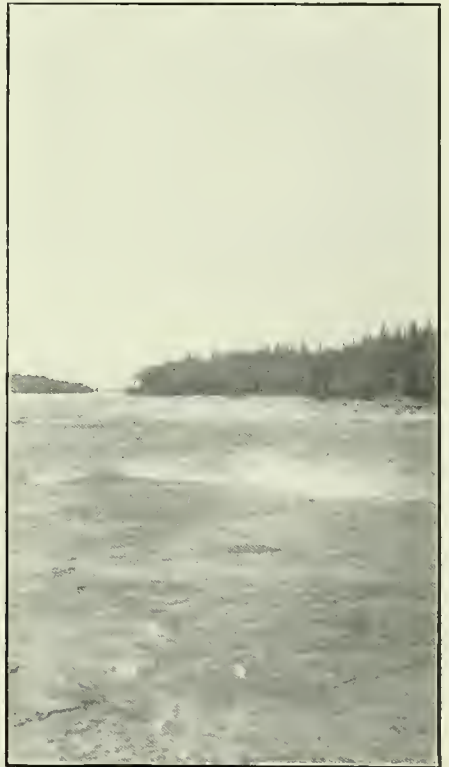
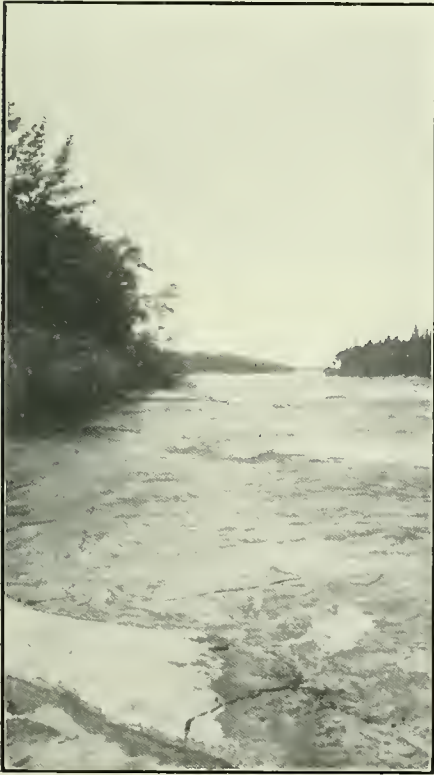
From Gull rapids to the first pitch in Kettle rapids is a distance of about 17 miles, with a couple of small chutes occurring between. The banks show cut clay to about 50 feet.

At the head of Kettle rapids, the river is again divided by islands into several channels, but narrows in a couple of places before the foot of the rapids are reached.

EBB AND FLOW RAPIDS.



Looking up Rapid.



Looking down Stream from Head of Rapid.

WHITE MUD FALLS.

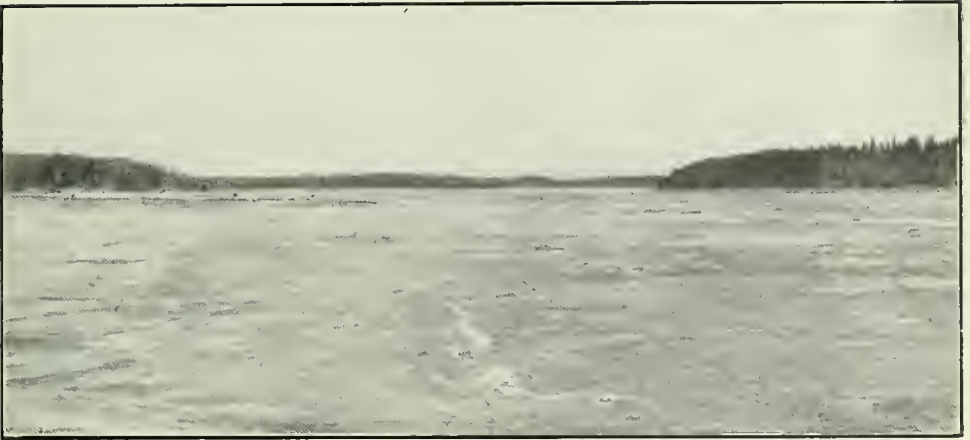


West Fall.



East Fall.

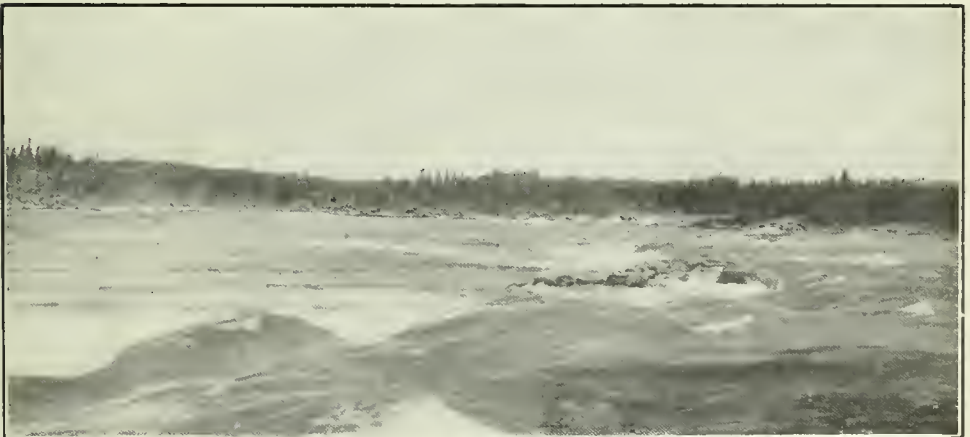
BLADDER RAPIDS.



Looking Down Stream.



Looking Up Rapid.



Looking Across 1st Pitch.





Over the Hill Rapids.



Two Views



Red Rock Rapids.

## SESSIONAL PAPER No. 19b

The main banks of the river are good, and from the foot of Kettle rapids the river runs through cut clay banks, which in some places are as high as 120 feet. These high banks continue on the west shore to Hudson bay and on the east shore to Seal islands. Solid rock is always seen along the shores of rapids and many projections of the shore line show rock.

From Kettle rapids to the 'Extreme Head of Navigation' are two rapids, Long Spruce (fall +85.5') and Limestone (fall +85.2'). A great many rocky islands and reefs are exposed in Long Spruce rapids.

The point known as the 'Extreme Head of Navigation' is about 50 miles, up the river, from Seal islands, or 75 miles from Hudson bay. The current in this piece of river is very strong throughout, and although the shallowest water sounded was 12 feet, many gravel bars are to be found in the channel.

In the upper part of the river, the banks are generally low and the river is more suitable for diversions by means of canal and locks, than by means of dams and raised water levels. Proposed locations for these diversions have been roughly investigated, the results of which are incorporated in the following sheets.

In the lower part of the river, which naturally lends itself to the lock in combination with dam and raised water level system, no details have been worked out owing to limited time at our disposal, beyond observations as to, height of banks, width of channel, fall in rapids, and soundings wherever possible.

*Details of Location.*

Playgreen lake and the West river have already been navigated, as far as Whisky Jack Portage, by a tug drawing six feet of water and having a maximum speed of seven miles an hour. Several rock shoals are found in the lake at the south end, but not for any continuous distance. Even in Lake Winnipeg, a short distance from the mouth of the river, a small shoal is found in the channel over which a boat drawing nine feet cannot pass, without touching, when the water is low.

About six or eight miles from Whisky Jack a shoal is found extending across the channel. The deepest water found on this shoal is eight feet, but the bottom is gravel and boulders.

Two miles from Whisky Jack, the channel is narrow and the current is very strong but the water is deep and a boat with a speed of 10 miles an hour would have no difficulty.

The river, from the end of Playgreen lake to Cross lake, in which the rapids occur, was not seen by the writer, but Plate No. 2 shows a profile of ground between Playgreen lake and Cross lake. The distance is about four and a half miles and would be the shortest possible route from Lake Winnipeg to Cross lake. No rock was seen at the south end of the Portage, or above the elevation of Playgreen lake, at any point on the Portage. (The difference in elevation of the two lakes is between 45 and 50 feet.)

By raising the elevation of Cross lake about five feet, no dredging would be necessary and the current would be slack to the head of Ebb and Flow rapids.

To do this, a dam would be constructed at the head of Ebb and Flow rapids and also in the other two channels leading from Cross lake, just above the first rapid in each.

Plate No. 3 shows Ebb and Flow rapids. From information obtained, the writer judges the other two channels to be about the same size.

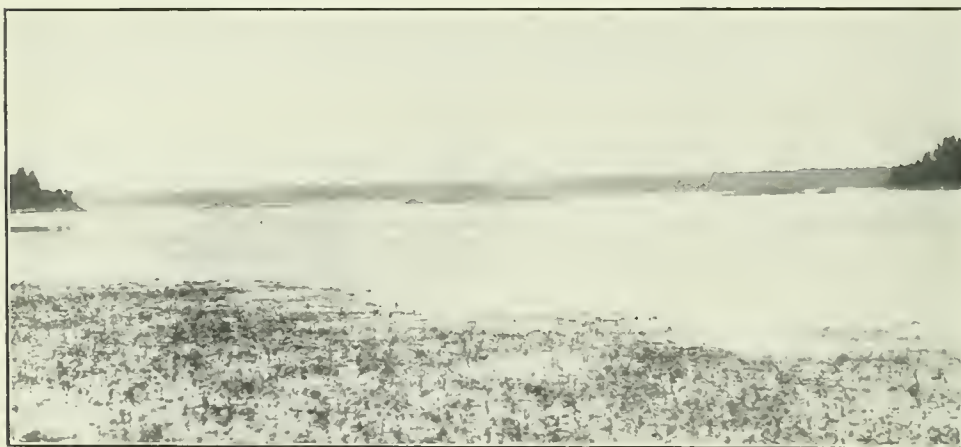
A diversion of about 2,500 feet would here be necessary together with the lock and dams.

From Ebb and Flow rapids to White Mud falls no improvement is necessary and it is therefore not necessary to dam the river above the rapid.

Plate No. 4 shows the location.



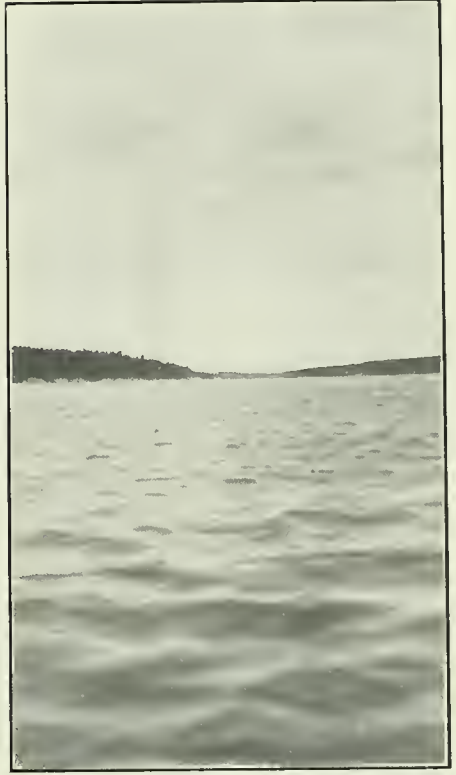
Chain of Rocks Rapids. (From below Fall.)



Chain of Rocks Rapids. (From above Fall.)



Typical View Se-pe-wesk Lake.



Two Views of River between Se-pe-wesk Lake and Devil's Narrows Rapids.



Devil's Narrows Rapids.

GRAND RAPIDS.



1st Pitch.



Looking Down Stream from Below 1st Pitch.



Looking Down Stream from North End of Portage.





Hudson's Bay Co.'s Store, Split Lake.



Cree Indians.



Birthday Rapids. Looking up River.



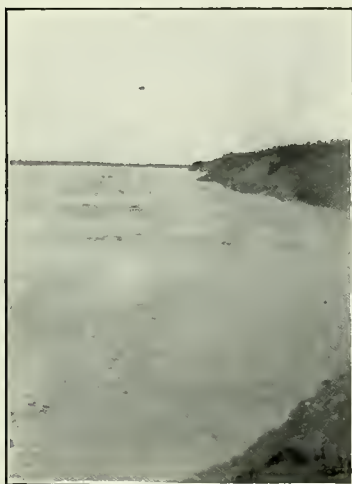
Foot of Gull Rapids.



1st Rapid above Moose Nose Point.



Long Spruce Rapids.



Looking up Limestone Rapids. From 1st Point above Limestone River.  
(High Banks are Cut Clay.)



Kettle Rapids.



Two Views of Clay Banks at 'Extreme Head of Navigation.'

YORK FACTORY.



Main Depot.



Old Cannon.



Church.

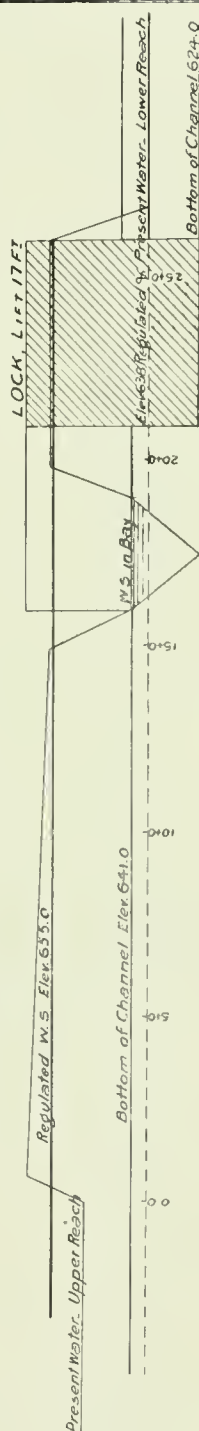
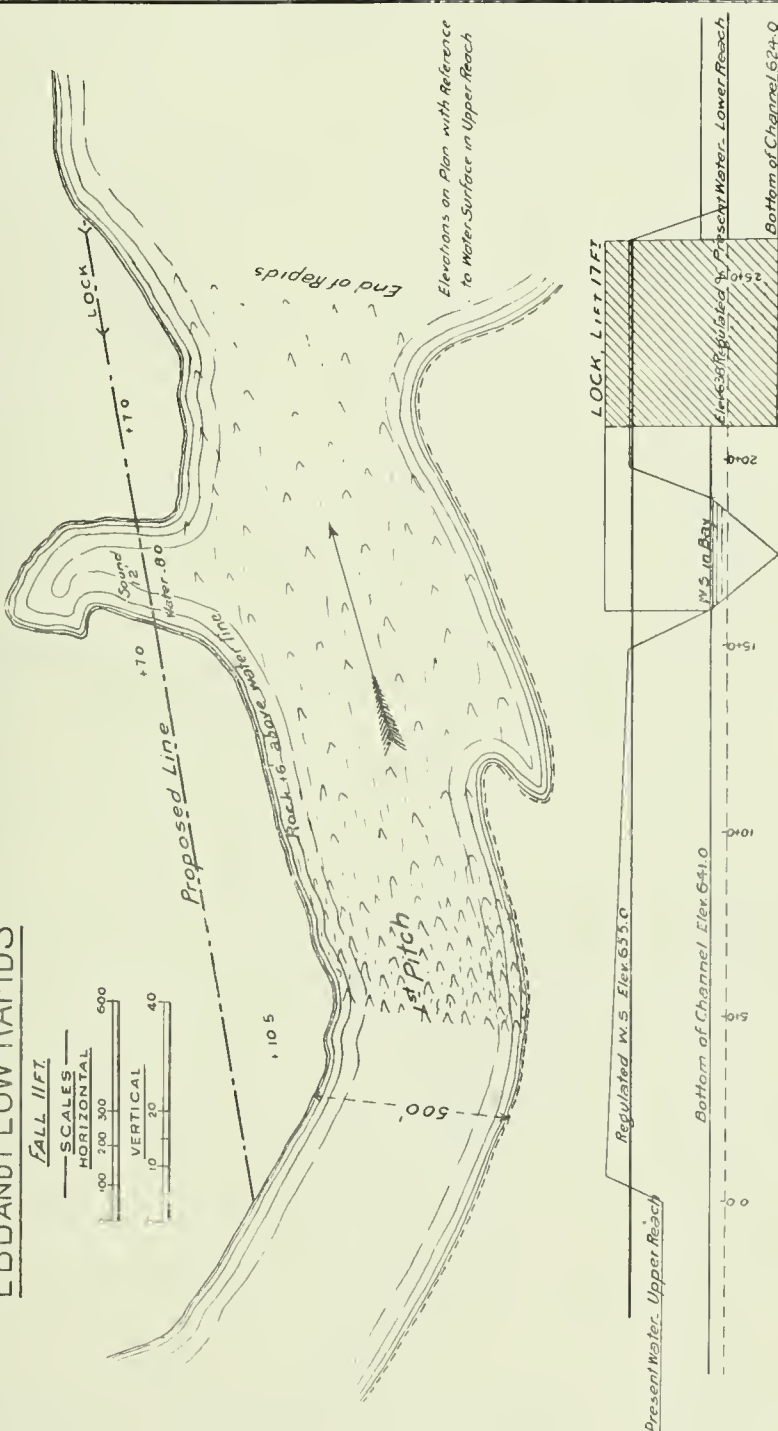




PLATE No. 3.

# EBB AND FLOW RAPIDS

FALL 11 FT.



A lock, with a diversion of about 3,200 feet would here be necessary for a good entrance at the lower end.

The currents from White Mud falls to Bladder rapids will necessitate a dam at the head of the latter.

The soundings obtained, about 500 feet from the head of the rapids, are deep but must be much shallower at the first pitch.

The diversion could here be so arranged that the excavation would just be sufficient to construct the dam.

The width of channel to be dammed is about 2,000 feet, with an island of 500 feet in the centre. (See Plate No. 5.)

If a dam at Chain of Rocks rapids (Plate No. 8) to raise the water about 35 feet were next constructed, this would flood out all rapids back to the foot of Bladders rapids. The rapids drowned out would be Over the Hill rapids (Plate No. 6), a small chute just below, and Red Rock rapids (Plate No. 7).

By this scheme, the waters of Sepewesk lake are reached and no rapids are encountered until Devils Narrows rapids are reached, a distance of 90 miles.

A dam and lock will probably be found necessary, somewhere in the river near the outlet of Sepewesk lake, to overcome the bad currents among the islands in the lake. A typical section of the river is the one used in the gauging section (Plate No. 1).

The total fall in Devils Narrows rapids and Devils rapids is about 5 feet, so if a dam were constructed just above Grand rapids (Plate No. 9) to maintain a rise of about 25 feet, Devils rapids would be drowned out and the current slackened in the river behind.

After leaving Grand rapids, one rapid, Chain of Islands, (Plate No. 10), has to be overcome before Split lake is reached. If the river was dammed just above Gull lake, (Plate No. 11), to raise the water at that point about 35 feet, all rapids from Split lake to that point would be eliminated; the elevation of Split lake would be raised about 12 feet, and Chain of Islands rapids would be drowned out.

Currents are found in Gull lake which will have to be eliminated, so the next dam should raise the elevation of Gull lake slightly.

The fall in the last large chute of Gull rapids is about 25 feet, so if a dam is built between this and the next fall above, the water could be raised sufficiently to eliminate the upper half of Gull rapids and raise Gull lake.

From the proposed dam to the end of the 25 foot chute is about 3,000 feet, so with an embankment forward, the next level could be reached with two locks.

The remainder of Gull rapids and the small rapids just above Moose Nose Point could be drowned out by a dam just below Moose Nose point. (Plate No. 13). The banks here are high and the width 1,800 feet.

No rock, however, shows at this point, although rock is seen about one mile farther up river, where the channel is wide and banks, near river, low.

If a dam was next constructed some place at the first Kettle rapids (Plate No. 14), a sufficient rise could be maintained to drown out all rapids as far back as Moose Nose Point.

A rough idea of all locations from here to the mouth of the river, was all that was obtained.

From the last dam to near the foot of Kettle rapids, all rapids could be eliminated by a dam just above the narrow part (Plate No. 15).

With an embankment about three-quarter miles forward, and another lock at the end, 54 feet could be overcome.

The next suitable location for a dam is at the head of Long Spruce rapids (Plate No. 16), and with an embankment of about 2,000 feet, 60 feet could be overcome.

A dam could next be located in Long Spruce rapids. The average width of channel in this rapid is about 2,800 feet, rock shores all through and although no soundings were taken, average water cannot be deep as the current runs very swiftly.

SESSIONAL PAPER No. 19b

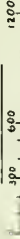
PLATE No. 4.

# WHITE MUD FALLS

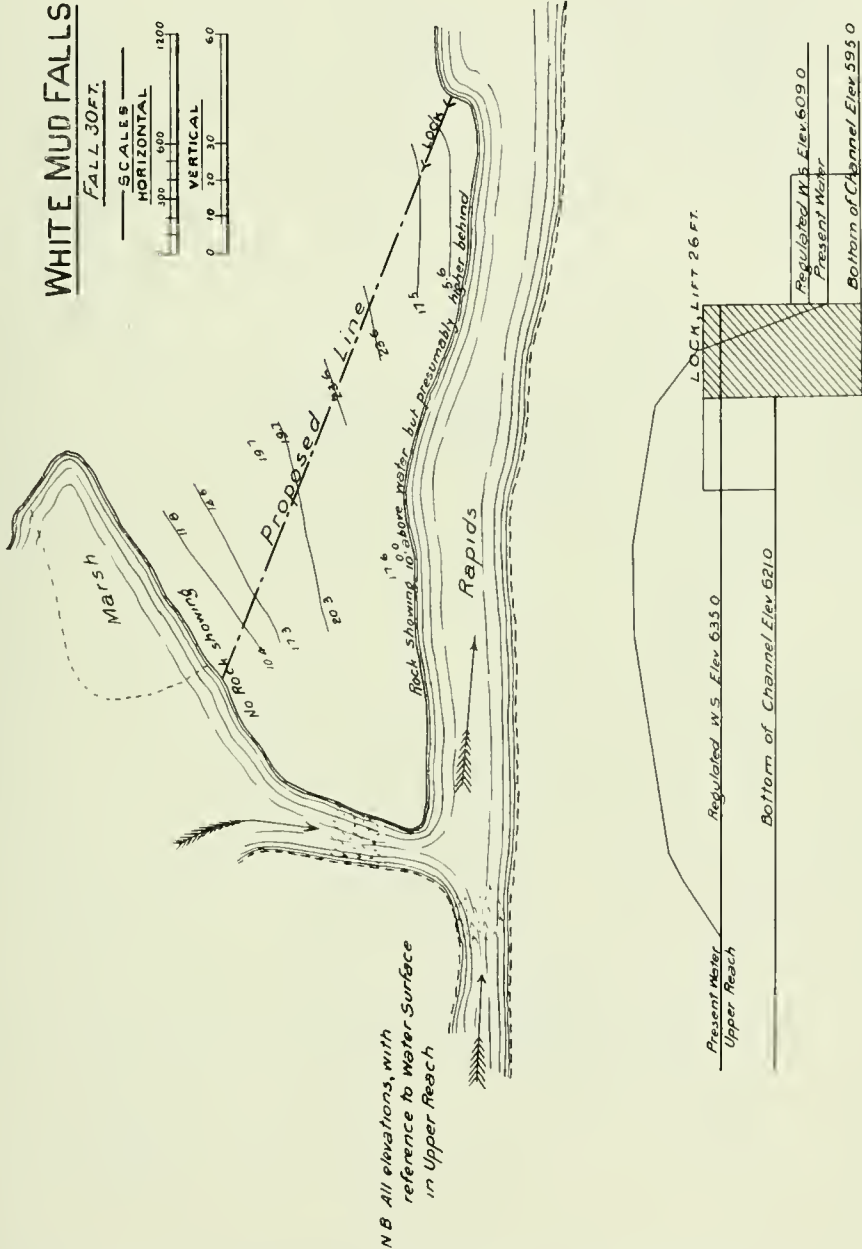
FALL 30 FT.

SCALES

HORIZONTAL



VERTICAL



N.B. All elevations, with reference to water surface in Upper Reach

Regulated W.S. Elev 635.0  
Bottom of Channel Elev 621.0

Lock, Lift 26 FT.  
Regulated W.S. Elev 609.0  
Present Water  
Bottom of Channel Elev 595.0

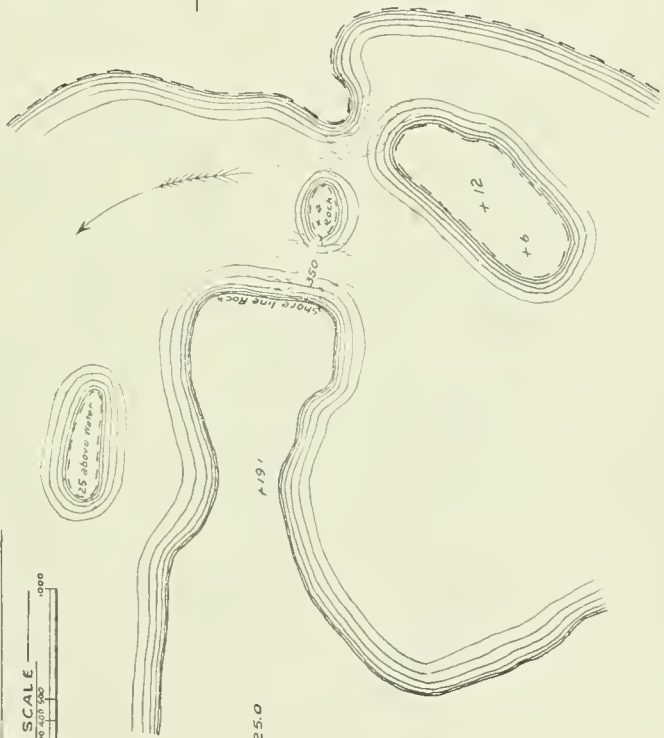
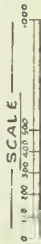




PLATE No. 6.

# OVER THE HILL RAPIDS

Drowned out by Dam at Chain  
of Rocks Rapids. — Fall 9.5 FT.



— N.B. Elevations, with reference to —  
 — Present Water surface in upper Reach —

# RED ROCK RAPIDS

FALL 105 FT

SCALE

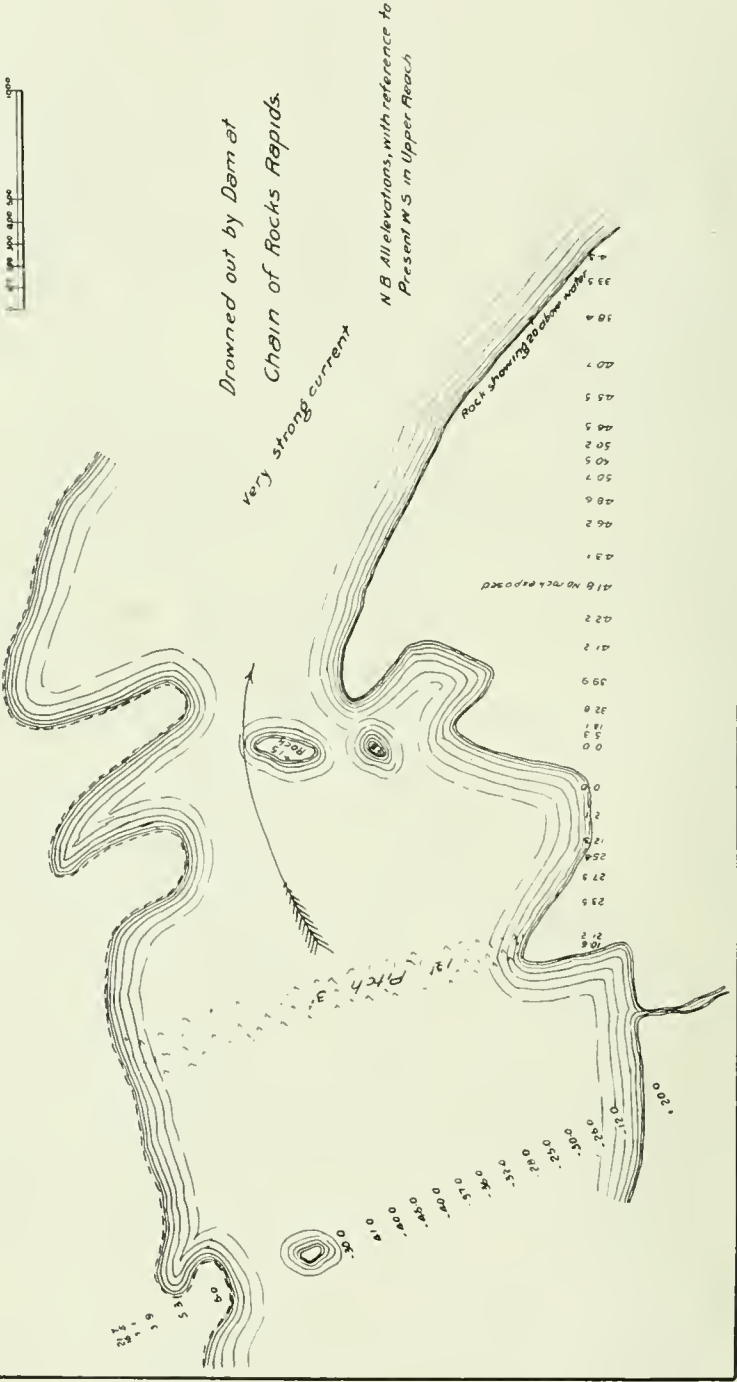


PLATE No. 8.

SESSIONAL PAPER No. 19b

# CHAIN OF ROCKS RAPIDS

FALL 1,2 FI.

SCALE

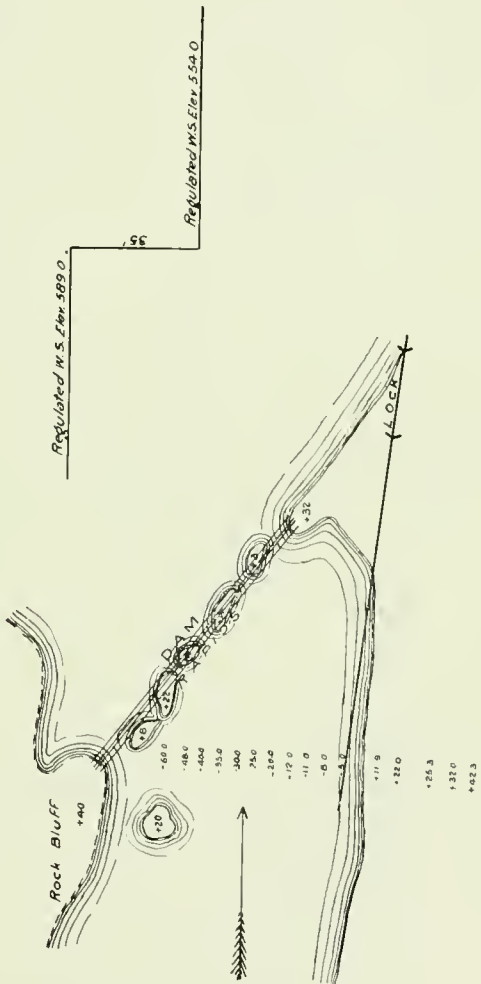
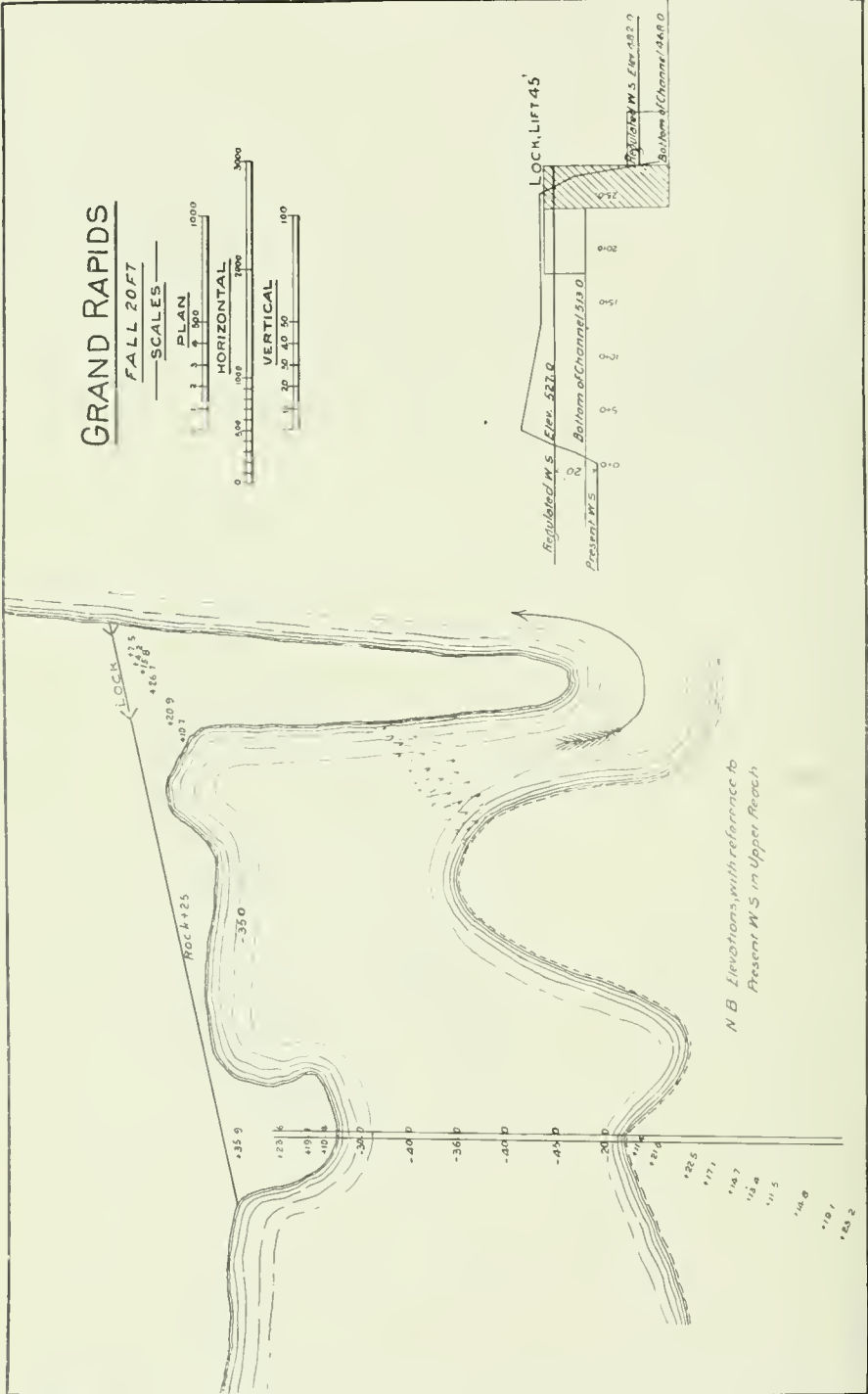
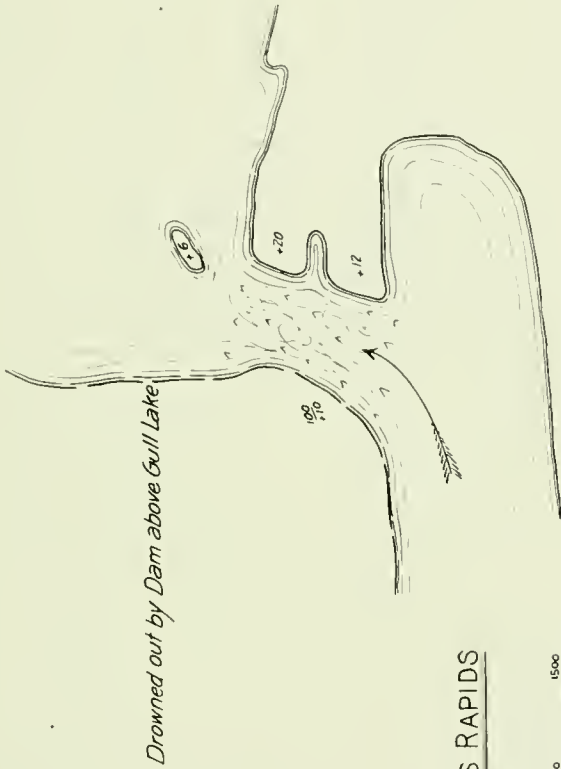


PLATE No. 3.





CHAIN OF ISLANDS RAPIDS

FALL = 45'

SCALE

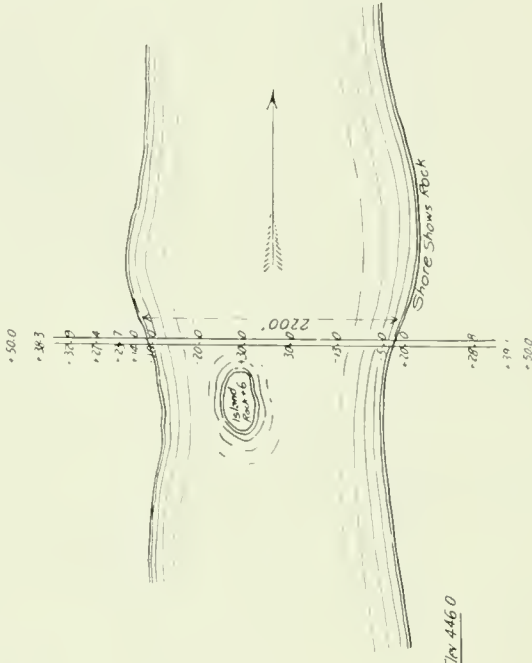




ABOVE GULL LAKE



200



Regulated W.S. Elev. 482.0

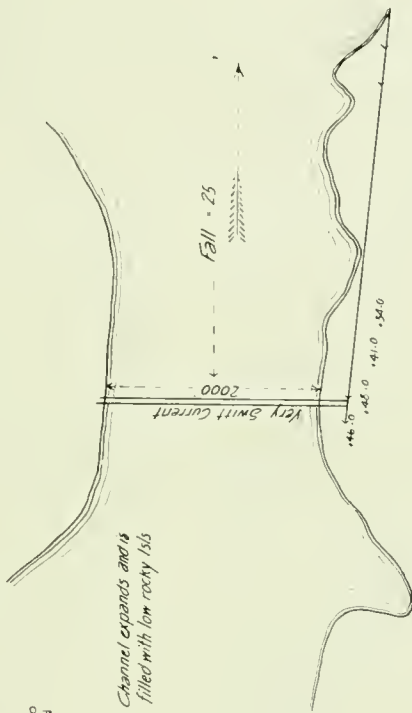
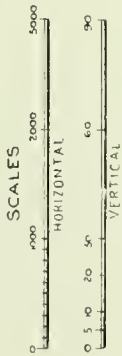
36

Regulated W.S. Elev. 446.0

SESSIONAL PAPER No. 196

PLATE No. 12.

# GULL RAPIDS



Regulated W.S. Elev. 446.0

Regulated W.S. Elev. 412.0

Present W.S.

Regulated W.S. Elev. 378.0





## SESSIONAL PAPER No. 19b

The next location chosen for a dam was above last Limestone rapid (Plate No. 18).

The width is 2,200 feet, and banks are good. Soundings are shown on the plate.

The next dam would have to be placed about 'The Extreme Head of Navigation.' (Plate No. 19).

From this point to Seal islands, the river has a uniform fall of about one foot to the mile, but the current is very swift, necessitating at least two dams. Locations with soundings are shown at 'Head of Navigation,' Dear islands, and just below Seal islands, (Plates No. 20, 21 and 22).

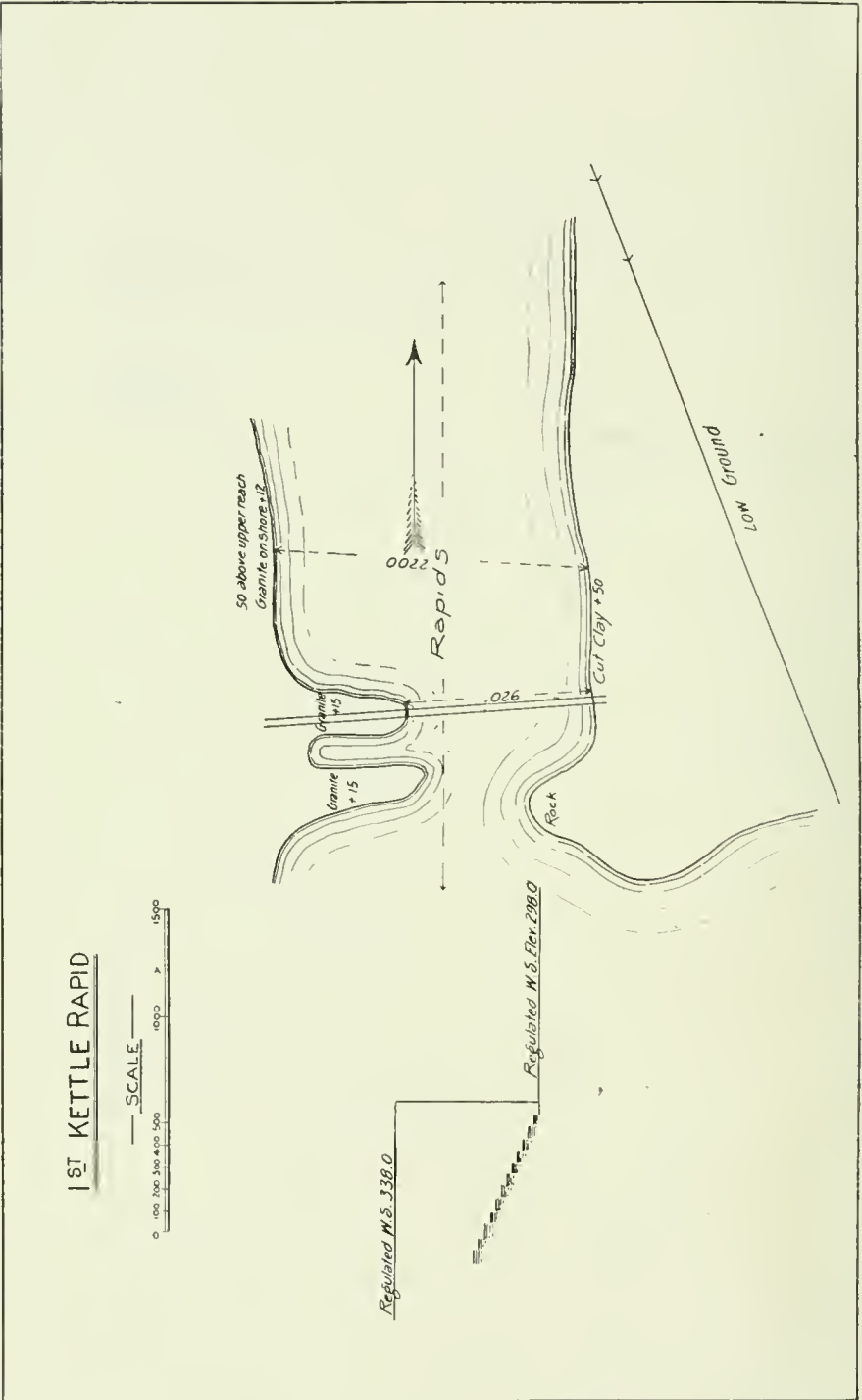
From Seal islands, the channel is irregular for about 15 miles farther down river, that is about half way from Flamborough Head to Beacon Point. From that point to Hudson bay a good channel with 20 feet of water at low tide, has been found.

Respectfully submitted,

E. S. MILES,  
*Assistant Engineer.*

A. R. DUFRESNE, Esq.,  
District Engineer,  
504 Ashdown Bldg.,  
Winnipeg, Man.

PLATE No. 14.





SESSIONAL PAPER No. 19b

PLATE No. 15.

# KETTLE RAPIDS

## SCALES

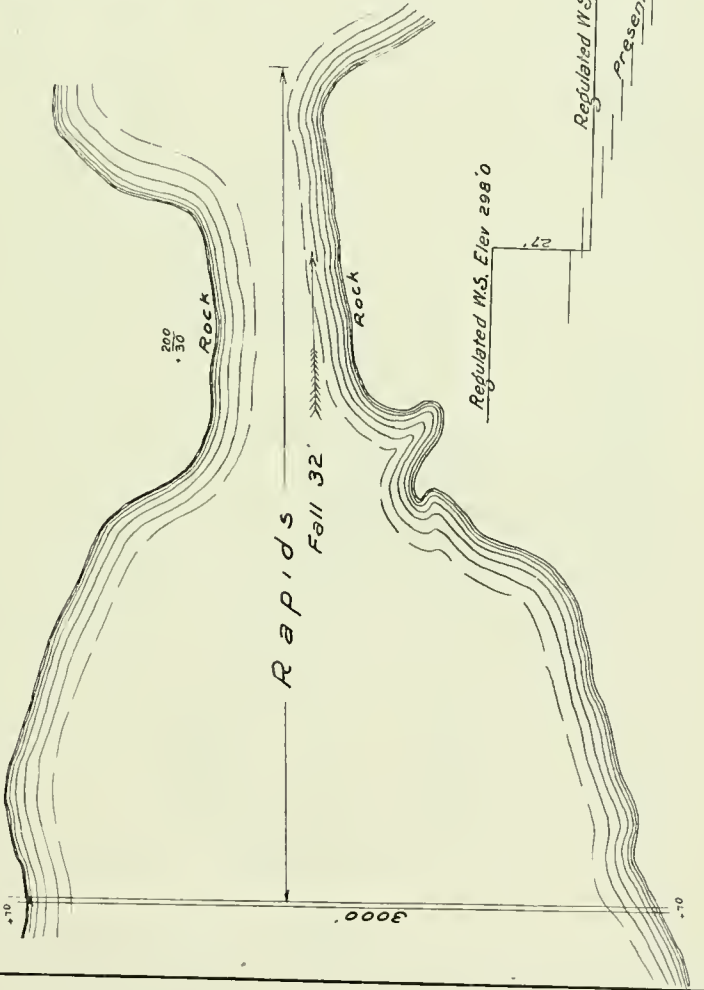
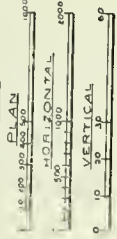
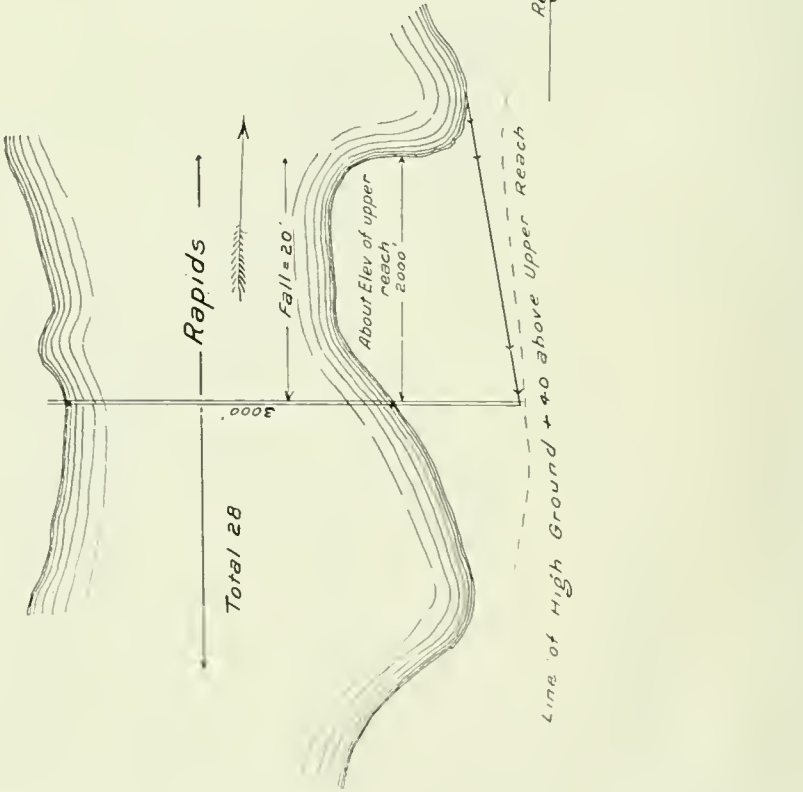


PLATE No. 16.

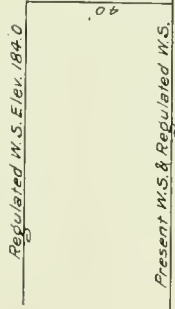
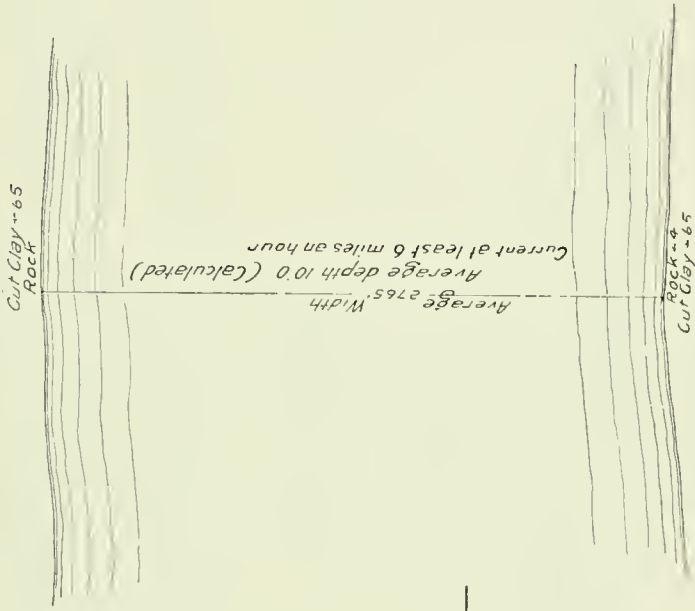
# HEAD OF LONG SPRUCE RAPIDS



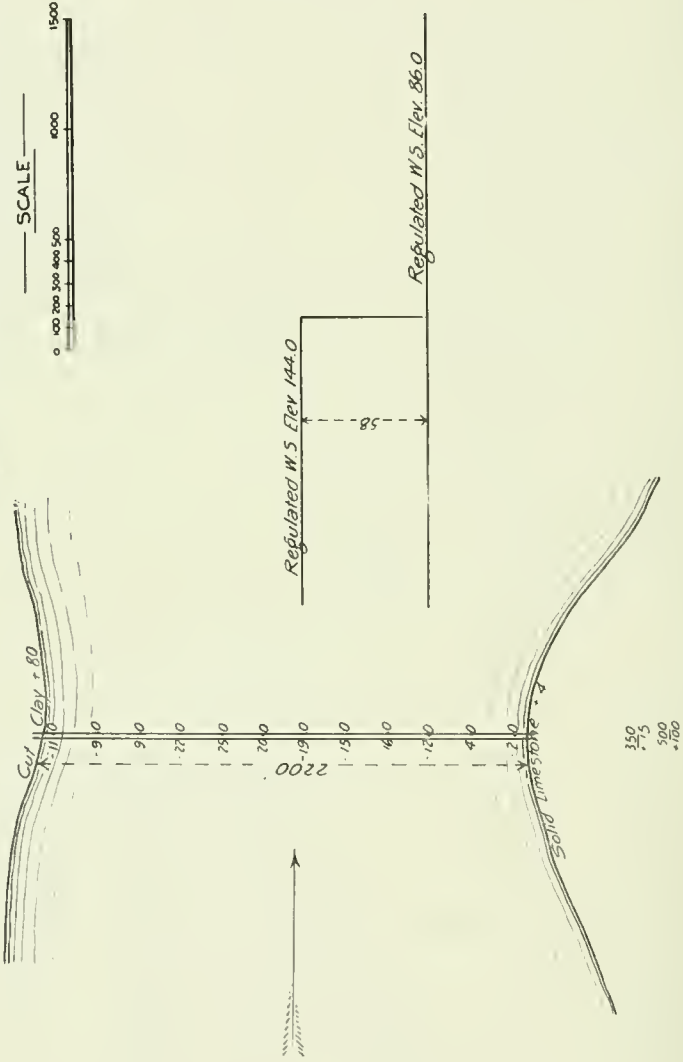
SESSIONAL PAPER No. 19b

PLATE No. 17.

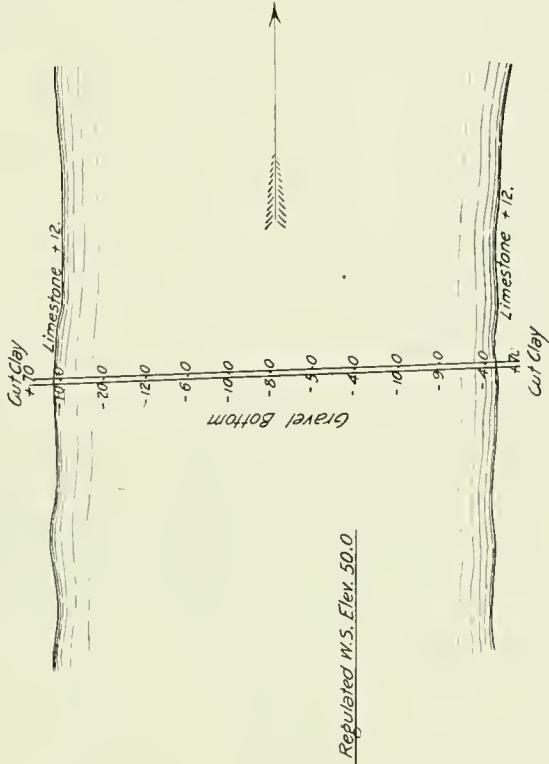
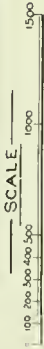
# FOOT LONG SPRUCE RAPIDS



LOCATION - ABOVE LAST LIMESTONE RAPIDS



LOCATION - EXTREME HEAD OF NAVIGATION

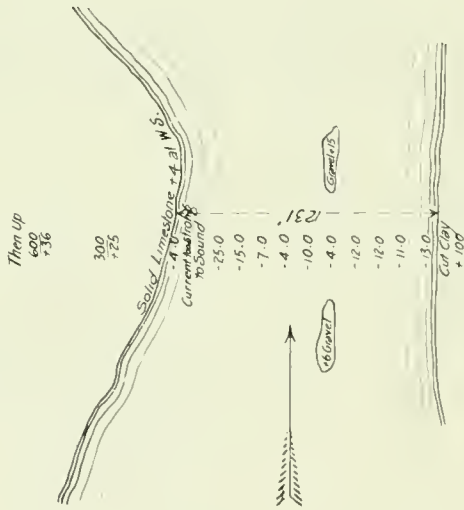


Regulated W.S. Elev. 86.0

Regulated W.S. Elev. 50.0



# LOCATION AT "HEAD OF NAVIGATION"



SESSIONAL PAPER No. 19b

PLATE No. 21.

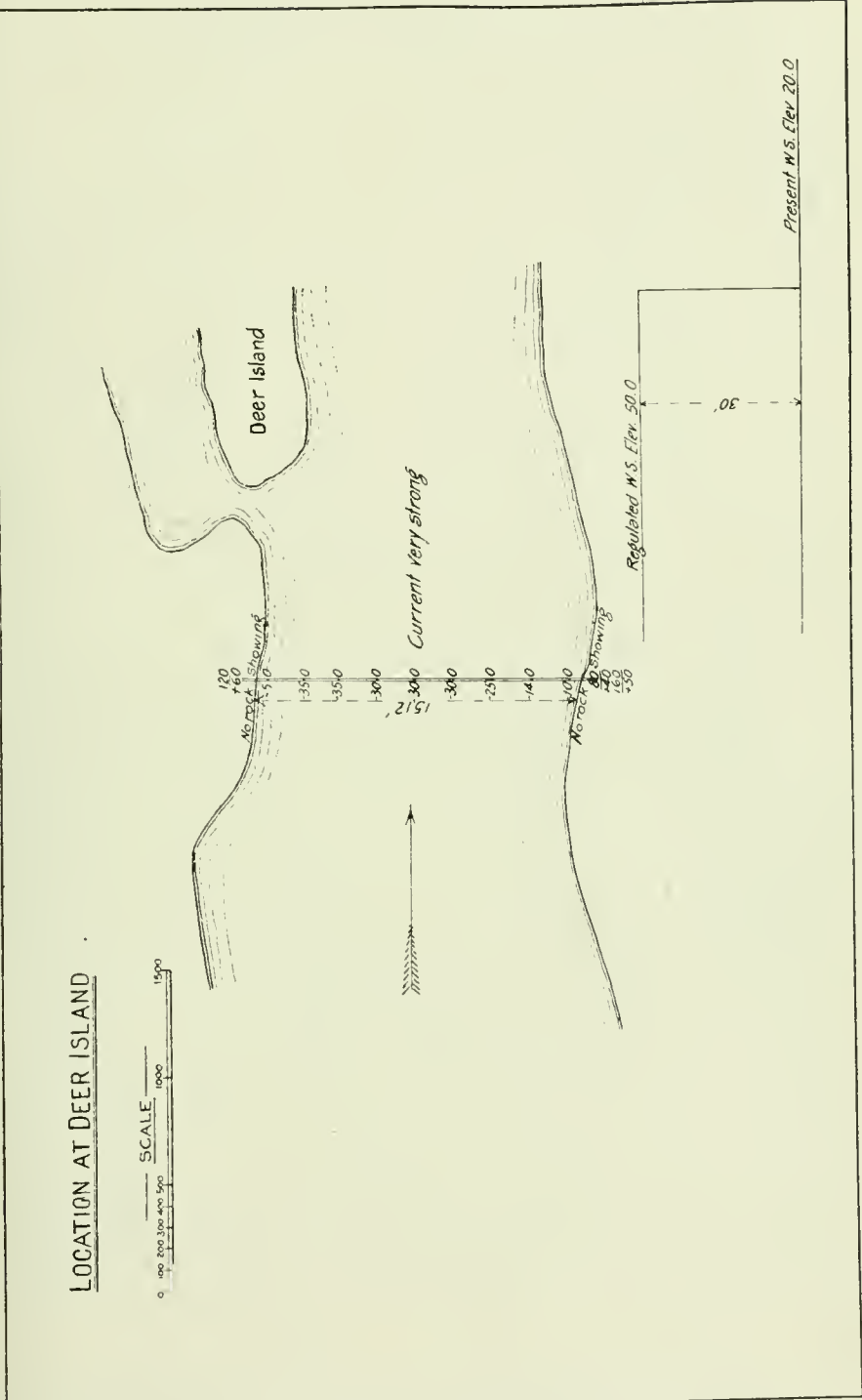
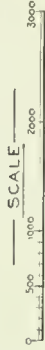


PLATE No. 22.

SOUNDINGS BELOW SEAL ISLANDS



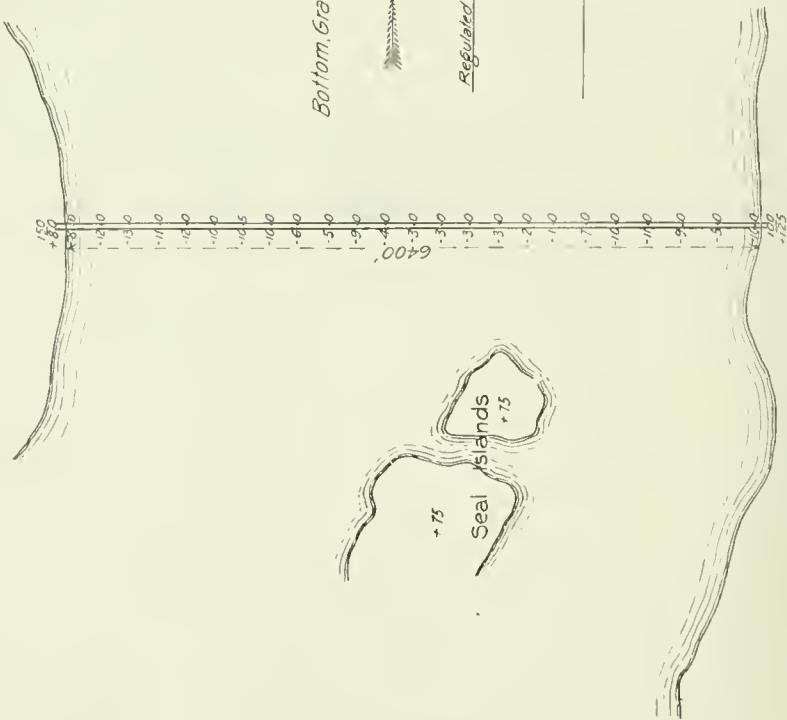
*Bottom, Gravel & Boulders*



*Regulated W.S. Elev. 20.0*

0.2

*Present W.S. Elev. 0.0*



SESSIONAL PAPER No. 19b

## SUMMARY OF LOCATION OF LOCKS AND DAMS

Location.	No. of Locks.	No. of Dams.	Lift.
Whisky Jack Portage.....	2	0	45 feet
Ebb and Flow Rapids.....	1	3	17 "
White Mud Falls.....	1	0	29 "
Bladder Rapids.....	1	1	20 "
Chain of Rocks Rapids.....	1	1	35 "
Devil's Creek.....	1	1	27 "
Grand Rapids.....	1	1	45 "
Above Gull Lake.....	1	1	36 "
Gull Rapids.....	2	1	68 "
Moose Nose Point.....	1	1	40 "
Head Kettle Rapids.....	1	1	40 "
Foot " ".....	2	1	54 "
Head Long Spruce.....	2	1	60 "
Foot " ".....	1	1	40 "
Above Last Limestone Rapid.....	2	1	58 "
*Extreme Head of Navigation.....	1	1	36 "
Deer Island.....	1	1	30 "
Seal Islands.....	1	1	20 "
	23	18	

N. B.—Locks to be 280 x 45 feet and for 14 foot navigation at low water.

## TABLE OF DISTANCES FROM OTTO J. KLOTZ'S SURVEY OF 1884.

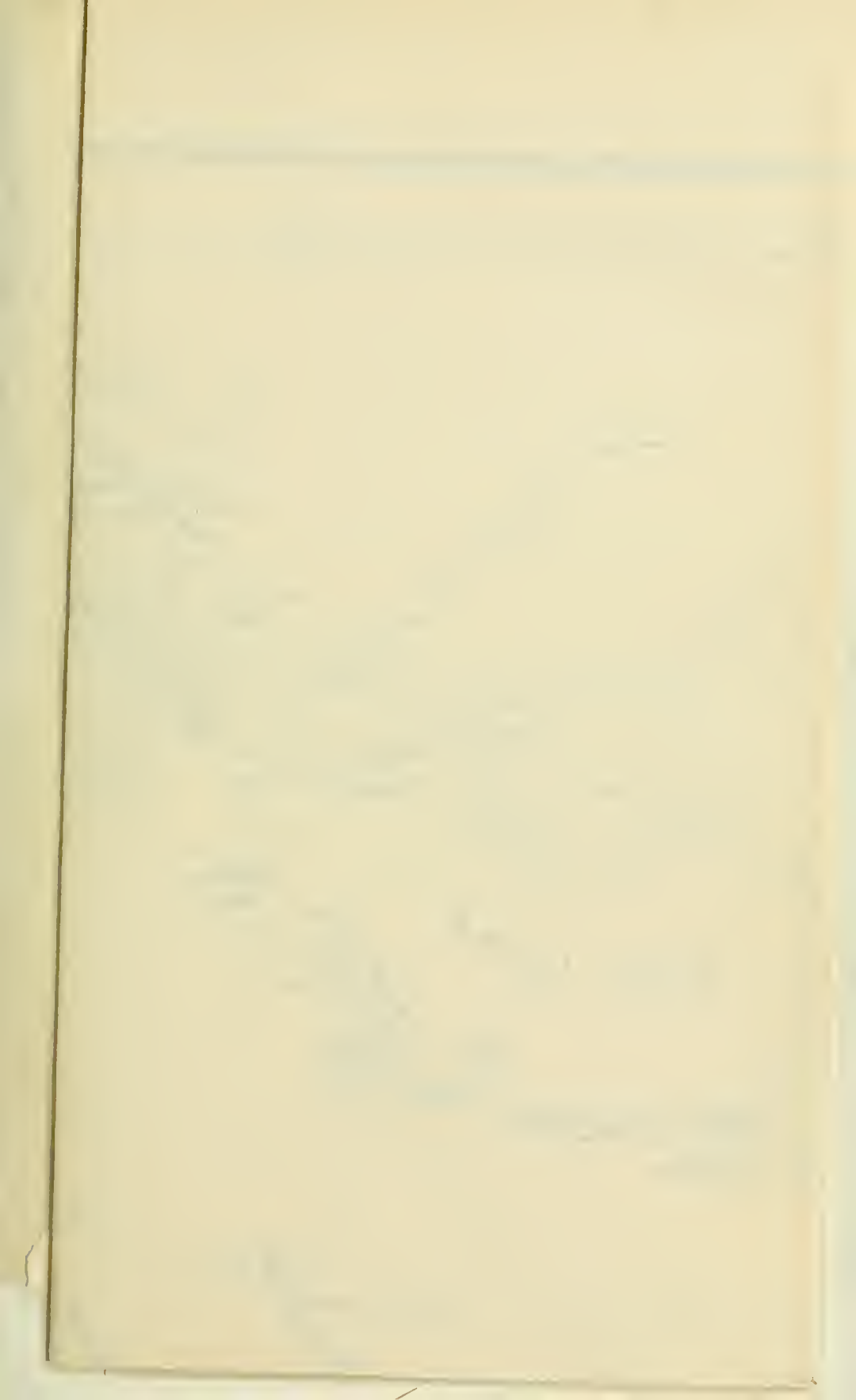
## DISTANCES FROM WARREN'S LANDING, LAKE WINNIPEG:—

To Playgreen Point.....	114	miles
Norway House.....	235	"
Sea Falls.....	435	"
Pipestone Lake.....	711	"
Cross Lake, Hudson Bay Co.'s post.....	834	"
Ebb and Flow Rapids.....	924	"
White Mud Falls.....	963	"
Bladder Rapids.....	1042	"
Forks to Duck Lake.....	1064	"
Over the Hill Rapids.....	111	"
Red Rock Rapids.....	1144	"
Chain of Rocks Rapids.....	1194	"
Lake Sepewesk.....	1224	"
" Outlet.....	155	"
Devil's Creek.....	168	"
Devil's Rapids.....	210	"
Grand Rapids.....	2261	"
Chain of Islands Rapids.....	2304	"
Split Lake.....	2321	"
Split Lake, Hudson Bay Co.'s post.....	2461	"
Gull Lake.....	2752	"
Gull Lake Rapids.....	2852	"
Kettle Rapids.....	3191	"
Long Spruce Rapids.....	3241	"
Limestone Rapids.....	3443	"
*Extreme Head of Navigation.....	3553	"
Seal Islands.....	4043	"
Hudson's Bay.....	4293	"

1 GEORGE V., A. 1913

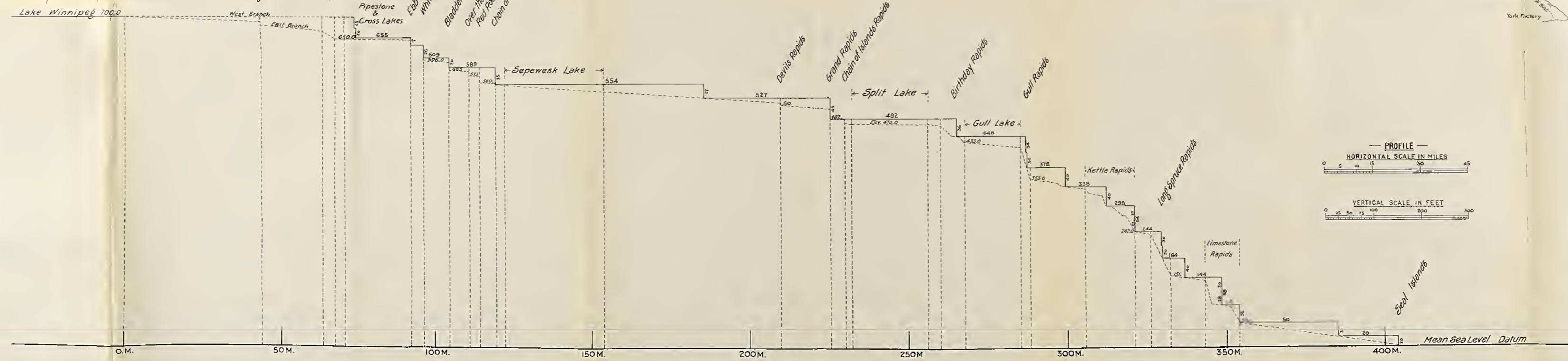
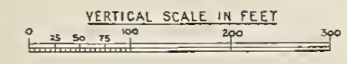
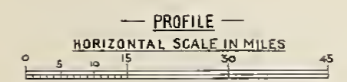
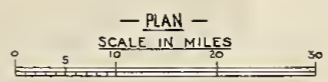
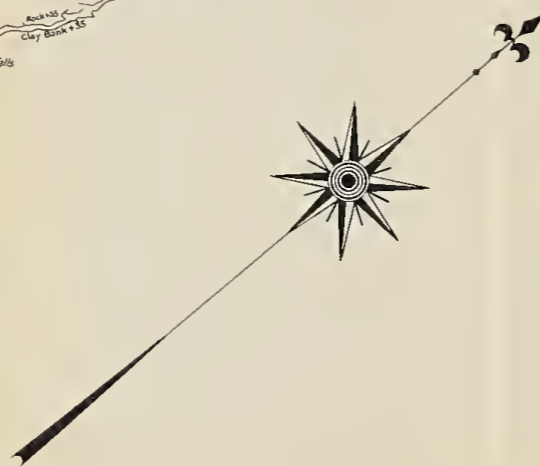
## APPROXIMATE WATER ELEVATIONS AT POINTS ON NELSON RIVER.

Location.	Elevation.
Warren's Landing.....	700 ft. above mean sea level.
Cross Lake.....	650 ft. " "
Foot of Bladder Rapids.....	586 ft. " "
Entrance to Sepewesk Lake.....	552 ft. " "
Head of Grand Rapids.....	504 ft. " "
Split Lake.....	470 ft. " "
Foot of Gull Rapids.....	350 ft. " "
Foot of Kettle Rapids.....	242 ft. " "
Foot of Long Spruce Rapids.....	150 ft. " "
Foot of Limestone Rapids.....	50 ft. " "
Seal Islands.....	0 ft. " "





# PLAN and PROFILE NELSON RIVER











DOMINION OF CANADA

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ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS AND CANALS

FOR THE FISCAL YEAR FROM APRIL 1, 1909, TO MARCH 31, 1910

*Submitted in accordance with the provisions of the Revised Statutes of Canada, 1906  
Chapter 35, Section 33.*

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY





*To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., Governor General of Canada.*

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 April 1, 1909, to March 31, 1910.

GEO. P. GRAHAM,  
*Minister of Railways and Canals.*



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(In separate pocket.)

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9. Welland Canal.
10. Trent Navigation and Murray Canal.
11. St. Lawrence, Ottawa, Rideau and Richelieu Canals.



# REPORT OF THE DEPUTY MINISTER.

To the Honourable Geo. P. GRAHAM,  
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Department of Railways and Canals for the fiscal period of twelve months ended March 31, 1910.

The annual reports of the engineers, together with general and special reports from superintendents, both of railways and canals, and from other officers in the department are given in appendices.

In Part I, will be found statements showing the amounts expended during the past fiscal year in construction, repair and maintenance of the several works under the department; also statements showing total expenditure on each canal since its construction, and on each of the government railways; also a statement showing payments made, year by year, to subsidized railways, with the aggregates of such payments.

On February 5, 1910, Mr. M. J. Butler, C.M.G., who filled the dual office of deputy minister and chief engineer, resigned, and on my appointment, on that date, to the position of deputy minister, the department reverted to the principle of having a special officer as chief engineer, and this office was filled by the appointment, on April 22, 1910, of Mr. W. A. Bowden, who had been acting in that capacity for some time previous.

Another change of importance was the constitution, under an order in council dated April 20, 1909, of a 'Government Railways Managing Board' with whom now rests the duty of carrying out the various details attaching to the operation of these roads.

## GENERAL SUMMARY.

During the twelve months of the past fiscal year the expenditures made by or through the department on its several works of operation, maintenance and construction, both railway and canal, and in furtherance by subsidy, under specific votes granted by parliament, of railway enterprises in various parts of Canada other than the government roads, aggregate as follows:—

The total railway expenditure amounted to \$32,862,094.46, of which \$21,505,975.91 was charged to capital, \$2,260,214.59 to income and \$9,095,903.96 to revenue.

The railway expenditure on capital account included \$19,968,126.86 for the eastern division (from Moncton to Winnipeg), of the National Transcontinental railway, which is in course of construction by a board of commissioners, and \$53,042.63 for surveys for a line of railway to Hudson bay.

The railway expenditure on income included a total of \$2,048,097.05 paid as subsidies to railways other than the government roads, \$112,465.04 for the Board of Railway Commissioners for Canada, \$17,644.66 for inspection of the Grand Trunk Pacific railway, and \$111,788.02 for preparing plans, &c., for the reconstruction of the bridge across the River St. Lawrence above Quebec—known as the Quebec bridge.



1 GEORGE V., A. 1911

The expenditure on the Intercolonial railway amounted to \$9,923,479.78, namely, on capital account \$1,278,409.45, and on revenue account \$8,645,070.33. On the maintenance of the Windsor branch the expenditure was \$23,549.90, charged to revenue account.

On the Prince Edward Island railway, the total expenditure was \$633,680.70, of which \$206,396.97 was charged to capital and \$427,283.73 to revenue.

The expenditure on canals aggregated \$3,259,097.18; of which \$1,650,706.64 was on capital account, \$489,256.68 on income, \$604,899.26 for staff and \$514,234.60 for repairs, the last two amounts being charged to revenue.

Adding to the above for miscellaneous expenditures in both branches the sum of \$4,706.79, the total expenditure for the year on railways and canals amounted to \$36,125,898.43.

The total revenue derived from the railway and canal works was \$9,841,347.99, of which the railway produced \$9,647,963.71, and the canals \$193,384.28,\* the sum of \$168,893.63 being received from hydraulic rents.

The total government expenditure on railways prior to and since Confederation (July 1, 1867) up to March 31, 1910, amounts, on capital account, to \$236,654,665.29, including the sum of \$25,000,000 granted to the Canadian Pacific Railway Company for its main line, and also the amount \$660,683.09 expended on the Annapolis and Digby railway. In addition, there has been expended from the consolidated fund a total of \$202,532,757.03, making a total of \$439,187,422.32. Of this amount the sum of \$13,881,460.65 was expended, prior to Confederation, on the construction of portions of what is now the Intercolonial railway system.

The government expenditure on canals prior to and since July 1, 1867, to the close of the fiscal year March 31, 1910, amounts, on capital account, to \$96,982,449.37, of which \$20,593,866.13 was expended prior to Confederation, and from the consolidated fund to \$29,346,507.21, making a total of \$126,328,956.58.

The total expenditure on railways and canals up to March 31, 1910, is, as above, \$565,516,375.90; adding to which, for general expenditures embracing both, the further sum of \$810,358.32, the grand total expenditure amounts to \$566,326,737.22.†

Details indicating the general classes and directions of the above expenditures will be found in the statements furnished by the accountant of the department and printed in the appendices hereto, Part I.

### GOVERNMENT RAILWAYS IN OPERATION.

The government railways are the Intercolonial, the Windsor branch (maintained only, and leased for operation), and the Prince Edward Island railway.

Details respecting these railways and their operation will be found in the appen-

\* Under the authority of an order in council, dated June 22, 1905, the system of charging tolls for the passage of vessels and goods was abolished on all the canals of the Dominion. Records, however, are kept for statistical purposes, and the compilation of the resultant figures is given in a separate report issued by the department.

† This amount does not include the annual payment of \$119,700 to the provincial government of Quebec, being interest at the rate of 5 per cent on the sum of \$2,394,000 up to 1905, granted by 47 Victoria, Ch. 8 (1884), nor the annual payment of \$107,730, being interest at the rate of 4½ per cent since and including 1905, on the said sum of \$2,394,000, for the line between Ottawa and Quebec, which sum was transferred to the public debt as a liability, and is dealt with by the Finance Department. (See Public Accounts 1893-4, page 10, and 1906, page 79.)

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dices, Part III., containing reports from the Government Railways Managing Board, and the officials of these roads.

The gross earnings of the government roads for the twelve months ended March 31, 1910, amounted to \$9,647,963.71; the working expenses amounted to \$9,095,903.96, showing a profit of \$552,059.75.

The Intercolonial railway working expenses amounted to \$8,645,070.33; its earnings amounted to \$9,268,234.99; a profit of \$623,164.66.

The Windsor branch maintenance expenditure amounted to \$23,549.90; the government earnings amounted to \$60,653.98, leaving a profit of \$37,104.08.

The Prince Edward Island railway working expenses amounted to \$427,283.73; its earnings amounted to \$319,074.74, the deficit being \$108,208.99.

## INTERCOLONIAL RAILWAY.

On March 1, 1898, the operations of the Intercolonial were extended to Montreal by means of leases obtained from the Grand Trunk and Drummond County Railway Companies, making an addition of 169.81 miles to the operation of the government line.

The leasing agreement with the Grand Trunk Railway Company, dated February 1, 1898, was confirmed by the Act 62-63 Vic., chap. 5 (1899). Its term extends for a period of ninety-nine years from March 1, 1898; the annual rental being fixed at \$140,000.

Under authority of the Act 62-63 Vic., chap. 6 (1899) the Drummond County railway from Chaudière to Ste. Rosalie, together with the branch from St. Leonard to Nicolet, was acquired by the Dominion; conveyance being made by a deed dated November 7, 1899.

On October 1, 1904, the Canada Eastern railway from Gibson to Loggieville, 123.67 miles, was purchased, and on April 19, 1905, the mortgaged Fredericton and St. Mary's bridge, with connected property, 1.33 mile, was surrendered to the government.

The total mileage in operation during the year remained the same as in the preceding year, 1,447.13 miles. 23.13 miles are double-tracked. This is irrespective of spur lines and sidings and tracks in yards, the aggregate length of which was 383.71 miles.

## CAPITAL ACCOUNT.

The expenditure for the past fiscal year ended March 31, 1910, on capital account amounted to \$1,278,467.60; from which is deducted the sum of \$58.15 (comprising a refund, &c.), leaving the total \$1,278,409.45, making the total expenditure on the whole road as amalgamated under the Acts 54-55, Vic. chap. 50 (1891) and 62-63 Vic. chaps. 5 and 6 (1899), together with the acquired Canada Eastern railway, \$92,273,073.51.

The principal items charged to capital during the year were as follows (omitting cents): for the new locomotive and car shops with equipment, and new freight yard at Moncton, \$399,400; new machinery for shops, \$95,799; increased accommodation at Halifax, \$179,953; engine house, machine shops, &c., at Rivière du Loup, \$156,945; extension to wharf at Dalhousie, \$27,500; double tracking parts of line, \$68,977; increased water supply, \$42,482, and increased facilities at various points, \$100,565.

The expenditure on capital account was \$2,588,822.71 less than in the previous year 1908-9, in which year \$1,353,646 was expended for rolling stock, whereas last year there was no capital expenditure under this head.

#### REVENUE ACCOUNT.

Expenditures on revenue account are grouped under five main heads, each divided into a number of sub-heads.

The main heads and the expenditures under them for the fiscal year ended March 31, 1910, are as follows: maintenance of way and structures (27 sub-heads), \$1,629,254.81, against which is a credit of \$6,975.06 for maintenance of joint tracks, yards, &c., leaving the net amount \$1,622,279.75; maintenance of equipment (21 sub-heads), \$1,851,792.68; traffic expenses (5 sub-heads), \$179,882.61; transportation expenses (40 sub-heads), \$4,870,874.65, against which is a credit of \$86,206.89 for operating joint yards and terminals, making the net expenditure under this head, \$4,784,667.76; general expenses (8 sub-heads), \$206,447.53.

The aggregate expenditure under these five heads for the year was \$8,645,070.33.

The items of cost of 'maintenance of way and structures' include (omitting cents): ties, \$226,214; rails, \$222,626; other track material, \$128,667; roadway and track, \$533,502; removal of snow, ice and sand, \$91,124; bridges, trestles and culverts, \$66,082; grade crossings, fences, cattle-guards and signs, \$37,516; buildings, fixtures and grounds, \$140,304; and maintaining joint tracks, yards and other facilities, \$44,161 (against which last item is a credit, as above).

The items of 'maintenance of equipment' include (omitting cents): repairs and renewals of locomotives, \$759,381; repairs and renewals of passenger cars, \$338,494, and of freight cars, \$583,914; and shop machinery and tools, \$33,297.

The items of 'traffic expenses' include (omitting cents): for outside agencies, \$61,587; for advertising, \$37,232; and for stationery and printing, \$24,810.

The items of 'transportation expenses' include (omitting cents): despatching trains, \$142,103; station employees, \$626,729; station supplies and expenses, \$86,785; yard masters and clerks, \$33,544; yard conductors and brakemen, \$121,899; yard enginemen, \$112,975; fuel for yard locomotives, \$152,678; operating joint yards and terminals, \$104,241 (against which is a credit of \$86,206); road enginemen, \$482,068; engine house expenses, \$234,189; fuel for road locomotives, \$1,490,049; road trainmen, \$629,430; train supplies and expenses, \$177,702; and operating floating equipment, \$42,321.

The items of 'general expenses' include (omitting cents): pensions, \$63,313; and law expenses, \$7,307.

The gross earnings of the year, \$9,268,234.99, were derived as follows:—

The passenger earnings amounted to \$2,765,884.66, or 29.84 per cent of the gross earnings; the freight earnings were \$6,048,884.18, or 65.26 per cent of the gross; the mail and express earnings were \$408,847.66 or 4.41 per cent and the miscellaneous earnings amounted to \$44,618.49, or .48 per cent of the gross. The revenue derived from transportation was 99.32 per cent of the gross.

The gross earnings per mile of railway (1,447.13 miles), were \$6,404.56; per engine mile, \$1.08; per train mile, \$1.39; and per car mile, 9.82 cents.

## SESSIONAL PAPER No. 20

The total engine mileage was 8,608,486; the total train mileage 6,682,353; and the total car mileage, 94,384,628.

The expenses per mile of railway were as follows: maintenance of way and structures, \$1,121.03; maintenance of equipment, \$1,279.63; traffic expenses, \$124.30; transportation expenses, \$3,306.32; and general expenses, \$142.66, making a total of \$5,973.94.

The expenses per train mile were: maintenance of way and structures, 24.28 cents; maintenance of equipment, 27.71 cents; traffic expenses, 2.69 cents; transportation expenses, 71.60 cents; and general expenses, 3.09 cents, making a total of 129.37 cents.

The ratio of expenses to gross earnings was as follows: maintenance of way and structures, 17.50 per cent; maintenance of equipment, 19.98 per cent; traffic expenses, 1.94 per cent; transportation expenses, 51.62 per cent; and general expenses 2.23 per cent.

Comparing the twelve months ended March 31, 1909, with the corresponding period ended on March 31, 1910, the revenue last year showed an increase of \$741,165.53. The passenger traffic produced an increase of \$137,666.09; the freight traffic an increase of \$546,333.60; and the mails and express an increase of \$57,165.84. The increase per mile of railway was \$512.16, and per train mile 15 cents.

A comparison of working expenses for the same periods shows a decrease in the year 1909-10, of \$682,951.22, or per mile of railway, \$471.95; per engine mile of 0.87 cents, and per train mile of 6 cents.

The increased revenue, \$741,165.53, and the reduction in working expenses, \$682,951.22, make a total betterment, as compared with the previous year, of \$1,424,116.75.

## GENERAL NOTES RE INTERCOLONIAL RAILWAY.

The number of passengers carried was 3,122,324, an increase compared with the previous year, of 215,087. There was an increase of 217,330 in the number of local passengers, and a decrease of 2,243 in the number of through passengers.

The actual quantity of freight carried, including non-revenue producing, was 4,071,692 tons. Of this, 144,452 tons consisted of supplies carried for the railway, such as ties, rails, station supplies, &c.

Of revenue producing freight, 3,927,240 tons were carried, an increase, compared with the previous year, of 353,268 tons. The local freight was increased by 216,188 tons, and the through freight by 137,080 tons; the principal items being the following:

Of agricultural products, 473,851 tons, including 155,484 tons of grain and 160,817 tons of flour; of animals, poultry and fish and their products, 76,732 tons, including 18,439 tons of dressed meats, 27,887 tons of fish and 6,667 tons of hides and leather; of products of mines, 1,266,572 tons, including 1,050,362 tons of coal and coke and 184,673 tons of stone, sand, &c.; of products of the forest 1,043,749 tons, including 416,774 tons of lumber, 185,385 tons of pulp wood, and 39,072 tons of wood pulp; of manufactured goods 708,373 tons, including 88,484 tons of iron and steel rails, 138,468 tons of pig and bloom iron, brick, lime and cement, 107,199 tons, sugar, 62,571 tons, and petroleum and oils, 27,537 tons. Of goods classed as miscellaneous, 357,963 tons were carried.

Of products of agriculture, there was an increase of 106,348 tons, including increases of 51,588 tons in grains, 14,125 tons in flour, and 36,208 in hay. Of products



of animals, the increase was 5,176 tons, chiefly in dressed meats and fish. Of products of mines, there was a decrease of 32,760 tons, coal and coke having decreased by 65,575 tons, and slate and granite by 1,732 tons, though other items showed increase. Of products of the forest, there was an increase of 164,702 tons, lumber having increased by 63,886 tons, and both pulp wood and wood pulp having shown considerable increase. Of manufactures, there was an increase of 79,208 tons, iron, pig and bloom, increased by 39,624 tons, wire rods by 35,365 tons, and other increases were made. Iron and steel rails fell off 12,856 tons, and steel billets 26,174 tons.)

The total rolling stock equipment of the railway on March 31, 1910, was as follows:

Locomotives, 414; cars of all kinds, 12,970, comprising sleeping cars, 1st class, 41, 2nd class, 50, parlour cars 9, dining cars 12, 1st class passenger cars 135, 2nd class 99, postal cars 34, baggage cars 65, box baggage cars 6, air brake instruction car 1, steam motor cars 4, box cars, 7,095, refrigerator cars 144, platform cars 3,058, pulp wood cars 52, oil tank cars 40, hopper cars 1,046, gondola coal cars 17, coal cars (20 tons capacity) 442, steel side dump coal cars 130, stock cars 148, convertible dump cars 200, auxiliary cars 23, vans 119; also 53 common snow ploughs, 20 wing ploughs, 2 rotary steam ploughs, 2 double track ploughs, 1 double end plough, 40 flangers; making a total of 118 ploughs and flangers; 2 ballast plough cars, and 1 well boring car.

Out of the foregoing list 11 locomotives, 645 cars of various kinds, and 1 common snow plough were condemned or destroyed and 11 locomotives, 445 cars, and 1 common snow plough were listed as to be replaced at the close of the year.

The following comparative statistics dealing with traffic will be of interest:—

In 1908-9, the average tons of freight carried per train, producing revenue, was 229.95, and the number of passengers 51.61; in 1909-10, the average freight tonnage was 260.02, and passengers 58.99.

In 1908-9, the average tons per loaded car, producing revenue, was 16.66, and the number of passengers 8.81; in 1909-10, the number of tons was 17.23, and of passengers, 9.62.

The number of tons per train, all freight, in 1908-9, was 235.46, and in 1909-10, 264.26.

The number of tons per car, all freight, in 1908-9, was 17.07, and in 1909-10, 17.51.

The average distance each ton of freight was carried in 1908-9, was 267.59 miles, and in 1909-10, the average distance was 271.69 miles. The average distances passengers were carried in those years were 48.04 miles, and 48.73 miles respectively.

The average number of loaded cars per train in 1908-9, was 13.80 cars of freight and 5.86 cars of passengers; in 1909-10, the number of freight cars per train was 15.09 and of passengers 6.13.

The average number of empty cars per train in 1908-9, was 3.93, and in 1909-10, 3.13.

In 1908-9, the average of train miles per mile of road was, for freight, 2,873.96; and for passengers, 1,870.06; in 1909-10, these figures were, respectively, 2,835.59, and 1,782.07.

In 1908-9, the average per mile of road of revenue producing freight carried one mile was 660,857.05 tons, and passengers 96,519.39; in 1909-10, the figures were, freight 737,317.14 tons, and passengers 105,131.40.

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The number of tons, all freight, per mile of road carried one mile in 1908-9, was 676,705.26, and in 1909-10, 749,338.04.

The train mileage in 1908-9 was: passenger, 2,706,214 miles; freight, 4,158,990 miles; in 1909-10, passenger, 2,578,885 miles; freight, 4,103,468 miles.

The loaded car mileage in 1908-9, was 57,381,108 miles, and in 1909-10, 61,916.687 miles.

The empty car mileage in 1908-9, was 16,356,184 miles, and in 1909-10, 12,843,789 miles.

The caboose car mileage in 1908-9, was 3,776,649 miles, and in 1909-10, 3,802,680 miles.

The steam motor car mileage (passenger) was 21,997 miles in 1908-9, and 16,563 miles in 1909-10.

The total car mileage in 1908-9 was: passenger, 15,860,178 miles, and freight, 77,513,941 miles; in 1909-10, the figures were: passenger, 15,821,472, and freight 78,563,156.

The total freight moved in 1908-9, was 3,751,724 tons; of this quantity, 3,573,972 tons were revenue-producing. In 1909-10, the total freight moved was 4,071,692 tons, of which 3,927,240 tons were revenue-producing.

Repairs to passenger cars cost, per car, in 1908-9, \$630.51, or per car mile, .0172 of a cent; and in 1909-10, \$604.87, or per car mile, .0171 of a cent.

Repairs to freight cars cost, per car, in 1908-9, \$47.86, or per car mile, .0078 of a cent; and in 1909-10, \$38.16, or per car mile, .0062 of a cent.

Repairs to locomotives cost, per locomotive, in 1908-9, \$1,884.53, or per locomotive mile, .0828 of a cent, and in 1909-10, \$1,504.72, or per locomotive mile, .0727 of a cent.

The value of stores on hand at the close of the year was \$1,243,181.69, comprising fuel, \$416,911.37; roadway and bridge material, \$314,377.42; and miscellaneous, \$511,892.90.

During the year the new shops at Moncton were occupied, and the locomotive repair work formerly executed at Halifax was transferred to the Moncton shops, a considerable reduction in the number of employees being thus effected.

The double tracking between Moncton and Painsec Junction, a distance of 7.2 miles, was completed and put in operation.

The general condition of the rolling stock is good, and the track of the railway, together with its bridges and other structures, has been maintained in good repair. It is believed that the whole road was never in better condition than at the present time.

Full details as to the various works of improvement and repair carried out during the year, and as to the mechanical department and the rolling stock, will be found in the appendices hereto; also the several statements of the comptroller in regard of the expenditures, &c.

## WINDSOR BRANCH.

The road is 32 miles in length. It extends from Windsor Junction, on the Inter-colonial railway, to Windsor.

The railway is operated by the Dominion Atlantic Railway Company, formerly the Windsor and Annapolis Railway Company. The company pay all charges in con-



nection with the working of the traffic, two-thirds of the gross earnings being allowed them, the government taking the remaining one-third, and assuming all cost of maintenance of the road and works. This arrangement is carried out under an agreement dated December 13, 1892, which extends for a further term of twenty-one years, arrangements similar to those made in 1871.

All charges for superintendence and supervision of maintenance of work are borne by the government; the duty of supervision is performed by the chief officers of the Interecolonial railway.

The gross government receipts for the twelve months of the fiscal year ended on March 31, 1910, amounted to \$60,653.98. The cost of maintenance aggregated \$23,549.90, leaving a profit of \$37,104.08. The government share of the receipts showed an increase of \$4,622.65 compared with the previous year.

### PRINCE EDWARD ISLAND RAILWAY.

This is a narrow gauge railway, 3 feet 6 inches. The length of road operated was the same as in the previous year, 267.5 miles.

#### CAPITAL ACCOUNT.

There was an addition of \$206,396.97 to the capital account expenditure during the past year ended March 31, 1910, making the total capital expenditure up to that date, \$8,465,364.91. The added expenditure included \$156,531.57 for increased accommodation at Charlottetown, where a new twenty stall brick and concrete engine house has been built, and \$49,829.25 for the branch line from Harmony to Elmira, a distance of 9.9 miles, the construction of which was placed under contract during the year.

#### REVENUE ACCOUNT.

The gross earnings of the year amounted to \$319,074.74, and the working expenses to \$427,283.73, making an excess of expenditure over earnings of \$108,208.99. Compared with the previous year there was an increase of \$7,755.11 in the gross earnings, and an increase of \$16,953.32 in the working expenses.

The expenditure on revenue account (working expenses) is classified, as on the Interecolonial railway, under five heads, with their several sub-heads. It comprised: 'Maintenance of way and structures,' (25 sub-heads), \$121,046.70, which included ties \$10,232.32; rails, \$11,008.03; roadway and track, \$60,149.62; removal of snow, ice and sand, \$11,930.76; and telegraph and telephone lines, \$6,916.88; 'maintenance of equipment' (10 sub-heads), \$79,258.26, which included repairs to locomotives, \$27,005. to passenger cars, \$14,485.79, and to freight cars, \$11,471.06; 'traffic expenses' (3 sub-heads), \$968.97, of which \$894.09 was for advertising; 'transportation expenses' (30 sub-heads), \$211,004.76, which included, station employees, \$45,038.14; road engineers, \$23,425.86; road engine house expenses, \$10,837.48; fuel for road engines, \$46,482.45; road trainmen, \$31,955.39; train supplies and expenses, \$7,071.15; and telegraph and telephone operation, \$7,013.08; 'general expenses' (6 sub-heads), \$15,005.04, which included the salaries and expenses of general officers, clerks and attendants, and relief department expenses, \$6,142.67.

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The number of passengers carried was 351,038, an increase compared with the previous year of 18,280, producing \$140,076.83, an increase of \$3,542.79. Of freight, 105,741 tons were carried, a decrease of 349 tons, producing \$153,273.11, an increase of \$4,222.50. The earnings for mails and sundries amounted to \$25,624.80, a decrease of \$10.18 compared with the previous year.

The freight carried was agricultural products, 29,767 tons, including grain, 12,918 tons; flour, 4,374 tons; hay, 2,912 tons; fruit and vegetables, 7,886 tons, and tobacco, 166 tons; animals, poultry and fish and their products, 12,064 tons, including live stock, 3,562 tons; dressed meats, 2,307 tons; poultry, game and fish, 3,030 tons, and hides and leather, 421 tons; products of mines, 10,795 tons, including 7,523 tons of bituminous coal; forest products (lumber) 13,358 tons; manufactures, 6,593 tons, including iron and steel rails, 598 tons, pig and bloom iron, 439 tons; agricultural implements, 711 tons; cement, brick and lime, 1,334 tons, and sugar, 907 tons; miscellaneous commodities, 33,164 tons.

The engine mileage aggregated 441,837 miles, the train mileage, 323,522 miles, and the car mileage, 2,051,034 miles.

The gross earnings per mile of railway amounted to \$1,195.03; per engine mile, \$71.73 cents; per train mile, 98.63 cents; and per car mile to 15.56 cents.

The working expenses per mile of railway amounted to \$1,600.31, and per train mile to 132.07 cents.

The value of stores on hand on March 31, 1910, was \$59,306.18, including fuel, \$12,155.77.

The total rolling stock equipment of the railway on March 31, 1910, was as follows: Locomotives, 31; passenger cars, first-class, 23, second-class, 12; combined second-class and baggage, 7; postal and smoking, 4; combined postal and baggage, 4; baggage, 6; pay car, 1; vans, 4; box freight, 313; refrigerator, 3; stock, 21; coal, 22; platform, 147; total, 567. In addition, there were 10 snow ploughs and 9 flangers.

In the Charlottetown shops, which the mechanical superintendent states are modern and up to date; the machinery has all been installed. One first-class passenger car and ten platform cars were rebuilt, ten locomotives received heavy repairs, and considerable quantity of work was done; the rolling stock being maintained in a high state of efficiency.

## GOVERNMENT RAILWAYS PROVIDENT FUND.

The Act of 1907, chap. 22, establishing a fund to be known as 'The Intercolonial and Prince Edward Island Railway Employees' Provident Fund' came into effect on April 1, 1907. The main feature is that a contribution of 1½ per cent of each month's salary and wages will be made by each employee to the fund, to which a like amount will be added by the railway. Interest at 3 per cent per annum will be allowed on the employee's contribution. On retirement, after a certain length of service, the employee will receive for the rest of his life a monthly allowance for each year of his service, equal to 1½ per cent of his average monthly salary or wages for the preceding eight years; the minimum allowance to be \$20 a month, and the maximum ⅓ of his said average monthly pay. The fund is administered by a board of five persons, three of whom are officers of the railway; the remaining two being elected annually by the

contributing employees. By the amending Act of 1909, chap. 20, the government Railways Managing Board nominates one of its members as chairman of the Provident Board.

The third annual report of the Board, which is printed in the appendices hereto, shows that at the beginning of the fiscal year April 1, 1909, there was a balance to the credit of the fund of \$225,898.31, and that during the past fiscal year the contributions of the railway employees amounted to \$69,949.70; adding to this a like contribution from the government railways and the sum of \$483.06 for refunds, &c., together with interest on monthly balances, \$6,314.32, the total of the fund for the year aggregated, \$372,595.09. The total expenditure during the year was \$117,010.01, of which \$103,628.20 was paid out in retiring allowances, leaving at the credit of the fund on March 31, 1910, the sum of \$255,585.08. It should again be observed that the expenditure, in the early years of the operation of the scheme, would naturally be less than the receipts; but this condition cannot be expected to continue indefinitely. However, meantime, a considerable increase of the fund at credit, year by year, will serve as a source from which to meet the larger expenditures to be looked for in the future.

In the course of the year, 168 employees were retired and pensioned; and seventeen died.

During the three years that the system has been in operation the total contributions by employees amount to \$227,963.85, and the total contributions by the railways to \$227,963.85. The number of employees pensioned is 398, and forty-five have died, leaving 353 in enjoyment of their allowances at the close of the fiscal year 1910. The total paid for retiring allowances is \$191,608.87.

## SURVEYS FOR A RAILWAY TO HUDSON BAY.

These surveys have been conducted from Le Pas Mission, a point on the River Saskatchewan, up to which point there is at present in operation a railway, part of the Canadian Northern railway system.

In last year's report there was printed a progress report made by Mr. John Armstrong, the chief engineer of the survey, dated February 15, 1909. This report, which was based on partial surveys, dealt with the two feasible routes discovered, one at Fort Churchill, on the River Churchill, and the other to Port Nelson, on the River Nelson.

Under date September 8, 1909, Mr. Armstrong has submitted a general report on the preliminary surveys, which now include preliminary surveys of the harbours at the mouth of the Nelson and Churchill rivers. His report is furnished with maps showing the two routes, with profiles, and charts with the soundings taken at Port Nelson. His report was laid before parliament last session and will be found printed in the appendices hereto.

From this report, the following information is summarized:—

The distance from Le Pas to Fort Churchill would be approximately 477 miles; its cost with 60-pound rails, \$10,586,520, or with 80-pound rails, \$11,351,520; adding to which the sum of \$7,757,152 for buildings, shops, grain elevators, &c., and for harbour works, \$6,675,000, the total is set down at \$19,108,672.

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The distance from Le Pas to Port Nelson would be approximately 410 miles; its cost with 60-pound rails, \$8,333,800, or with 80-pound rails, \$8,981,800; adding to which, for buildings, shops, grain elevators, &c., the sum of \$7,444,540, and for harbour works, \$5,065,000, the total cost is set down at \$16,426,340.

In both cases, the sum of \$4,000,000 is given as representing the cost of two 4,000,-000 bushel fireproof elevators to be erected at either terminal.

The grades obtained are, on the Churchill route,  $\frac{1}{10}$  of 1 per cent for the north bound and  $\frac{1}{10}$  for the south bound traffic. On the Nelson route the grade is  $\frac{1}{10}$  both ways.

On the Churchill route the estimate provides for steel bridge structures over the River Saskatchewan and the Deer river, timber to be used for all other waterways.

On the Nelson route the bridge over the River Saskatchewan and the two crossings of the Nelson river are proposed to be of steel and concrete; all others to be of wood.

For about the first 150 miles from Le Pas the route is common to both lines of survey, and, of this, the first 120 miles runs through a comparatively level country, giving easy grades and cheap construction. This character is maintained generally on the whole of the Nelson route, the greater portion of the grading being in clay loam, a certain percentage of sand gravel and swamps. The profile shows a practically straight line of descent to the bay, varied only by stretches of level grade.

The Churchill route is at a higher elevation, and passes through a granite country. It involves a number of rising and falling grades between the 250th mile and the bay, and requires much curvature to secure the grade adopted, at reasonable cost.

The question of harbour facilities at the two points is one that constitutes a very important factor in the determination of the route to be adopted, and although a large amount of information has been obtained, as is indicated by the charts with their marked soundings, and Mr. Armstrong's statements as to tides, currents, ice conditions, anchorage, sites for railway terminals, &c., it is considered that further details should be gathered.

By the close of the fiscal year, March 31, 1910, location plans and profiles of the proposed line for a distance of about seventy-five miles from Le Pas were prepared, and further location work was in progress.

## BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

By the Act 3 Edward VII., chap. 58 (1903), amending and consolidating the law respecting railways, the Railway Committee of the Privy Council was abolished, and in lieu thereof a Board of Commissioners, under the above title, was created, to consist of three members (increased to six by the Act of 1908, chap. 62), to be appointed by the Governor in Council; this Act was brought into force on February 1, 1904, by proclamation, on the authority of an order in council, dated January 18, 1904, which also appointed certain persons as commissioners. By the Act of 1908, chap. 61, the jurisdiction of the board was extended to cover the operation of telegraph and telephone lines, and by the Act of 1908, chap. 62, certain amendments were made to its constitution and otherwise. The office of the board is at Ottawa, though it is authorized to hold sessions in any part of Canada. Its decisions and orders are final, subject



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to appeal to the Supreme Court upon questions of jurisdiction or law, and also to action thereon by the Governor in Council, in his discretion.

It is required to make, annually, a report of its proceedings, which report is laid before parliament. The report for the year ended March 31, 1910, has been received, and will be laid before parliament in due course.

### NATIONAL TRANSCONTINENTAL RAILWAY.

Under an agreement, dated July 29, 1903, ratified by the Dominion Act of that year, chap. 71, and under a modifying agreement dated February 18, 1904, ratified by the Act of that year, chap. 24, the Grand Trunk Pacific Railway Company, a company incorporated by the Act of 1903, chap. 122, have undertaken certain obligations in respect of a line of railway, wholly upon Canadian territory, between the city of Moncton, in the province of New Brunswick, and the navigable waters of the Pacific ocean, at or near Port Simpson or some other port in British Columbia, as may be agreed upon. The railway is composed of two divisions, namely, the eastern division, between Moncton and Quebec, thence westerly through the northern part of the provinces of Quebec and Ontario, and in the province of Manitoba to the city of Winnipeg, and the western division, between Winnipeg and the Pacific ocean. The eastern division is being constructed by the government under four commissioners appointed by the Governor in Council, and on completion is to be leased to and maintained and operated by the company, who undertake to construct at their own cost and to maintain and operate the western division. The lease of the eastern division is to be for a period of fifty years, at a rental of three per cent per annum upon the cost of its construction; the first seven years of the term to be free of rent; both divisions are to be equipped by the company, the first equipment to be of a value not less than \$20,000,000.

By way of assistance to the company in the construction of the western division, it is provided that the government shall guarantee payment of the principal and interest of an issue of bonds to be made by the company for an amount sufficient to produce a sum equal to 75 per cent of the cost of its construction, such amount not to exceed \$13,000 per mile in respect of the prairie section from Winnipeg to the eastern limit of the Rocky Mountains (such limit to be established by the chief engineer of the company and the chief engineer of the government, as the result of actual surveys to be made).

The several government expenditures to be made under these Acts and agreements are to be so made from appropriations by parliament for the purpose, and on the recommendation of the Minister of Railways and Canals, to whom accounts of all receipts, expenditures and liabilities are to be furnished monthly. The board are required to furnish annually a report to the Governor in Council, through the Minister of Railways and Canals, showing the receipts and expenditures of the year, and other information as to the railway, which report is to be submitted to parliament.

The headquarters of the Board are in the city of Ottawa.

The report of the Board for the fiscal period of twelve months ended March 31, 1910, has been prepared, and will be laid before parliament in due course.

The following summary shows the position at the close of the year, March 31, 1910.

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The entire line from Moncton to Winnipeg is under contract, the distance being 1804.84 miles.

Of this distance, 1,106 miles are graded. The track is laid for a distance of 698.7 miles of main line, with 114.5 miles of sidings; total 813.2 miles. The work is comprised in twenty-one contracts, and the total percentage done is 60.1 per cent of the whole.

The work is divided into six districts. On the first westward from Moncton, *District 'A,' 256.51 miles;* 246 miles are graded, and the main track is laid for 155.91 miles. The expenditure for construction during the year was \$4,996,543.26. 81.07 per cent of the work has been done.

*District 'B,' 507.22 miles;* 358.25 miles are graded, and the main track is laid for 216.4 miles. This district extends east and west of the Quebec bridge. The expenditure during the year on construction was \$5,313,240.10, and on transport, \$14,169.14. 64.87 per cent of the work has been done.

*District 'C,' 192.91 miles;* 13 miles have been graded. The expenditure during the year on construction was \$360,264.18; on transport, \$26,691.28, and on location, \$6,948.04. 5.31 per cent of the work has been done.

*District 'D,' 216.11 miles;* 127.5 miles have been graded, and 57.9 miles of main track laid. The expenditure during the year on construction was \$3,479,414.94, and on transport, \$27,286.12. 36.89 per cent of the work has been done.

*District 'E,' 255.19 miles;* 41.5 miles have been graded. The expenditure on construction during the year was \$857,325.09, and on transport, \$10,249.70; 20.58 per cent of the work has been done.

*District 'F,' 376.80 miles;* brings the road into the city of Winnipeg, crossing the Red river at St. Boniface. It embraces the construction of the yards and locomotive and other shops at a point about six miles east of Winnipeg. The track connecting the Lake Superior branch with the Dundee branch of the Canadian Northern railway at St. Boniface, was laid in October, 1909, and 46.7 per cent of the work of constructing the station buildings, &c., over this distance is completed. The substructure of a double track bridge over the Red river at Winnipeg is under contract, and six of the piers have been completed. The foundations of all the terminal shop buildings are completed, and about 2,500 tons of the general steel work have been erected. The expenditure during the year on construction was \$4,648,295.23, and on transport, \$11,982.58; 82.21 per cent of the work has been done.

The expenditure for the fiscal year up to March 31, 1910, on the entire eastern division amounted to \$19,968,126.86, of which \$19,655,682.80 was on construction. The total expenditure up to that date was \$71,918,843.88.

The yearly expenditures have been as follows:—

1904-5. . . . .	\$ 778,363 63
1905-6. . . . .	1,831,263 50
1906-7 (nine months). . . . .	5,537,867 50
1907-8. . . . .	18,910,449 41
1908-9. . . . .	24,892,772 98
1909-10. . . . .	19,968,126 86



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As the result of disputes between the government engineers and those of the Grand Trunk Pacific Railway Company respecting classification of material on districts 'B' and 'F,' and as to returns for rock moved outside the regular section in rockcuts, (commonly known as 'overbreak'), these matters have been referred for settlement to a board of three arbitrators, as provided for in the company's agreement with the government. Owing to snow on the ground, it was not found possible to deal with the question of classification before the close of the fiscal year. A number of adjustments of 'overbreak' were, however, made, and where they involved deductions these have been made in the contractors' progress estimates. In some cases remeasurements will be necessary before they can be dealt with.

On the western division of the railway, in course of construction by the Grand Trunk Pacific Railway Company, the position at the close of the fiscal year, March 31, 1910, is shown by the report made by the government chief engineer of that division, Mr. Collingwood Schreiber, C.M.G., to be as follows:—

The total length of this division is about 1,751 miles, divided into two sections, viz.: the 'Prairie Section' which extends from the west bank of the Assiniboine river, in the city of Winnipeg, to the east bank of Wolf creek, a distance of 915 miles, and the 'Mountain Section' extending from the east bank of Wolf creek to the western end of the city of Prince Rupert, the Pacific coast terminus, a distance of about 836 miles.

#### ' PRAIRIE SECTION.'

The entire section is graded, and the structures are built. The main line track is laid, and sidings have been constructed at 138 stations, aggregating 140½ miles in length. 474 miles of main line are fully ballasted; 350 miles have a first lift of ballast of about five inches in depth, and there remain thirty-five miles of skeleton track between Entwistle and Wolf creek.

Seven hundred and thirty-two miles of double fence have been erected.

A telegraph line has been built over the entire 'Prairie Section' of 915 miles, of which 793 miles is a four wire line, and 122 miles a two wire line.

Eleven interlocking plants have been established at rail level crossing of other railways.

Water services have been introduced at forty-nine stations.

Six round houses have been built, viz.:—At Rivers, 18 stalls; Melville, 12 stalls; Watrous, 12 stalls; Biggar, 12 stalls; Wainwright, 12 stalls; Edmonton, 18 stalls; and two small engine houses have also been erected—one of two stalls at Portage la Prairie and one of two stalls at South Saskatoon.

Machine shops have been erected at Rivers, Melville, and Edmonton, three divisional stations.

Five divisional station houses; 26 way station houses; 54 section houses; 66 tool houses; 79 bunk houses; 5 coaling plants; 80 permanent and 22 temporary loading platforms; and 18 stock yards; 115 grain elevators have been erected at stations.

The portion of the road between Winnipeg and Edmonton—795 miles—has been regularly operated for public traffic since September 13, 1909, under authority of the Board of the Railway Commissioners. On the 120 miles west of Edmonton, though there is no regular operation, there has been attached to the construction trains since

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February 1, 1910, a combination passenger and freight car, for the convenience of those concerned.

' MOUNTAIN SECTION.'

Location plans and profiles have been approved by the government and Board of Railway Commissioners from Wolf creek westward for a distance of 289 miles, and from Prince Rupert easterly for 409 miles, leaving a gap of 138 miles.

Of the 289 miles from Wolf creek westerly, only 179 miles have, as yet, been put under contract.

As the contracts were only awarded late last autumn, very little work has been done beyond the first mile west of Wolf creek. The work on this mile is very heavy, there being two large steel bridges to be erected, and a cutting of over 130,000 cubic yards to be taken out. The first structure will be 622 feet in length and 130 feet high, crossing Wolf creek. The second structure is to span the MacLeod river; it will be 1,052 feet long, and 125 feet high. The concrete piers, pedestals and abutments of these two bridges are completed in readiness to receive the superstructure.

The erection of the superstructures of these two bridges will be carried on simultaneously, so as to have them completed at the earliest possible date, in order that the tracklaying may be proceeded with during the ensuing summer season.

During the winter season, over 3,600 car loads of plant and supplies reached Wolf creek and were at once forwarded and distributed by teams along the line of work.

Of the 409 miles from Prince Rupert easterly, 240 miles are under contract.

Of the first 100 miles out of Prince Rupert easterly the grading and culvert structures are far advanced towards completion.

About seven miles of track have been laid easterly from Prince Rupert, and sufficient rails and fastenings have been delivered to cover 200 miles, together with enough ties for 100 miles.

A wharf has been built at Prince Rupert; also a warehouse.

On the 140 miles east of the first 100 miles, very little work has been done pending the opening of navigation on the Skeena river.

### QUEBEC BRIDGE RECONSTRUCTION.

By the Act of 1908, chapter 59, the Governor in Council was authorized to take over the whole undertaking, assets, property and franchises of the Quebec Bridge and Railway Company. By an order in council of August 17, 1908, such authority was given, and the property was assumed on December 1, 1908. The transfer was made by a deed of assignment and transfer, dated October 18, 1909.

The chairman of the special Board of Engineers, constituted by Order in Council of August 17, 1908, for the work of reconstruction, has reported on the progress made during the fiscal year, ended March 31, 1910; his report will be found printed in the appendices hereto.

Results of the borings made to determine the nature of the material in the vicinity of the present piers, and the location of bed rock have established the feasibility of sinking a new pier down to bedrock outside of the present pier on the north side

of the river, and that on the south side the foundations of the present pier are sufficient to support the enlarged work.

The contract for the construction of the piers and abutments of the new bridge was awarded in December, 1909, and preparatory work on the north side has been steadily carried on since.

In the same month, the contract for the removal of the debris was awarded, and by the close of the year about 21 per cent of the total work was executed.

Contracts have been made for the important work of carrying out compression and tension tests, and the question of the use of nickel steel rivets for joints instead of carbon steel was also submitted to careful test, but without developing any material advantage to be gained by the use of nickel steel.

By the close of the year the plans and specifications of the Board for a bridge on a cantilever design had made such progress as to ensure their being in readiness for the early calling for tenders. Intending tenderers, however, have been notified that, in addition, they will be allowed to submit plans prepared by themselves.

The expenditure during the year, for the preparation of plans, salaries, &c., amounted to \$111,788.02, adding to which the sum of \$355,279.07, the amount paid for acquiring the stock of the Quebec Bridge and Railway Company, and the further sum of \$31,765.44, the expenses of the commission of inquiry into the causes of the collapse of the old structure, the total expenditure since the date of the collapse is \$498,832.53.

There is, however, a credit of \$100,000, the amount paid to the government by the Phoenix Bridge Company, the original contractors for the superstructure, under an agreement, dated March 12, 1910, made with them, under authority of an order in council of February 22, 1910, in settlement of the claims of the government for damages and the counter claims of the company in this connection; the company releases to the government all its interest in the steel and manufactured materials used or intended to be used then at the bridge site and storage yards there and at Quebec, and the government releases to the company all its interest in the steel and manufactured materials then at the company's works at Phoenixville, Pa., U.S.A., together with the government lien on the company's working plant, equipment, &c., then at the site of the bridge and said storage yards.

By this agreement and settlement the company surrenders all rights it previously possessed under contract for the construction of the bridge.

### SUBSIDIZED RAILWAYS.

Information as to subsidized railways is given in the statements of the accountant and the law clerk of the department, respectively, which will be found in the appendices hereto. The accountant's statement shows all payments made, year by year, since the beginning of the system of railway subsidies; the law clerk's statement shows the several subsidy agreements entered into during the past year, with certain details of the specification in each case.

## CANALS.

The total expenditure on the Dominion canals for the twelve months ended March 31, 1910, was \$3,259,097.18, comprising, for works of construction, \$1,650,706.64, charged to capital; \$489,256.68 for maintenance, charged to income; \$604,899.26 for staff and \$514,234.60 for repairs; the last two items being charged to revenue.

The balance of rentals due on April 1, 1909, was \$148,795.35. The rentals accrued during the year amounted to \$176,126.70, making a total of \$324,922.05. Of this amount, there was collected during the year a total of \$168,893.63. The balance remaining due on March 31, 1910, after deducting abatements, was \$148,266.82. It should be observed that, as a general rule, rentals are payable in advance, this fact accounting, to a considerable extent, for the large amount of rentals due at the end of each year.

The total net revenue collected amounted to \$194,685.84, the balance being made up of wharfage dues, fines, &c. Of this amount, refunds were made to the extent of \$1,301.56, leaving the net revenue \$193,384.28.

• No tolls are charged on any of the Dominion canals.

Summaries of these expenditures and receipts will be found in the statements furnished by the accountant of the department, printed in the appendices, Part I, of the present report.

The above figures relate to the fiscal year 1909-10, but very voluminous statistics relating to canal traffic, and various commercial statistics for the season of navigation of the year 1909 will be found in the 'Canal Statistics,' which are issued as a separate report.

The principal facts of these statistics, summarized, are as follows:—

The total traffic through the several canals of the Dominion for the season of 1909 amounted to 33,720,748 tons, an increase of 16,217,928 tons compared with the previous year. 272,222 passengers were carried, a decrease of 8,608.

The following features of the principal canal traffic during the season of 1909, will be of interest:—

On the Welland canal, 2,025,951 tons of freight were moved, an increase of 322,498 tons. Of the total, 921,866 tons were agricultural products and 186,614 tons produce of the forest; of coal, 377,681 tons were carried; 1,976,040 tons were through freight, of which 1,325,023 tons passed eastward.

Of the through freight, Canadian vessels carried 1,247,694 tons, an increase of 326,373 tons, and United States vessels 728,346 tons, a decrease of 45,762.

The total through freight passed eastward and westward through this canal to United States ports was 445,419 tons, a decrease of 3,235 tons compared with the year 1908.

The quantity of grain passed down the Welland and St. Lawrence canals to Montreal, was 652,742 tons, a decrease of 103,399 tons as compared with the previous year; no transhipments have been made at Ogdensburg since 1903.

On the St. Lawrence canals, 2,410,629 tons of freight were moved, an increase of 123,652 tons, of which 1,564,584 tons were eastbound freight, and 846,045 tons westbound freight; 773,730 tons were agricultural products; 639,767 tons coal; and 509,157 tons forest products.



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On the Ottawa river canals, the total quantity of freight moved was 336,939 tons, an increase of 78,412 tons, of which 232,025 tons were produce of the forest.

On the Chambly canal, 752,117 tons were moved, an increase of 248,841 tons, of which 599,330 tons were produce of the forest and 98,533 tons of coal.

On the Rideau canal, 91,774 tons were carried, an increase of 2,134 tons; 26,727 tons being produce of the forest, and 15,633 tons of coal.

On the St. Peter's canal, 79,850 tons were carried, an increase of 7,835 tons; 41,301 tons were coal.

On the Murray canal, 102,291 tons passed, an increase of 76,390 tons.

On the Trent canal, 59,952 tons were moved, of which 55,086 tons were product of the forest.

On the Sault Ste. Marie canal the total movement of freight was 27,861,245 tons, being an increase of 15,102,029 tons, carried in 6,331 passages of vessels, the number of lockages being 5,046. Of wheat, 74,401,000 bushels and of other grain, 29,503,240 bushels were carried; 2,522,700 barrels of flour; 21,156,915 tons of iron ore; 2,797,699 tons of coal; and 34,309,300 feet, board measure, of lumber.\*

By means of the enlarged Canadian canal system and the intermediate waterways, a minimum depth of fourteen feet of water from Lake Superior to the head of the ocean navigation at Montreal is afforded; the smallest locks being 270 feet in length and 45 feet in width, intended, for the purpose of ordinary traffic, to accommodate vessels 255 feet long and 44 feet beam.†

The foot note below relating to the Erie canal will be found of interest.\*\*

\* The following summary of the total traffic of the American and Canadian canals at Sault Ste. Marie for the season of 1909 is taken from the statistical report prepared under the direction of Lieut.-Col. C. McD. Townsend, Corps of Engineers, U.S. Army:—

Total freight carried, tons, 57,895,149; total tons, net register, 46,751,717; total mile-tons, 46,812,929,345; total valuation placed on freight carried, \$626,104,173; total amount paid for freight transportation, \$36,291,948; total number of registered vessels using the canals, 870; total number of passages by unregistered crafts carrying freight, 242; total valuation placed on registered vessels, \$126,899,000; total number of passengers transported, 59,948; average distance freight was carried, 809 miles; average cost per ton for freight transportation 63 cents; average cost per mile per ton, 0.78 mills; average value per ton of freight carried, \$10.81.

The total freight traffic of 57,895,149 net tons for the season of 1909, when compared with the season of 1908, shows an increase of 40 per cent, or 16,504,592 tons, and the net registered tonnage of 46,751,717 tons shows an increase of 50 per cent, or 15,659,987 tons.

The traffic through the American canal was 52 per cent of the total freight, 62 per cent of the net registered tonnage, and 46 per cent of the total number of passengers carried, the amounts being 30,132,374 tons of freight, 28,939,463 tons register, and 27,736 passengers. Compared with the season of 1908 there was an increase of 1,475,077 tons of freight, or 5 per cent; 7,451,964 tons register, or 35 per cent; and 4,657 passengers, or 20 per cent.

The traffic through the Canadian canal was 48 per cent of the total freight, 38 per cent of the total registered tonnage, and 54 per cent of the passengers carried, the amounts being 27,762,775 tons of freight, 17,812,254 tons register, and 32,212 passengers. Compared with the season of 1908, there was an increase of 15,029,515 tons of freight, or 113 per cent; 8,208,023 tons register, or 85 per cent; and 2,004 passengers, or 7 per cent.

It has to be observed that the traffic figures do not, in all cases, agree with those of the Canadian canal returns, a fact which is probably due to certain differences existing between the standards and classifications of the two countries.

† In exceptional cases this length can, with certain manœuvring, be somewhat increased, being governed, of course, by the form of the vessel. As a matter of fact, there are vessels now using the canals whose length, over all, is 265 feet, and width of beam 37 feet.

\*\* The Erie canal, between Buffalo and Albany, is 350½ miles long; comprises 72 locks, 110 x 18 feet, with a depth of 7 feet of water, accommodating, as a maximum, vessels of 240 tons burden. The original canal was completed in 1836, and the enlargement to the above dimensions in 1862. The total cost of construction was \$51,609,200.

There is now under construction an enlarged canal, authority for which was given in 1903. The locks were to be 328 feet long by 28 feet wide in the clear, with 11 feet of water on the mitre sills. The estimated cost was \$100,562,993. It was intended to accommodate barges of 1,000 tons burden. In 1905 the width of the locks was increased to 45 feet, and construction is proceeding on this basis. When completed, it will permit the passage of lake boats carrying 2,600 tons.

## SESSIONAL PAPER No. 20

The through route between Montreal and Fort William and Port Arthur, on the west shore of Lake Superior, comprises 73 miles of canal, with 48 locks, and 1,167 miles of river and lake water, or a total of 1,230 miles. From Montreal to Duluth, at the southwest of Lake Superior, the total distance is 1,354 miles, and to Chicago, 1,286 miles. A summary of this route will be found in Part VIII., with details of the several works. At Port Arthur and at Fort William (about six miles apart), the Canadian Pacific railway gives communication westward and eastward, and the Canadian Northern railway westward and with the south at Fort William. A line of railway has been built from Fort William by the Grand Trunk Pacific railway to give communication with the Transcontinental railway, and over that road to Winnipeg.

The approaches to the canals and the channels through the intermediate river reaches are well defined, and are lighted with gas buoys under the control of the Department of Marine and Fisheries, admitting of safe navigation, in the hands of competent pilots, both by day and night. In the cases of the Sault Ste. Marie, the Welland, the Cornwall, the Soulanges and the Lachine, they are well lighted throughout by electricity. The Sault Ste. Marie, the Welland, the Cornwall, the Soulanges and the Lachine canals are electrically operated. The Farran's Point canal is lighted with acetylene gas.

On the Lachine canal, the principal features of work have been the facing with concrete of the slope walls in the reach above the Côte St. Paul locks, and the widening of the canal at this point, and the provision of wharf accommodation at St. Henri and Côte St. Paul, of which a large proportion was completed during the year.

On the Soulanges canal similar work of concrete protection has been carried on.

The action of the waters of Lake St. Francis on the clay dykes at Ste. Barbe and Hungry bay is being met by the construction of boulder protection, which is now completed at Hungry bay, at which point the macadamizing of the roadway on the top of the dyke has been completed for a considerable distance.

The high water in the River Ottawa prevented the completion of the repairs to the Carillou dam during the year, but all preparations had been made for resumption of work in the following season.

On the Chambly canal, the electric power house was completed, but the electric machinery has not yet been installed.

The improvements in the harbour of St. Johns, placed under contract in 1908, comprise the removal of an old wharf, an extension of the present canal wharf up to the railway bridge, the building of a new wharf, and a breakwater, &c. They were completed during the year so far as regards the works above the bridge.

On the Trent canal, the extent completed remains the same as in the previous year, namely, 160 miles, extending from Lake Simcoe to Healeys Falls, a point sixteen miles below the village of Hastings; the canal was operated for this distance. The water was satisfactorily maintained at a uniform height throughout the year.

A considerable amount of work in the way of repair and improvement was executed, notably in the dredging of portions of the River Otonabee, the raising of private wharfs in Stony lake to meet the raise in water level necessitated by the requirements of navigation, various improvements at Fenelon Falls, and in the repair of the



several dams controlling the various reservoir systems acquired from the Ontario government. In two important cases, new concrete dams were built.

The construction of the Ontario-Rice Lake division of the canal is dealt with in an interesting and comprehensive report of the superintending engineer, which will be found in the appendices hereto.

The division is 56½ miles in length, extending from Trenton, on Lake Ontario, to Rice lake, of which five out of the seven sections into which it has been divided are under contract. It follows the River Trent, and will comprise nine and a half miles of canal, thirteen miles of subaqueous channel, and thirty-four miles of deep river; the total rise between low water level on Lake Ontario and normal navigation level at Rice lake is 369 feet, to be overcome by eighteen locks. The river level will be controlled by fourteen concrete dams; sixteen bridges will be required, six of which are for the accommodation of railways; they will all be swing or bascule spans except one. The locks will be of concrete, with 8 feet 4 inches of water on the sills; they will be 175 feet long between the hollow quoins, and 33 feet in width, accommodating barges of 1,000 tons, about 150 feet long and of 30 feet beam, drawing 8 feet of water. The work involved will require the removal of about 1,500,000 cubic yards of earth, 1,250,000 cubic yards of rock, loose and solid, and the building of about 400,000 cubic yards of concrete. The approximate cost is set down at \$6,750,000; of this, up to March 31, 1910, there had been expended the sum of \$1,285,092. Five of the locks and six of the dams have been built. Details of the work done will be found in the above mentioned report of the superintending engineer.

In addition to the work on this division, a contract for the construction of a new concrete dam at Burleigh Falls has been entered into to replace the present dilapidated wooden structure. This is part of a scheme to raise the level of Lovesick lake to the level of Deer bay, a difference of about four feet, dispensing with the present lift lock at Lovesick, and the flight lock at Burleigh Falls, and replacing them by a single lock at the latter place.

On the Lindsay section, the new lock and dam at Lindsay, placed under contract in January, 1909, are finished, and the dam sluices have been of service in dealing with the spring freshets, which have caused trouble in the past in the Scugog river above Lindsay.

On the Rosedale section, a contract was entered into in February, 1908, for the work of building a new canal between Lakes Camron and Balsam, 1.8 mile in length, together with a new lock and dam to take the place of the old wooden structures; thus shortening by 1.2 mile, the distance between the two lakes. The lock is completed and the excavation for the canal.

The Holland River division extends from Cook's bay, Lake Simcoe, to Holland Landing, 8½ miles, all on the Lake Simcoe level, and from Holland Landing to Newmarket, 4½ miles, on which distance there is a rise of 43 feet, to overcome which three locks will be required, together with three dams; the work on this section (No. 2) was placed under contract in February, 1908, and about 37 per cent has been executed up to March 31, 1910.

Hydrographic surveys of the various lakes embraced in the Trent navigation have been carried on, with the object of making a complete set of charts of these waters.

## SESSIONAL PAPER No. 20

No action has, so far, been taken with regard to the adoption of a route for the northern section of the canal, from Lake Simcoe to Georgian Bay, beyond the making of surveys of alternative routes.

On the Galops canal, the work of removing certain shoals in the River St. Lawrence west of the upper entrance to the canal was completed, the result being to afford a clear channel, 17 feet deep, between the upper entrance and the lower end of what is known as the 'north channel.' All the enlargement works undertaken in connection with the Ontario-St. Lawrence canals district have now been completed.

At the same time, it should be noted that the intermediate river stretches present some serious difficulties, vessels being compelled to cross the river from side to side in order to follow the devious marked channel; a drawback to navigation which could be remedied by straightening the channel at certain points, removing shoals and improving the entrances to the Farran Point and Rapide Plat canals.

On the Cornwall canal, preliminary steps were taken for the improvement of the upper entrance of the canal, where the approach to the lock is extremely difficult, and plans and specifications have been prepared for an approach wall and certain dredging, &c.

The permanent work of repair of the serious break in the south canal bank, which occurred in June, 1908, has been completed, under contract, during the year, and by carrying it on, day and night, the canal was opened for navigation on May 3, 1909. The whole of the works were completed in the following October. It may be observed that, notwithstanding the grave nature of the break, which carried away about 200 feet of the bank, the actual delay to navigation was only seventeen days, a temporary dam and diversion having been made to obtain this result. In view of evidence of weakness in the bank immediately west of the washout, it was decided to extend the new concrete wall for a further distance, and the work has been placed under contract.

On the Rideau canal, the freshets of 1909, the highest on record, caused a very serious washout at Black Rapids, the water cutting into the sand bank of the river at the end of the new dam, making a breach of about 200 feet in length. The work of repair, exceptionally difficult under the circumstances, entailed a delay of six weeks in opening the canal to navigation. A considerable amount of work of repair and improvement at various points on this extensive water course was carried out during the year.

On the Welland canal, the clearing up of the harbour at Port Colborne is in progress, and a channel to the elevator 22 feet deep when there is a depth of 14 feet on the lock sills, is now available. A spur line of railway has been built from the Grand Trunk railway to the elevator. In connection with the surveys that have been conducted in order to obtain information in the event of decision to build a new Welland canal, borings have been made to determine the nature of the ground at various points.

On the Sault Ste. Marie canal, the work of improving the channel at the upper entrance of the canal by deepening it to 21 feet 5 inches at low water stage and providing a width of 500 feet, was completed; the middle section, through the Vidal Shoals, about two miles above the lock, being finished during the year. The channel-way on the north side of the canal above the north pier is under contract.\*

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\* It may be noted that a new lock is now in course of construction by the United States government, which is to be 1,350 feet long by 80 feet wide, and to have a depth of 25 feet on the sills at low water stage.

1 GEORGE V., A. 1911

On June 9, 1909, an accident of a most serious character occurred, the details of which are fully given in the report of the superintending engineer herewith. A steamer was in the lock, and another just entering the upper end when a third steamer entered the lower approach, and its engines failing to reverse at the proper time, the vessel was carried against one of the lower lock gates, forcing it back. The resultant rush of water was most disastrous, both to the vessels and the lock works, all four of the gates being broken, and other damage done. The immense movable dam above the lock was brought into action and proved of service, though some points of weakness developed in it. Navigation was not resumed until the 21st.

On two occasions during the season, the Poe lock, on the American side of the river, was out of commission for periods of three and eight days, respectively. As indicating the extent of traffic at this point, and the importance of having sufficient accommodation to deal with it in the event of accident, it may be observed that on the first of these occasions, the Canadian canal was worked continuously for 101 hours, passing 184 vessels of an aggregate of 553,287 tons register, and on the second for 264 continuous hours, passing 460 vessels of a total of 1,372,145 tons register. There were 112 vessels at one time waiting for passage; a formidable blockade which entailed a loss in their earnings estimated at \$250,000.

#### RAILWAY STATISTICS.

The digest of the sworn statements of railway companies relating to their operations in Canada for the twelve months ended June 30, 1909, is prepared by the Departmental Comptroller of Statistics, and is issued as a separate report.

#### CANAL STATISTICS.

The traffic statistics of the Dominion canals for the season of navigation of 1909 are compiled under the direction of the same officer, and are also issued as a separate report.

I have the honour to be, Sir,

Your obedient servant,

A. W. CAMPBELL.

*Deputy Minister, and Chairman of the  
Government Railways Managing Board.*

# APPENDICES



PART I

STATEMENTS

OF THE

ACCOUNTANT OF THE DEPARTMENT

SHOWING

EXPENDITURE ON RAILWAYS AND ON CANALS

(INCLUDING SUBSIDIZED RAILWAYS)

AND RECEIPTS

FOR THE FISCAL YEAR 1909-10

ALSO FOR PREVIOUS YEARS





STATEMENT showing the amount expended by the Department of Railways and Canals,  
Dominion of Canada, during the Fiscal Year ended March 31, 1910.

## CANALS.

Name of Work.	Chargeable to Capital.	Chargeable to Income.	CHARGEABLE TO REVENUE.	
			Staff.	Repairs.
CANALS.	§ cts.	§ cts.	§ cts.	§ cts.
Beauharnois.....		24,319 49		
Carillon. . . }				
Grenville. . . }		10,410 09	23,512 72	11,925 28
Chambly.....	30,479 41	8,207 00	29,198 76	22,825 53
Cornwall.....	89 54	35,549 06	76,519 49	51,330 83
Galops.....	2,057 86	13,694 97		
Lachine.....	215,611 98	70,000 20	77,701 55	75,247 71
Murray.....			4,378 74	2,674 57
Rideau.....		9,225 73	48,324 13	95,188 97
Sault Ste. Marie.....	46,809 13	147,147 52	18,976 64	20,300 77
Soulanges.....	153,022 23	2,299 93	32,851 69	46,287 16
St. Anne's Lock.....		2,339 76	2,267 60	2,446 28
St. Ours ".....		1,925 08	4,137 64	1,752 66
St. Lawrence River { Removal of shoals.....	28,815 36			
St. Lawrence River { District Office.....	5,573 96			
St. Peters.....			3,449 43	238 14
Trent.....	1,000,000 00	59,483 51	36,800 42	54,206 13
Welland.....	168,247 17	75,233 28	136,783 47	77,723 23
Williamsburg.....			29,682 88	29,645 76
Totals.....	1,650,706 64	459,835 62	515,585 16	491,793 02
GENERAL ON CANALS.				
Dredge Vessels—Lachine.....				7,668 29
" " Rideau.....				14,219 64
Miscellaneous.....			1,582 40	553 65
Salaries and Contingencies Statistical Officers, &c.....			37,502 73	
Sunday labour.....			30,109 89	
Surveys and Inspections.....		2,012 52		
Quebec Canals { Maintenance.....			20,119 08	
Quebec Canals { Remarking boundaries, &c.....		4,596 96		
Quebec Canals { Dredging.....		17,999 29		
Miscellaneous works not provided for.....		4,812 29		
		29,421 06	89,314 10	22,441 58
Total on Canals.....	1,650,706 64	489,256 68	604,899 26	514,234 60

Grand total, canals, \$3,259,097.18.

1 GEORGE V., A. 1911

STATEMENT showing the amount expended by the Department of Railways and Canals,  
&c.—*Concluded.*

## RAILWAYS.

Name of Work.	Chargeable to Capital.	Chargeable to Income.	CHARGEABLE TO REVENUE.	
			Working Expenses.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>RAILWAYS.</b>				
Intercolonial. . . . .	1,278,409 45		8,645,070 33	
National Transcontinental. . . . .	19,968,126 86			
Prince Edward Island . . . . .	206,396 97		427,283 73	
Windsor Branch . . . . .			23,549 90	
<b>Total . . . . .</b>	<b>21,452,933 28</b>		<b>9,095,903 96</b>	
<b>GENERAL ON RAILWAYS.</b>				
Contribution to McGill University. . . . .		2,500 00		
Railway Subsidies . . . . .		2,048,097 05		
Governor General's Car . . . . .		1,966 62		
Railway Commission maintenance, &c. . . . .		112,465 04		
" " Statutory . . . . .		46,500 00		
Subscription to Railway Congress, Brussels. . . . .		97 33		
Surveys and Inspections. . . . .		17,085 87		
Government Director Grand Trunk Pac. Ry. . . . .		2,000 00		
Inspections Grand Trunk Pac. Ry. . . . .		17,614 66		
Hudson Bay Railway Surveys. . . . .	53,042 63			
Quebec bridge—				
‡ Preparing plans, &c . . . . .		111,788 02		
Railway Grade Crossing Fund . . . . .		70 00		
		2,360,214 59		
Less amount received from the Phoenix Bridge Company . . . . .		100,000 00		
<b>Total . . . . .</b>	<b>53,042, 63</b>	<b>2,260,214 59</b>		
<b>Total on railways . . . . .</b>	<b>21,505,975 91</b>	<b>2,260,214 59</b>	<b>9,095,903 96</b>	
<b>Grand total Railways. \$32,862,094.46</b>				
<b>MISCELLANEOUS.</b>				
Cost of litigation . . . . .		4,706 79		
<b>Grand totals railways and canals, including miscellaneous . . . . .</b>	<b>23,156,682 55</b>	<b>2,754,178 06</b>	<b>9,700,803 22</b>	<b>514,234 60</b>

Total amount of expenditure, \$36,125,898 43.

NOTE.—Up to and including the year 1906, the fiscal year ended June 30, after which it ends March 31.

W. C. LITTLE,  
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

SESSIONAL PAPER No. 20

STATEMENT showing the amount expended on Construction, Renewals, Ordinary Repairs and Working Staff, up to March 31, 1910.

## ST. PETER'S CANAL.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation		156,523 32			
" " since	1868	21,519 72			
" " "	1869	70,719 80			
" " "	1870		46,193 57		
" " "	1871			225 36	555 78
" " "	1872			280 00	6,122 07
" " "	1873			343 32	6,539 58
" " "	1874			725 93	1,558 57
" " "	1875	20 97		560 00	889 35
" " "	1876	11,125 00		641 55	
" " "	1877	63,330 18		600 00	17 45
" " "	1878	26,511 51		600 00	
" " "	1879	107,337 75		631 50	
" " "	1880	80,120 54		400 00	
" " "	1881	69,434 76		959 58	
" " "	1882	484 00		1,920 54	200 63
" " "	1883			2,089 19	232 42
" " "	1884	2,471 40		2,601 47	367 85
" " "	1885	16,820 15		1,929 11	183 11
" " "	1886	2,316 85		2,360 67	297 81
" " "	1887	1,087 75	750 00	2,777 13	343 23
" " "	1888			3,217 77	1,588 40
" " "	1889		500 00	3,085 29	353 38
" " "	1890			3,110 15	255 34
" " "	1891	972 65	510 53	3,255 30	312 02
" " "	1892	14,387 00	30,936 82	3,007 70	1,461 24
" " "	1893	811 59	9,987 78	2,933 15	1,856 30
" " "	1894	437 05	3,852 21	2,935 94	1,086 70
" " "	1895	868 44	26,222 46	2,499 81	353 55
" " "	1896	1,453 21	16,743 64	2,182 04	260 90
" " "	1897			2,728 38	1 20
" " "	1898		111 70	2,785 25	453 85
" " "	1899			2,819 86	456 61
" " "	1900			2,833 24	1,483 30
" " "	1901		2,311 26	2,730 44	841 63
" " "	1902		10,014 43	2,939 81	274 44
" " "	1903			2,836 49	764 11
" " "	1904			3,126 94	122 45
" " "	1905		3,000 10	2,969 90	1,095 90
" " "	1906			3,239 19	253 65
" " "	1907			2,468 78	246 87
" " "	1908			3,371 13	942 64
" " "	1909			3,282 22	532 78
" " "	1910			3,449 43	238 14
LESS—Refunds in 1897—\$.....		648,755 64			
		208 50			
Total .....		*648,547 14	151,134 50	87,458 56	33,443 25

\* Expenditure as above. .... \$ 648,547 14  
 Less expenditure prior to Confederation ..... 156,523 32

Agreeing with Public Accounts, 1910, page 4. .... \$ 492,023 82

W. C. LITTLE,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,  
 OTTAWA, July 23, 1910.



SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## LACHINE CANAL.

	Year ending.	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								
Government expenditure since Confederation .....	1868				1,852	70	13,742	05	10,431	51	
" .....	1869	2,000	00				14,209	02	12,085	84	
Cost of original construction and enlargement from 1845 to 1848 .....				2,589,532	85						
Expenditure by Dominion Government .....	1870						15,834	49	13,302	39	
" .....	1871					12,231	40	17,478	52	15,093	25
" .....	1872	36,708	15				16,076	93	12,334	69	
" .....	1873	7,824	28			35,158	21	23,601	03	34,300	60
" .....	1874	158,618	35				25,811	07	22,828	66	
" .....	1875	197,420	52				28,592	01	30,057	34	
" .....	1876	327,769	39				33,797	73	29,103	65	
" .....	1877	1,439,375	73				33,148	86	19,824	33	
" .....	1878	1,484,619	63				39,062	97	13,646	41	
" .....	1879	958,053	30				42,338	84	12,400	78	
" .....	1880	369,566	74				38,950	90	10,223	62	
" .....	1881	292,165	51				39,027	99	19,888	33	
" .....	1882	252,821	33			2,978	66	41,158	90	17,116	46
" .....	1883	396,496	96			1,859	68	45,554	91	18,199	59
" .....	1884	188,266	18				48,624	51	19,683	24	
" .....	1885	111,215	23				49,004	85	20,199	78	
" .....	1886	210,509	42				50,969	10	19,199	18	
" .....	1887	28,772	52			12,981	59	53,113	97	22,567	81
" .....	1888	19,414	34			7,996	38	52,229	61	19,999	64
" .....	1889	76,032	96			972	71	54,110	67	22,957	71
" .....	1890	7,448	03			8,238	46	53,114	34	22,999	38
" .....	1891	217	53			16,155	75	50,721	69	36,292	98
" .....	1892	87,852	35			27,480	80	52,729	37	67,499	62
" .....	1893	445,983	21			50,937	40	53,185	00	51,616	79
" .....	1894	64,345	14			17,152	48	60,174	03	40,939	70
" .....	1895	189,944	36			32,405	20	56,337	44	25,891	45
" .....	1896	184,998	25			8,193	15	58,342	96	24,950	20
" .....	1897	282,052	48			14,664	21	57,533	20	25,820	73
" .....	1898	216,717	44			819	62	57,282	50	33,391	92
" .....	1899	162,351	83			3,103	99	55,990	00	35,776	90
" .....	1900	125,009	41			12,210	88	56,791	45	31,988	81
" .....	1901	97,305	52			12,072	87	58,364	29	50,005	48
" .....	1902	113,328	26			36,249	02	59,435	33	45,853	97
" .....	1903	58,426	92			109,893	43	69,762	03	53,054	20
" .....	1904	181,487	06			162,705	14	77,233	17	50,660	92
" .....	1905	112,460	47			144,996	37	86,209	93	65,202	42
" .....	1906	103,798	28			133,518	77	84,708	78	60,064	84
" .....	1907	18,840	85			65,872	25	53,308	14	47,465	20
" .....	1908	203,307	25			92,362	48	74,222	78	70,427	37
" .....	1909	359,041	77			143,526	35	72,049	32	82,081	39
" .....	1910	215,611	98			70,000	20	77,701	55	75,247	71
Cost of enlargement .....				9,786,178	93						
Total .....				12,375,711	78	1,238,590	15	2,101,636	23	1,412,676	79

Total expenditure on capital account as above.....\$12,375,711 78

Less charged to St. Lawrence River and Canals, see page 11. \$2,950,104 15

Less expenditure by Imperial Government .....

40,000 00

2,990,104 15

Agreeing with Public Accounts balance sheet, 1910, page 4.....\$ 9,385,607 63

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.W. C. LITTLE,  
Accountant.



STATEMENT showing the amounts expended on Construction, Renewals, &c.—Continued.

BEAUHARNOIS CANAL.

—	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation		1,611,424 11			
" " prior " ..	1868		63,193 75	9,349 99	6,216 98
" " " ..	1869		55 00	9,626 99	6,498 57
" " " ..	1870		27 50	10,117 57	6,384 81
" " " ..	1871			12,316 53	5,722 36
" " " ..	1872		27 50	11,792 46	15,733 38
" " " ..	1873		5,122 50	12,210 73	9,882 06
" " " ..	1874		26 00	15,392 51	10,990 56
" " " ..	1875		36 00	14,399 32	12,253 01
" " " ..	1876			14,465 86	17,170 83
" " " ..	1877			14,377 63	15,207 36
" " " ..	1878			14,383 37	9,861 05
" " " ..	1879			15,015 86	10,370 71
" " " ..	1880	266 15		15,362 61	8,997 34
" " " ..	1881			17,659 93	10,770 67
" " " ..	1882			18,804 53	20,813 86
" " " ..	1883		6,727 44	18,287 77	15,826 71
" " " ..	1884		3,277 98	19,107 38	16,232 61
" " " ..	1885		7,999 79	18,960 40	14,637 70
" " " ..	1886		8,491 80	19,228 90	14,356 00
" " " ..	1887		3,633 37	18,867 45	14,999 88
" " " ..	1888		14,411 97	19,325 05	14,285 98
" " " ..	1889		10,993 52	20,019 11	14,932 54
" " " ..	1890			19,847 42	14,999 20
" " " ..	1891		17,085 68	18,886 86	12,537 39
" " " ..	1892		1,606 23	20,050 01	14,999 80
" " " ..	1893			20,348 34	14,107 11
" " " ..	1894		6,547 72	20,574 53	13,903 46
" " " ..	1895		27,982 93	20,428 59	12,299 49
" " " ..	1896			20,725 47	15,050 85
" " " ..	1897		9,813 15	21,012 64	14,862 98
" " " ..	1898	25,000 00	5,799 34	20,650 00	16,164 92
" " " ..	1899		1,000 00	20,613 22	13,463 01
" " " ..	1900		4,959 22	20,147 59	14,505 30
" " " ..	1901		483 40	20,118 42	14,199 12
" " " ..	1902			16,682 52	6,532 33
" " " ..	1903			8,218 14	10,063 38
" " " ..	1904			9,236 27	11,936 37
" " " ..	1905		14,949 83	9,086 68	10,499 99
" " " ..	1906		2,531 24	9,291 91	18,640 71
" " " ..	1907		598 64	7,552 02	11,711 09
" " " ..	1908		2,260 81	7,032 31	13,019 76
" " " ..	1909		21,758 84		
" " " ..	1910		24,319 49		
Total .....		*1,636,690 26	265,810 84	649,574 89	525,691 23†

\* See page 11 for total cost of St. Lawrence River and Canals.

† This canal being under lease since 1908, no expenditure has been incurred for maintenance nor operation.

W. C. LITTLE.

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.

OTTAWA, July 23, 1910.



1 GEORGE V., A. 1911

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## LAKE ST. LOUIS.

	Year ending.	Chargeable to Capital.		Chargeable to Revenue.	
		\$	cts.	\$	cts.
Government expenditure prior to Confederation.....	1868				
" " since " " .....	1869				
" " " " .....	1870				
" " " " .....	1871				
" " " " .....	1872				
" " " " .....	1873				
" " " " .....	1874				
" " " " .....	1875				
" " " " .....	1876				
" " " " .....	1877				
" " " " .....	1878				
" " " " .....	1879				
" " " " .....	1880				
" " " " .....	1881				
" " " " .....	1882				
" " " " .....	1883				
" " " " .....	1884				
" " " " .....	1885				
" " " " .....	1886				
" " " " .....	1887				
" " " " .....	1888				
" " " " .....	1889				
" " " " .....	1890				
" " " " .....	1891				
" " " " .....	1892				
" " " " .....	1893				
" " " " .....	1894				
" " " " .....	1895		4,753 14		
" " " " .....	1896		49,909 31		
" " " " .....	1897		73,300 41		
" " " " .....	1898		64,495 83		
" " " " .....	1899		57,607 79		
" " " " .....	1900		11,765 70		
" " " " .....	1901		12,918 31		
" " " " .....	1902		6,000 00		
" " " " .....	1903		9,508 72		
" " " " .....	1904		7,916 90		
" " " " .....	1905		†		
" " " " .....	1906		†		
" " " " .....	1907		†		
" " " " .....	1908		†		
" " " " .....	1909		†		
" " " " .....	1910		†		
Total.....			*298,176 11		

\* Included in total cost of St. Lawrence River and Canals, *see* page 11.

† Transferred to Department of Marine and Fisheries in 1905

W. C. LITTLE,  
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## LAKE ST. FRANCIS.

	Year ending.	Capital.	Renewals Chargeable to Income.
		\$ cts.	\$ cts.
Government expenditure since Confederation.....	1868		
" " " " .....	1869		
" " " " .....	1870		
" " " " .....	1871		
" " " " .....	1872		
" " " " .....	1873		
" " " " .....	1874		
" " " " .....	1875		
" " " " .....	1876		
" " " " .....	1877		
" " " " .....	1878		
" " " " .....	1879		
" " " " .....	1880		
" " " " .....	1881		
" " " " .....	1882		
" " " " .....	1883		
" " " " .....	1884		
" " " " .....	1885		
" " " " .....	1886		
" " " " .....	1887		
" " " " .....	1888		
" " " " .....	1889		
" " " " .....	1890		
" " " " .....	1891		
" " " " .....	1892		
" " " " .....	1893		
" " " " .....	1894		
" " " " .....	1895		
" " " " .....	1896		
" " " " .....	1897		
" " " " .....	1898	3,420 00	
" " " " .....	1899	23,110 00	
" " " " .....	1900	15,431 46	12,288 39
" " " " .....	1901	15,000 00	8,060 30
" " " " .....	1902	13,945 25	
" " " " .....	1903	5,000 00	
" " " " .....	1904		2,199 52
" " " " .....	1905	†	
" " " " .....	1906	†	
" " " " .....	1907	†	
" " " " .....	1908	†	
" " " " .....	1909	†	
" " " " .....	1910	†	
Total.....		*75,906 71	22,548 21

\* Included in total cost of St. Lawrence River and Canals, see page 11.

† Transferred to Department of Marine and Fisheries in 1905.

W. C. LITTLE,  
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

1 GEORGE V., A. 1911

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## CORNWALL CANAL.

—	Year ending.	Chargeable to Capital.		Renewals Chargeable to Income.		Staff.		Repairs.			
		\$	cts.	\$	cts.	\$	cts.	\$	cts.		
Government expenditure prior to Confederation.....		1,933,152	69								
Government expenditure since Confederation.....	1868			2,786	00	11,244	47	3,774	18		
" " ..	1869	10,692	04			10,347	91	3,859	14		
" " ..	1870			17,780	05	10,368	16	7,145	42		
" " ..	1871			7	50	11,848	39	8,891	61		
" " ..	1872			10,000	21	10,594	30	8,163	70		
" " ..	1873			1,011	75	13,042	25	12,467	65		
" " ..	1874					13,405	20	7,610	70		
" " ..	1875	1,780	00			13,351	91	7,097	34		
Cost of original construction.....				1,945,624	73						
Expenditure by Dominion Government.....	1876					13,320	61	6,423	67		
" " ..	1877	49,211	37			13,375	70	6,440	54		
" " ..	1878	145,015	45			13,825	50	4,935	21		
" " ..	1879	143,032	05			13,817	96	4,983	15		
" " ..	1880	109,454	95			14,440	33	9,735	76		
" " ..	1881	53,948	14			15,173	60	5,524	10		
" " ..	1882	44,587	61			15,052	20	6,634	62		
" " ..	1883	21,728	93			18,283	67	8,361	71		
" " ..	1884	22,018	13			18,475	48	9,007	73		
" " ..	1885	62,034	90	16,298	96	15,988	96	12,368	51		
" " ..	1886	57,820	83	6,960	95	15,994	80	11,832	83		
" " ..	1887	46,966	43			17,520	54	12,100	29		
" " ..	1888	67,945	74			16,938	54	13,942	64		
" " ..	1889	163,993	85			17,890	55	58,205	26		
" " ..	1890	365,038	01	2,000	00	17,063	49	12,758	18		
" " ..	1891	599,001	85	1,459	98	16,077	72	9,830	05		
" " ..	1892	398,555	25	2,345	26	15,596	66	9,864	36		
" " ..	1893	352,536	13			15,173	01	9,668	14		
" " ..	1894	404,990	22			15,344	02	7,733	54		
" " ..	1895	450,689	65	21,497	74	15,414	56	13,053	55		
" " ..	1896	448,408	31	2,175	00	15,472	26	25,259	56		
" " ..	1897	438,487	51			15,540	43	16,438	32		
" " ..	1898	133,208	96			15,011	50	15,431	02		
" " ..	1899	37,649	00	15,960	80	16,000	00	14,623	90		
" " ..	1900	169,889	51	18,547	50	18,798	10	13,998	29		
" " ..	1901	62,032	47			17,104	13	13,166	89		
" " ..	1902	90,535	18			17,896	58	15,045	95		
" " ..	1903	77,833	81			70,129	29	19,205	66		
" " ..	1904	113,795	16	1,730	16	45,792	64	20,932	55		
" " ..	1905	104,093	45	8,324	83	71,073	68	28,100	67		
" " ..	1906	37,879	09	20,063	79	71,246	77	31,893	13		
" " ..	1907	5,218	03	4,191	61	52,050	56	24,489	18		
" " ..	1908	9,897	90	11,270	83	73,651	90	35,703	68		
" " ..	1909	495	00	151,628	65	75,581	54	42,978	72		
" " ..	1910	89	54	35,549	06	76,519	49	51,330	83		
Cost of enlargement.....				5,289,142	41						
Total.....				*7,234,767	14	351,599	63	1,060,839	36	661,016	93

\*Included in total cost of St. Lawrence River and Canals, see page 11.

W. C. LITTLE,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,

OTTAWA, July 23, 1910.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## WELLAND CANAL.

	Year ending.	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			
" " since " .. 1868	1868	12,097 84		37,679 05	38,852 96
" " " " .. 1869	1869	43,486 36		39,060 61	50,773 03
" " " " .. 1870	1870		22,173 72	40,340 45	65,009 19
" " " " .. 1871	1871		48,569 10	42,383 33	53,381 02
" " " " .. 1872	1872	53,680 32	6,022 44	37,085 37	50,276 90
" " " " .. 1873	1873	82,282 20	47,876 27	45,382 99	66,550 73
" " " " .. 1874	1874	746,420 61		50,966 48	103,666 99
" " " " .. 1875	1875	1,047,119 91		52,595 00	88,539 99
" " " " .. 1876	1876	1,569,478 19	700 00	57,623 31	81,376 12
" " " " .. 1877	1877	2,199,962 61		59,963 47	49,783 93
" " " " .. 1878	1878	2,138,392 99		60,138 59	66,393 53
" " " " .. 1879	1879	1,552,697 41		59,942 23	56,755 57
" " " " .. 1880	1880	1,252,924 75		63,198 10	76,535 25
" " " " .. 1881	1881	1,242,943 37	6,593 19	56,398 04	69,249 53
" " " " .. 1882	1882	603,402 17	13,664 80	74,641 51	84,374 97
" " " " .. 1883	1883	549,433 29	5,979 03	109,207 21	72,707 62
" " " " .. 1884	1884	432,336 21		113,276 87	90,926 97
" " " " .. 1885	1885	463,505 38	6,150 21	112,670 00	91,534 66
" " " " .. 1886	1886	215,380 75	1,359 00	111,660 22	69,507 48
" " " " .. 1887	1887	1,071,073 87	3,828 67	109,371 69	77,440 80
" " " " .. 1888	1888	429,720 94	10,740 86	110,806 01	86,518 97
" " " " .. 1889	1889	225,910 21	43,803 80	113,587 05	77,547 77
" " " " .. 1890	1890	117,633 22	51,648 28	109,202 02	72,686 19
" " " " .. 1891	1891	36,371 03	19,767 73	107,662 63	82,548 30
" " " " .. 1892	1892	29,541 21	9,008 80	104,673 73	73,771 87
" " " " .. 1893	1893	8,259 94	25,103 13	104,926 73	65,016 84
" " " " .. 1894	1894	1,571 78	13,430 20	102,018 80	53,053 71
" " " " .. 1895	1895	3,809 35	24,245 02	90,438 07	48,270 94
" " " " .. 1896	1896	1,677 67	18,768 99	87,988 11	62,542 64
" " " " .. 1897	1897	2,282 35	22,283 06	88,065 20	41,247 81
" " " " .. 1898	1898		34,803 25	84,806 54	59,571 66
" " " " .. 1899	1899		30,099 84	86,110 88	56,270 60
" " " " .. 1900	1900	18,167 29	37,164 84	84,888 36	59,507 64
" " " " .. 1901	1901	224,536 96	87,777 43	86,889 24	72,055 89
" " " " .. 1902	1902	303,997 81	78,905 37	88,048 95	69,279 90
" " " " .. 1903	1903	315,819 49	94,127 21	90,684 05	72,004 59
" " " " .. 1904	1904	555,751 00	31,140 58	91,115 35	85,717 88
" " " " .. 1905	1905	890,457 82	34,559 42	91,928 96	111,418 62
" " " " .. 1906	1906	715,198 24	28,799 66	107,932 96	78,704 93
" " " " .. 1907	1907	480,305 03	56,036 47	75,031 24	53,247 50
" " " " .. 1908	1908	806,760 46	138,430 19	108,101 56	78,460 40
" " " " .. 1909	1909	255,986 16	129,489 99	115,934 78	88,409 53
" " " " .. 1910	1910	168,247 17	75,233 28	136,783 47	77,723 23
Total .....		28,506,863 19	1,358,283 83	3,601,239 21	3,029,214 65

\*Total expenditure as above ..... \$ 28,506,863 19

Less expenditure by Imperial Government ..... 222,220 00

Agreeing with Public Accounts Balance Sheet, 1910, page 4 ..... \$ 28,284,643 19

Original cost of construction, including first enlargement ..... \$ 7,693,824 03

Enlargement, including new Welland Canal. . . . . 20,813,039 16

Total expenditure as above ..... 28,506,863 19

W. C. LITTLE,  
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.



STATEMENT showing the amounts expended on Construction, Renewals, &c.—Continued.  
WILLIAMSBURG CANALS.

	Year ending	CAPITAL.				Renewals Chargeable to Income.	Staff.	Repairs.
		Farran's Point.	Gallops.	Rapide Plat.	Total.			
		% cts.	% cts.	% cts.	% cts.	% cts.	% cts.	
Government expenditure prior to Confederation being amount of original construction.....	1868				1,320,655 54		5,745 37	6,142 41
Government expenditure since Confederation.....	1869						5,769 81	5,070 88
"	1870						5,573 13	6,546 16
"	1871						6,382 17	5,308 41
"	1872					1,077 06	5,542 94	3,230 47
"	1873						6,424 49	7,347 75
"	1874						6,857 19	7,395 92
"	1875						6,547 62	4,110 29
"	1876						7,418 39	11,690 98
"	1877						7,388 08	10,053 61
"	1878						7,430 11	4,449 78
"	1879						7,517 20	3,949 71
"	1880						3,990 15	3,999 77
"	1881						7,572 35	5,020 73
"	1882						7,589 44	7,447 69
"	1883				13 19		7,423 48	7,299 39
"	1884				2,473 44		7,757 04	7,349 37
"	1885	70,761 07	32,473 07	32,473 05	103,237 12		7,696 67	8,198 63
"	1886	78,014 92	71,820 79	71,820 71	149,835 71		7,671 54	7,847 05
"	1887	32,862 02	82,950 98	82,950 98	115,853 00		7,635 54	7,904 76
"	1888	16,628 95	53,499 34	53,499 34	70,128 29	1,613 67	7,646 79	8,190 13
"	1889	37,661 15	22,296 11	22,296 11	59,867 26		7,485 28	8,794 61
"	1890	126,417 42	12,660 95	12,660 95	139,078 37		8,954 53	8,191 69
"	1891	2,853 76	175,779 88	55,036 96	239,670 50		8,678 25	7,987 40
"	1892	218,511 17	158,034 15	158,034 15	376,545 32	797 83	9,458 33	8,551 32
"	1893	154,524 01	217,669 28	372,193 29	589,717 29	3,075 00	8,676 03	8,347 97
"	1894	223,992 81	274,397 42	498,390 23	772,380 23		10,230 95	7,029 95
"	1895	118,464 53	228,892 70	228,892 70	347,387 23	13,720 36	9,675 09	7,371 37
"	1896	4,980 00	159,744 16	286,396 96	442,121 12		9,588 51	1,036 00
"	1897	262,793 78	205,480 55	205,480 55	468,274 33	3,880 76	8,697 54	8,210 71
"	1898	231,321 44	734,492 07	116,072 55	1,081,886 06		10,708 66	8,032 84



STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## STE. ANNE'S LOCK AND CANAL.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederat'n		134,456 51			
" " since	1868			778 16	432 47
" " "	1869			1,062 96	1,873 51
" " "	1870			1,136 54	1,280 36
" " "	1871			1,285 84	1,539 02
" " "	1872		1,939 46	1,106 80	1,393 63
" " "	1873		540 11	2,199 64	1,264 40
" " "	1874	12,753 27		2,614 90	7,208 63
" " "	1875	32,627 71		1,859 29	4,506 68
" " "	1876	24,935 85		1,952 14	4,033 72
" " "	1877	30,003 08		1,982 65	1,756 93
" " "	1878	14,618 85		2,057 32	541 95
" " "	1879	22,113 02		2,202 03	3,259 70
" " "	1880	3,054 63		2,152 57	1,704 71
" " "	1881	69,042 76		2,553 02	3,257 92
" " "	1882	193,158 36		2,611 30	2,343 99
" " "	1883	172,959 95		2,569 86	3,448 83
" " "	1884	142,006 25		2,775 32	2,725 49
" " "	1885	93,679 57		2,618 60	4,042 04
" " "	1886	129,681 67		2,611 90	5,803 01
" " "	1887	45,276 08	6,054 10	2,537 41	1,499 96
" " "	1888	18,910 55	1,372 59	2,505 61	1,380 75
" " "	1889	24,786 33		2,569 22	1,730 79
" " "	1890	6,151 14		2,571 04	1,525 51
" " "	1891		8,173 69	2,505 69	1,503 56
" " "	1892		25,471 61	2,571 28	1,666 21
" " "	1893		6,521 88	2,581 08	2,800 03
" " "	1894		3,497 56	2,640 00	2,799 63
" " "	1895		3,694 33	2,508 14	3,025 91
" " "	1896			2,493 54	4,993 89
" " "	1897			2,357 51	1,688 12
" " "	1898			1,904 10	1,699 44
" " "	1899			1,920 12	1,997 96
" " "	1900			1,840 51	2,679 21
" " "	1901			1,895 89	3,999 02
" " "	1902			1,994 52	3,015 97
" " "	1903		1,984 39	2,072 17	4,684 42
" " "	1904			2,292 94	2,244 13
" " "	1905			2,151 01	6,091 44
" " "	1906			2,259 16	2,294 86
" " "	1907		2,449 96	1,595 62	901 47
" " "	1908		2,501 42	2,248 29	1,693 63
" " "	1909		199 67	2,292 19	4,290 57
" " "	1910		2,339 76	2,267 60	2,446 28
Total		*1,170,215 63	66,740 53	92,707 39	115,069 75

\* Included in total cost of Ottawa River Works, see page 22.

Original Construction	\$ 134,456 51
Enlargement, including new lock	1,035,759 12

\$ 1,170,215 63

W. C. LITTLE.

Accountant.



1 GEORGE V., A. 1911

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## CULBUTE LOCK AND DAM.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure since Confederation..	1868				
" " " "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873		835 53		
" " " "	1874		38,388 99		
" " " "	1875	63,659 29			
" " " "	1876	76,842 44			
" " " "	1877	56,081 87			
" " " "	1878	5,933 53			
" " " "	1879	20,694 19			
" " " "	1880	16,688 20		202 50	259 31
" " " "	1881	4,721 62		962 85	
" " " "	1882	29,567 15		790 00	162 33
" " " "	1883	14,249 60		695 00	288 99
" " " "	1884	8,151 16		733 50	
" " " "	1885	19,071 76		730 00	572 75
" " " "	1886	26,385 27		730 00	2,396 14
" " " "	1887	7,760 88		730 00	967 33
" " " "	1888	7,573 99		739 50	730 60
" " " "	1889	17,112 01		1,050 00	116 53
" " " "	1890	2,818 35		747 83	
" " " "	1891	2,183 15	9,122 05	745 25	499 91
" " " "	1892		1,546 25	736 00	
" " " "	1893		1,420 65	749 00	13 55
" " " "	1894		2,540 14	730 00	494 43
" " " "	1895		1,475 26	436 05	434 28
" " " "	1896				
" " " "	1897				
" " " "	1898				100 00
" " " "	1899				
" " " "	1900	3,085 00			
" " " "	1901	197 00			
" " " "	1902		1,135 00		
" " " "	1903				
" " " "	1904		2,204 50		
" " " "	1905		2,255 00		
" " " "	1906				
" " " "	1907				
" " " "	1908				
" " " "	1909				
" " " "	1910				
Total.....		*382,776 46	60,923 37	11,507 48	7,036 15

\* Included in total cost of Ottawa River Works, see page 22.

W. C. LITTLE,  
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## RIDEAU CANAL.

	Year ending	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						
" " since	1868		166 50	7,298	12	18,397	28	16,475	21
" " " "	1869					19,250	71	13,140	77
" " " "	1870			13	16	20,022	37	19,469	33
" " " "	1871			11,732	98	22,814	58	18,120	52
" " " "	1872			4,967	50	22,139	48	14,005	32
" " " "	1873			18,070	97	22,841	51	26,074	49
" " " "	1874			5,793	16	26,815	44	22,957	40
" " " "	1875	9,310	85			26,553	37	19,699	81
" " " "	1876	2,163	96			26,430	77	14,428	25
" " " "	1877		214 11			25,959	56	14,198	18
" " " "	1878					26,651	51	11,034	22
" " " "	1879	7,703	88			26,042	52	7,134	55
" " " "	1880					26,463	88	11,434	05
" " " "	1881			133	50	26,024	71	8,627	00
" " " "	1882					26,915	29	13,860	28
" " " "	1883			70	65	27,322	81	23,524	84
" " " "	1884			4,597	50	26,938	95	19,245	02
" " " "	1885			2,098	76	26,971	32	18,189	55
" " " "	1886			550	00	27,045	95	35,648	04
" " " "	1887			20,823	06	29,440	46	18,565	34
" " " "	1888			18,889	48	33,458	83	25,478	87
" " " "	1889			6,665	22	33,801	77	18,106	36
" " " "	1890			21,124	10	34,270	57	18,025	21
" " " "	1891			20,967	25	34,641	98	21,537	56
" " " "	1892			31,363	23	35,500	82	21,507	16
" " " "	1893			24,274	71	35,022	49	18,789	50
" " " "	1894			14,485	11	34,943	35	16,939	47
" " " "	1895			31,559	48	33,827	08	19,897	32
" " " "	1896			21,452	29	34,052	77	30,196	38
" " " "	1897			19,079	11	31,461	55	29,535	94
" " " "	1898			13,608	39	30,759	05	26,599	93
" " " "	1899			700	29	30,751	20	28,199	49
" " " "	1900			11,780	41	30,623	27	30,237	09
" " " "	1901					31,334	40	33,791	17
" " " "	1902			8,894	40	32,193	66	33,959	86
" " " "	1903			16,235	13	34,595	31	36,424	23
" " " "	1904			13,525	04	39,127	96	38,496	78
" " " "	1905	1,565	84	14,513	35	40,838	81	49,790	55
" " " "	1906			5,272	90	41,819	77	54,495	63
" " " "	1907			14,322	03	30,667	34	44,627	82
" " " "	1908			42,903	03	44,875	16	55,090	45
" " " "	1909			19,989	52	44,911	60	53,880	51
" " " "	1910			9,225	73	48,324	13	95,188	97
Total.....		*4,085,889	21	456,980	46	1,322,845	34	1,146,628	42

\* Included in total cost of Ottawa River Works. See page 22.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.W. C. LITTLE,  
Accountant.





SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## ST. OURS LOCK.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation		121,537 65			
" " since	1868			1,532 75	753 74
" " "	1869			1,755 15	1,399 18
" " "	1870			1,458 09	1,006 22
" " "	1871			1,414 48	1,210 98
" " "	1872			1,565 80	1 263 19
" " "	1873			2,076 50	1,575 10
" " "	1874			2,219 13	2,363 42
" " "	1875			1,362 22	1,245 69
" " "	1876			1,403 92	1,601 71
" " "	1877			1,533 40	750 80
" " "	1878			1,556 65	283 77
" " "	1879			1,581 55	456 07
" " "	1880			1,614 01	705 54
" " "	1881			1,741 97	1,299 77
" " "	1882			2,002 71	1,902 41
" " "	1883		17,230 32	2,361 65	2,188 08
" " "	1884		5,279 17	2,315 37	1,494 99
" " "	1885		4,700 64	2,271 57	3,652 63
" " "	1886			2,311 70	4,143 47
" " "	1887			2,175 37	5,864 78
" " "	1888			2,216 04	2,801 17
" " "	1889		17,964 45	2,421 14	2,002 63
" " "	1890		24,571 96	2,138 40	1,935 44
" " "	1891		21,696 74	2,011 08	4,460 16
" " "	1892		3,585 34	2,168 44	1,944 33
" " "	1893			2,136 66	1,994 34
" " "	1894			2,216 68	924 55
" " "	1895			2,161 63	915 50
" " "	1896			2,094 91	1,678 49
" " "	1897			2,135 60	707 06
" " "	1898			2,049 67	692 04
" " "	1899			2,244 12	1,494 93
" " "	1900		1,596 88	2,181 43	2,681 10
" " "	1901		3,610 06	2,128 25	1,681 44
" " "	1902		15,549 27	2,262 39	984 36
" " "	1903		9,344 89	2,288 63	1,671 83
" " "	1904		7,984 41	2,334 67	1,690 61
" " "	1905		14,900 90	2,479 66	1,716 35
" " "	1906		7,307 39	2,582 95	3,872 75
" " "	1907		4,260 00	2,064 62	1,142 79
" " "	1908		3,338 79	2,891 76	2,121 43
" " "	1909			2,294 78	3,693 19
" " "	1910		1,925 08	4,137 64	1,752 66
Total		*121,537 65	164,786 29	89,898 14	79,720 69

\* Included in the total cost of Chambly Canal and Richelieu River, see page 24.

W. C. LITTLE,  
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.



SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## MURRAY CANAL.

	Year ending.	Capital.		Renewals Chargeable to Income.		Staff.		Repairs.		
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	
Government expenditure prior to Confederation	1868			400	00					
" " " since	1869									
" " " "	1870									
" " " "	1871									
" " " "	1872									
" " " "	1873									
" " " "	1874									
" " " "	1875									
" " " "	1876									
" " " "	1877									
" " " "	1878									
" " " "	1879									
" " " "	1880									
" " " "	1881									
" " " "	1882		7,135	63						
" " " "	1883		84,071	68						
" " " "	1884		118,187	43						
" " " "	1885		148,902	66						
" " " "	1886		179,704	52						
" " " "	1887		142,563	66						
" " " "	1888		146,754	37						
" " " "	1889		215,326	46						
" " " "	1890		106,760	35			494	31		
" " " "	1891		61,260	49		5,137	03		173 53	
" " " "	1892		5,964	22		5,803	48		3,505 15	
" " " "	1893		30,838	79		5,499	62		5,341 34	
" " " "	1894					5,667	52		5,295 57	
" " " "	1895					5,354	97		5,063 49	
" " " "	1896					5,409	10		5,410 33	
" " " "	1897					5,526	87		3,966 41	
" " " "	1898					5,799	94		4,710 23	
" " " "	1899					5,073	70		3,533 68	
" " " "	1900					5,613	83		2,777 60	
" " " "	1901					5,175	74		1,138 15	
" " " "	1902					5,254	51		6,377 19	
" " " "	1903		500	00		5,757	00		4,627 70	
" " " "	1904		750	00	2,521	13			6,075 94	
" " " "	1905		100	00	740	45			4,452 68	
" " " "	1906				293	75			2,840 91	
" " " "	1907				10,423	00			1,710 55	
" " " "	1908				37,334	70			2,953 23	
" " " "	1909		126	45	20,250	61			3,374 82	
" " " "	1910								2,674 57	
Total			*1,248,946	71	71,963	64	103,520	67	76,003	07

Agreeing with Public Accounts Balance Sheet, 1910, page 4.

W. C. LITTLE,  
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—Continued  
TRENT CANAL.

	Year ending	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation		309,371 31			
" since	1868				
"	1869				
"	1870				
"	1871				
"	1872				
"	1873				
"	1874				
"	1875				
"	1876				
"	1877				
"	1878				
"	1879				
"	1880	561 50		1,188 92	3,568 89
"	1881			2,489 93	2,233 50
"	1882		5,836 51	2,011 92	8,115 50
"	1883	40,767 16	9,503 66	2,235 50	3,047 42
"	1884	120,393 91	6,198 57	2,208 64	5,264 35
"	1885	121,382 84		3,303 87	4,653 50
"	1886	75,103 30		1,639 75	5,917 88
"	1887	179,541 63		1,938 08	6,008 88
"	1888	114,879 35		1,770 29	5,151 42
"	1889	47,592 13	29,677 92	3,242 05	5,935 94
"	1890	58,644 50	11,522 65	3,450 99	730 55
"	1891	9,826 49	3,164 81	3,803 66	4,888 98
"	1892	4,457 28	6,506 97	3,695 85	4,721 85
"	1893	5,962 47	10,838 90	3,739 86	2,087 17
"	1894	3,412 32	20,403 93	3,785 47	4,988 59
"	1895	53,907 70	21,143 41	4,184 18	3,374 49
"	1896	392,976 08	6,185 75	4,349 34	3,329 97
"	1897	486,575 70	13,880 37	4,965 39	3,497 90
"	1898	351,273 31	8,991 54	5,034 60	4,998 80
"	1899	166,611 49	6,179 79	5,048 72	6,454 49
"	1900	334,583 01	8,043 39	5,131 52	9,989 26
"	1901	284,503 89	10,494 82	5,254 51	13,075 89
"	1902	449,075 45	26,165 93	5,575 52	14,984 88
"	1903	523,950 74	18,548 58	6,993 25	10,791 15
"	1904	489,038 44	21,228 55	7,237 05	21,179 12
"	1905	333,261 75	36,853 28	12,071 88	26,056 78
"	1906	319,789 49	26,030 36	17,440 68	33,398 85
"	1907	153,045 42	35,360 10	19,229 25	36,516 47
"	1908	343,176 05	96,315 87	32,826 38	33,382 94
"	1909	1,099,836 38	80,517 65	32,028 57	44,849 83
"	1910	1,090,000 00	59,483 51	36,800 42	54,206 13
Total		*7,873,501 09	578,876 82	244,676 04	387,401 37

\*Total expenditure on Capital Account as above ..... \$7,873,501 09  
 Less—Expenditure prior to Confederation: ..... \$ 309,371 31  
 " Year 1880 ..... 561 50  
 309,932 81

Agreeing with Public Accounts Balance Sheet, 1910, page 4. .... \$7,563,568 28

W. C. LITTLE,  
 Accountant.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

## TAY CANAL.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure since Confederation.	1868				
" " " "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873				
" " " "	1874				
" " " "	1875				
" " " "	1876				
" " " "	1877				
" " " "	1878				
" " " "	1879				
" " " "	1880				
" " " "	1881				
" " " "	1882		748 65		
" " " "	1883	4,831 80			
" " " "	1884	50,878 12			
" " " "	1885	92,473 97			
" " " "	1886	65,561 51			
" " " "	1887	49,617 92			
" " " "	1888	54,166 57			
" " " "	1889	89,486 18			
" " " "	1890	22,226 23		*	*
" " " "	1891	17,114 78		*	*
" " " "	1892	29,771 65		*	*
" " " "	1893			*	*
" " " "	1894			*	*
" " " "	1895			*	*
" " " "	1896			*	*
" " " "	1897	10,720 50		*	*
" " " "	1898			*	*
" " " "	1899			*	*
" " " "	1900	2,750 00		*	*
" " " "	1901			*	*
" " " "	1902			*	*
" " " "	1903			*	*
" " " "	1904			*	*
" " " "	1905			*	*
" " " "	1906			*	*
" " " "	1907			*	*
" " " "	1908			*	*
" " " "	1909			*	*
" " " "	1910			*	*
Total		†439,599 23	748 65	*	*

\* Included in Rideau Canal since 1890.

† Agreeing with Public Accounts 1910, page 4.

W. C. LITTLE,  
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.



1 GEORGE V., A. 1911

STATEMENT showing the amounts expended on Construction, Renewals, &amp;c.—Continued.

## SAULT STE. MARIE CANAL.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts	\$ cts.
Government expenditure since Confederation.	1868	.....	.....	.....	.....
" " " "	1869	.....	.....	.....	.....
" " " "	1870	.....	.....	.....	.....
" " " "	1871	.....	.....	.....	.....
" " " "	1872	.....	949 35	.....	.....
" " " "	1873	.....	.....	.....	.....
" " " "	1874	.....	.....	.....	.....
" " " "	1875	.....	.....	.....	.....
" " " "	1876	.....	.....	.....	.....
" " " "	1877	.....	.....	.....	.....
" " " "	1878	.....	.....	.....	.....
" " " "	1879	.....	.....	.....	.....
" " " "	1880	.....	.....	.....	.....
" " " "	1881	.....	.....	.....	.....
" " " "	1882	.....	.....	.....	.....
" " " "	1883	.....	.....	.....	.....
" " " "	1884	.....	.....	.....	.....
" " " "	1885	.....	.....	.....	.....
" " " "	1886	.....	.....	.....	.....
" " " "	1887	.....	.....	.....	.....
" " " "	1888	8,145 06	.....	.....	.....
" " " "	1889	34,018 95	.....	.....	.....
" " " "	1890	176,568 55	.....	.....	.....
" " " "	1891	325,336 33	.....	.....	.....
" " " "	1892	341,474 31	.....	.....	.....
" " " "	1893	589,801 25	.....	.....	.....
" " " "	1894	1,316,529 29	.....	.....	.....
" " " "	1895	466,151 50	.....	3,432 73	.....
" " " "	1896	189,986 59	.....	16,074 70	2,650 17
" " " "	1897	209,561 82	.....	15,381 59	7,671 79
" " " "	1898	21,004 56	.....	14,389 92	8,172 09
" " " "	1899	63,935 48	.....	13,840 24	6,564 40
" " " "	1900	27,157 98	.....	13,901 40	13,219 87*
" " " "	1901	323,353 93	48 39	13,730 93	10,289 18
" " " "	1902	122,505 73	.....	15,920 80	14,839 71
" " " "	1903	65,933 43	.....	16,077 22	10,855 70
" " " "	1904	32,029 54	.....	14,653 35	9,491 44
" " " "	1905	110,181 69	.....	15,681 55	14,776 33
" " " "	1906	120,000 00	.....	15,878 11	20,086 15
" " " "	1907	95,504 63	.....	12,290 94	11,520 53
" " " "	1908	140,433 22	.....	20,345,38	23,206 00
" " " "	1909	42,109 63	11,453 28	15,231 79	16,462 29
" " " "	1910	46,809 13	147,147 52	18,976 64	20,300 77
Total .....		*4 868,532 60	159,598 54	235,807 29	190,106 42

\* Agreeing with Public Accounts, 1910, page 4.

W. C. LITTLE,  
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.



1 GEORGE V., A. 1911

STATEMENT showing amount expended on Construction and Enlargement of Canals, to  
March 31, 1910.

Canal.	Construction.	Enlargement.	Total.
	§ cts.	§ cts.	§ cts.
St. Peter's.....	648,547 14		648,547 14
Lachine.....	2,589,532 85	9,786,178 93	12,375,711 78
Beauharnois.....	1,636,699 26		1,636,699 26
St. Lawrence River and Canals.....	18,442 85	3,451,470 56	3,469,913 41
Lake St. Louis.....		298,176 11	298,176 11
Lake St. Francis.....		75,906 71	75,906 71
Cornwall.....	1,945,624 73	5,289,142 41	7,234,767 14
Williamsburg. {	Farran's Point.....	877,090 57	10,485,611 69
	Galops.....	6,118,927 32	
	Rapide Plat.....	2,158,242 00	
	Williamsburg.....	10,696 26	
Welland.....	7,693,824 03	20,813,039 16	28,506,863 19
Ste. Anne's.....	134,456 51	1,035,759 12	1,170,215 63
*Carillon and Grenville.....	63,053 64	4,119,039 32	4,182,092 96
Culbute.....	382,776 46		382,776 46
Rideau.....	4,085,889 21		4,085,889 21
St. Ours.....	121,537 65		121,537 65
Chambly.....	637,214 66	43,786 43	681,001 09
Murray.....	1,248,946 71		1,248,946 71
Trent.....	7,873,501 09		7,873,501 09
Tay.....	489,599 23		489,599 23
Sault Ste. Marie.....	4,868,532 60		4,868,532 60
Soulanges.....	7,126,135 61		7,126,135 61
Total.....	42,884,960 77	54,077,454 90	96,962,415 67

\* Construction by Imperial Government not included. Records relating to same were kept in Ordnance Office, Montreal, and were destroyed by fire in 1852.

W. C. LITTLE.

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.









HYDRAULIC AND OTHER RENTS.

Balances due April 1, 1900.	Accrued during the year ended March 31, 1910.	Totals.	1909-1910.	Abatement.	Deposited to the credit of the Receiver General.	Paid into hands of the Collectors.	Balance due March 31, 1910.	Totals.
\$ cts.	\$ cts.	\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
57,167 77	47,188 88	104,356 65	Welland Canal	101 64	41,539 78	41,539 78	62,715 23	104,356 65
7,878 17	3,438 00	11,316 17	Williamsburg Canal	2,000 00	5,240 00	5,240 00	4,076 17	11,316 17
7,940 37	7,654 50	15,594 87	Cornwall Canal		7,669 50	7,669 50	7,925 37	15,594 87
8,658 34	15,001 00	23,659 34	Beauharnois Canal		16,691 50	16,691 50	6,967 84	23,659 34
33,485 38	91,059 78	124,545 16	Lachine Canal	5,275 96	85,672 56	85,672 56	33,596 64	124,545 16
889 84	186 00	1,075 84	Chambly Canal		198 00	198 00	877 84	1,075 84
4,254 20	4,201 50	8,455 70	Rideau Canal	10 50	3,516 75	3,516 75	4,928 45	8,455 70
2,004 45	3,072 04	5,076 49	Trent Canal	373 50	4,596 54	4,596 54	106 45	5,076 49
15 00	575 00	590 00	Sault Ste. Marie Canal		530 00	530 00	60 00	590 00
26,492 83	615 00	27,107 83	Castillon and Grenville Canal		109 00	109 00	26,998 83	27,107 83
9 00	68 00	77 00	Sundry Canals		63 00	63 00	14 00	77 00
	3,067 00	3,067 00	Sonlanges Canals		3,067 00	3,067 00		3,067 00
148,765 35	176,126 70	324,892 05	Totals	7,761 60	168,893 63	168,893 63	148,266 82	324,892 05

W. C. LITTLE,  
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY.

(Including amounts paid to Nova Scotia Railway and European and North American Railway, N.B.)

—	Year ending	Construction.	Income.	Working Expenses including Windsor Branch Ry.	Revenue received, including Windsor Branch Ry.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Expenditure prior to Confederation . . . . .		10,766,725 54			
" since " . . . . . 1868		483,353 65		359,961 08	420,752 58
" " " . . . . . 1869		282,615 18		387,548 47	455,022 76
" " " . . . . . 1870		1,729,381 49		445,208 75	471,245 09
" " " . . . . . 1871		2,916,782 13		442,993 31	565,713 52
" " " . . . . . 1872		5,131,141 51		595,076 22	622,900 56
" " " . . . . . 1873		5,201,450 37		1,011,892 60	703,458 26
" " " . . . . . 1874		3,614,898 81		1,847,175 24	893,430 17
" " " . . . . . 1875		3,426,099 55		1,532,589 62	861,593 43
" " " . . . . . 1876		1,108,321 59		1,277,197 79	848,861 46
" " " . . . . . 1877		1,318,352 19		1,661,673 55	1,154,445 35
" " " . . . . . 1878		408,816 74		1,811,273 56	1,378,946 78
" " " . . . . . 1879		226,639 19		2,010,183 22	1,294,099 69
" " " . . . . . 1880		2,048,014 60		1,607,956 70	1,520,310 45
" " " . . . . . 1881		608,732 80		1,780,353 53	1,777,856 76
" " " . . . . . 1882		585,568 79		2,080,592 37	2,100,315 85
" " " . . . . . 1883		1,616,632 96		2,383,477 20	2,395,034 99
" " " . . . . . 1884		1,405,377 52		2,366,719 95	2,376,666 19
" " " . . . . . 1885		1,195,363 08		2,460,229 87	2,892,605 00
" " " . . . . . 1886		544,958 17		2,508,473 10	2,406,858 88
" " " . . . . . 1887		823,070 86		2,854,158 91	2,621,337 41
" " " . . . . . 1888		742,203 09		3,300,481 94	2,937,337 40
" " " . . . . . 1889		655,228 13		3,174,785 19	2,923,736 46
" " " . . . . . 1890		365,246 48		3,500,455 80	2,958,243 38
" " " . . . . . 1891		79,929 34		3,691,273 65	3,007,630 51
" " " . . . . . 1892		168,101 77		3,458,891 39	2,978,950 82
" " " . . . . . 1893		228,984 79		3,062,207 45	3,099,815 20
" " " . . . . . 1894		166,362 43		2,999,317 07	3,020,485 74
" " " . . . . . 1895		327,034 51		2,964,940 98	2,979,795 59
" " " . . . . . 1896		259,105 23		3,029,304 08	2,994,201 93
" " " . . . . . 1897		145,142 00		2,936,789 71	2,906,631 25
" " " . . . . . 1898		252,367 20	70,000 00	3,275,830 14	3,154,896 49
" " " . . . . . 1899		1,081,929 94	210,000 00	3,478,559 30	3,775,558 08
" " " . . . . . 1900		1,796,348 29		4,444,296 25	4,599,423 14
" " " . . . . . 1901		3,633,836 57		5,477,285 30	5,019,497 76
" " " . . . . . 1902		4,621,841 05		5,596,939 57	5,720,990 50
" " " . . . . . 1903		2,254,266 68		6,214,496 38	6,366,884 53
" " " . . . . . 1904		+1,880,856 60		7,264,263 13	6,392,865 48
" " " . . . . . 1905		3,937,621 93		8,535,689 91	6,838,561 50
" " " . . . . . 1906		+3,765,170 90		7,599,400 33	7,693,282 40
" " " . . . . . 1907		1,506,209 26		6,045,597 15	6,293,751 52
" " " . . . . . 1908		4,363,494 01		9,195,347 64	9,229,989 21
" " " . . . . . 1909		3,867,232 16		9,364,256 10	8,583,100 79
" " " . . . . . 1910		1,278,409 45		8,668,620 23	9,328,888 97
Total . . . . .		*82,819,218 53	280,000 00	147,797,763 73	140,060,973 83

\* Including \$296,872.90 charged to 'Consolidated Fund.'

† Expenditure for year . . . . .	\$ 1,894,856 90
Less refunds of previous years . . . . .	14,000 30
	<u>\$ 1,880,856 60</u>

‡ Expenditure for year . . . . .	\$ 3,760,942 95
Add refunded cheque of 1901-2 paid during fiscal year 1905-6 . . . . .	4,227 95
	<u>\$ 3,765,170 90</u>

1 GEORGE V., A. 1911

INTERCOLONIAL RAILWAY—*Concluded.*

Total cost of Construction as shown on page 35..... \$82,819,213 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>\$ 88,363 18</u>	
		<u>208,509 72</u>	
			296,872 90
			<u>†\$82,522,345 03</u>
Cape Breton Railway, page 40.....		3,860,679 14	
Oxford and New Glasgow Railway, page 39.....		1,949,063 21	
Eastern Extension Railway, page 37.....		1,324,042 81	
Montreal and European Short Line Railway, page 41.....		333,942 72	
Drummond County Railway, page 45.....		1,464,000 00	
Canada Eastern Railway, page 48.....		819,000 00	
			<u>*9,750,727 88</u>
Total capital cost of Intercolonial Railway system.....			<u>\$92,273,073 51</u>

\* Agreeing, less outstanding cheques, with Public Accounts, 1908-1909, page 4.

† Includes \$220.48 amount of an Exchequer Court award in 1907 against the Oxford and New Glasgow Railway.

W. C. LITTLE,  
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS  
 OTTAWA, July 23, 1910.























YUKON TERRITORY WORKS.  
(Stikine-Teslin Railway.)

			Year	Construction.
				\$ cts.
Government expenditure prior to Confederation.....			1868	.....
" " since " ".....			1869	.....
" " " ".....			1870	.....
" " " ".....			1871	.....
" " " ".....			1872	.....
" " " ".....			1873	.....
" " " ".....			1874	.....
" " " ".....			1875	.....
" " " ".....			1876	.....
" " " ".....			1877	.....
" " " ".....			1878	.....
" " " ".....			1879	.....
" " " ".....			1880	.....
" " " ".....			1881	.....
" " " ".....			1882	.....
" " " ".....			1883	.....
" " " ".....			1884	.....
" " " ".....			1885	.....
" " " ".....			1886	.....
" " " ".....			1887	.....
" " " ".....			1888	.....
" " " ".....			1889	.....
" " " ".....			1890	.....
" " " ".....			1891	.....
" " " ".....			1892	.....
" " " ".....			1893	.....
" " " ".....			1894	.....
" " " ".....			1895	.....
" " " ".....			1896	.....
" " " ".....			1897	.....
" " " ".....			1898	.....
" " " ".....			1899	.....
" " " ".....			1900	.....
" " " ".....			1901	.....
" " " ".....			1902	283,323 55
" " " ".....			1903	.....
" " " ".....			1904	.....
" " " ".....			1905	.....
" " " ".....			1906	.....
" " " ".....			1907	.....
" " " ".....			1908	.....
" " " ".....			1909	.....
" " " ".....			1910	.....
Total.....				*283,323 55

\*Included in Public Accounts Balance Sheet, 1902-1903, page 6.

W. C. LITTLE,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.





SESSIONAL PAPER No. 20

## STATEMENT showing amount expended on Capital Account on Railways.

Railways.	—	—
	\$ cts.	\$ cts.
Intercolonial.....	82,522,345 63	
Cape Breton.....	3,860,679 14	
Oxford and New Glasgow.....	1,949,283 69	
Eastern Extension.....	1,324,042 81	
Drummond County.....	1,464,000 00	
Montreal and European Short Line.....	333,942 72	
Canada Eastern.....	819,000 00	
		92,273,073 51
Carleton Branch.....		48,410 48
Prince Edward Island.....		8,465,430 56
Canadian Pacific.....		62,786,857 74
Annapolis and Digby.....		660,683 09
Yukon Territory Works (Stikine-Teslin Ry.).....		283,323 55
National Transcontinental.....		71,934,877 08
Governor General's car.....		56,538 82
Hudson Bay Railway Surveys.....		145,470 51
Total.....		236,654,665 29
<i>Memo. re Recapitulation—Railways.</i>		
Total cost as per statement above.....		236,654,665 29
Add amounts transferred from Capital to Consolidated Fund, Intercolonial Railway, see statement, page 36.....		296,872 90
Agreeing with total of Construction, as per statement, page 50.....		236,951,538 19

W. C. LITTLE,  
*Accountant.*

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.



SESSIONAL PAPER No. 20

STATEMENT showing Miscellaneous Expenditure yearly, by the Department of Railways and Canals.

Year ending.	Chargeable to Capital.	CHARGEABLE TO INCOME.			CHARGEABLE TO REVENUE.			Total Yearly Expenditure
	Canals.	Canals.	Railways.	General.	Canals.	Railways.	General.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1868.				6,305 66	12,000 00		2,416 66	20,722 32
1869.				8,367 52	12,000 00		1,000 00	21,367 52
1870.				7,853 03	18,698 89		7,679 78	34,231 70
1871.				34,773 72	12,018 98			46,792 70
1872.				20,049 50	12,208 76			32,258 26
1873.				36,891 74	12,099 44		6,889 20	55,880 38
1874.				40,098 84	12,959 25		5,428 98	58,487 07
1875.				35,579 24	12,047 43		5,620 17	53,246 84
1876.				42,920 10	86 08		5,690 28	48,696 46
1877.					51 87	43,639 97		43,691 84
1878.		1,860 00			556 00		34,388 59	36,804 59
1879.								
1880.		2,561 55			323 16			2,884 71
1881.		2,338 41			5,535 22			7,873 63
1882.					9,826 23			9,826 23
1883.		11,781 27			6,978 54			18,759 81
1884.		7,486 62	62,256 58		8,305 41			78,048 61
1885.		16,725 47	11,003 38		1,210 61			28,939 46
1886.		20,323 62	10,383 59		776 30			31,483 51
1887.		20,873 21	23,545 34		649 04			45,067 59
1888.		34,533 07	22,898 90		5,799 83			63,231 80
1889.		10,091 87	16,552 64		5,207 64			31,852 15
1890.		16,426 69	50,909 74		49,550 21			116,886 64
1891.		16,925 31	16,314 41		56,922 05			90,161 77
1892.		6,540 49	19,062 51		65,074 07			90,677 07
1893.		8,498 41	4,313 73	28,640 93	63,965 54			105,418 61
1894.		4,178 85	4,855 11	15,746 31	60,265 22			85,045 49
1895.		10,695 48	13,221 27	19,304 87	60,769 56			103,991 18
1896.		10,893 40	6,562 20	25,194 21	70,340 22			112,990 03
1897.		2,937 47	5,118 99	25,142 90	62,777 12		597 39	96,573 87
1898.		1,719 69	8,327 96	28,042 10	56,284 42	1,400 00		95,774 17
1899.		1,318 79	67,005 86	22,085 19	66,850 29			157,260 13
1900.		11,873 35	33,496 99	22,802 18	58,836 57			127,009 09
1901.		12,267 99	28,658 78	33,986 68	61,938 61			136,852 06
1902.		3,658 23	21,752 58	34,138 50	63,770 65			125,319 96
1903.		2,491 84	15,570 43	35,398 00	63,175 19			116,635 46
1904.		3,730 79	85,353 17	36,262 32	66,067 30			191,413 58
1905.		1,498 14	97,507 00	38,660 52	64,515 07			202,180 73
1906.		9,160 44	99,018 80	37,484 64	62,171 45			267,835 33
1907.		9,687 55	92,115 62	34,183 75	66,251 27			202,238 19
1908.	14,999 70	24,760 08	178,266 39	45,115 99	105,518 99			368,661 15
1909.	5,034 00	28,819 54	604,483 02	20,912 04	106,065 87			765,314 47
1910.		29,421 06	212,117 54	4,706 79	111,755 68			358,001 07
	20,033 70	346,078 68	1,810,672 53	740,647 27	1,594,204 03	45,039 97	69,711 05	4,626,387 23

W. C. LITTLE,  
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.



1 GEORGE V., A. 1911

## RECAPITULATION—RAILWAYS AND CANALS, TO MARCH 31, 1910.

## EXPENDITURE.

<i>Chargeable to Capital Account—</i>			
Railways, <i>see</i> Statement page 49.....		\$ 236,654,665	29
Canals " " 31 and 51 .....		96,982,449	37
		\$ 333,637,114	66
<i>Chargeable to Consolidated Fund—</i>			
*Railway Subsidies as per Statement page 54 to 63.....		\$ 41,450,116	28
<i>Income Account—</i>			
Intercolonial Railway <i>see</i> page 35.....	\$ 280,000	00	
Add transferred from Capital " 36.....	296,872	90	
Railways " 51.....	1,810,672	53	
Canals " 31 .....	6,221,471	41	
" " 51 .....	346,078	68	
General, Railways and Canals " 51 .....	740,647	27	
		9,695,742	79
<i>Revenue Account—</i>			
Canals—Operating and maintaining staff, <i>see</i> page 31.	\$ 11,695,850	15	
Canals—Repairs, <i>see</i> page 31 .....	9,488,902	94	
" " " 51.....	1,594,204	03	
Railways—Working expenses, <i>see</i> page 50.....	158,650,055	35	
" " " 51 .....	45,039	97	
General—Railways and Canals " 51.....	69,711	05	
		181,543,763	49
		232,689,622	56
Total expenditure on Railways and Canals.....		\$ 566,326,737	22

## EXPENDITURE AS ABOVE SEPARATED AS BETWEEN RAILWAYS AND CANALS.

## RAILWAYS.

Capital Account.....	\$ 236,654,665	29
Consolidated Fund.....	202,532,757	03
	\$ 439,187,422	32

## CANALS.

Capital Account.....	\$ 96,982,449	37
Consolidated Fund.....	29,346,507	21
	\$ 126,328,956	58
Total.....	\$ 565,516,378	90

## GENERAL, COMMON TO BOTH.

Consolidated Fund.....	810,358	32
Total expenditure on Railways and Canals.....	\$ 566,326,737	22

## REVENUE, SEPARATED AS BETWEEN RAILWAYS AND CANALS.

Railways—Revenue received from July 1, 1867, to March 31, 1910 (for details <i>see</i> page 50).	\$ 147,157,192	85
Canals " " " " ( " " 31).	14,156,354	14
Total revenue, Railways and Canals.....	\$ 161,313,546	99

\* This amount does not include the subsidy of \$25,000,000 to the Canadian Pacific Railway, nor the amount \$660,683 09 expended on the Annapolis and Digby Railway, both of which are included in Capital Account, nor the annual payment of \$119,700 to the Provincial Government of Quebec, being interest at the rate of 5 per cent on the sum of \$2,394,000 up to 1905, granted by 47 Vict., cap. 8 (1884) and the annual payment of \$107,730 being interest at the rate of 4½ per cent since and including 1905 on the said sum of \$2,394,000 for the line between Ottawa and Quebec which sum was transferred to the Public Debt as a liability, and is dealt with by the Finance Department (*see* Public Accounts, 1898-1910, and page 79, 1908).

W. C. LITTLE,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

## STATEMENT

SHOWING SUBSIDIES VOTED FOR RAILWAYS AS TO WHICH CONTRACTS  
HAVE BEEN ENTERED INTO AND PAYMENTS MADE FROM JULY 1,  
1883 TO MARCH 31, 1910.

1 GEORGE V., A. 1911

## STATEMENT showing subsidies voted for Railways as to which Contracts

SUBSIDIES VOTED.		RAILWAYS.	July 1, 1883, to June 30, 1903.	
Authority.	Amount.		§	cts.
			§	cts.
46 Vic., chap. 25	156,800 00	International Railway, Quebec .....	156,800	00
53 " " 2				
45 " " 14	384,000 00	Quebec and Lake St. John Railway, Quebec .....	1,006,743	50
46 " " 25	80,000 00			
48-49 " " 59	96,000 00			
49 " " 10	186,235 00			
50-1 " " 24	28,800 00			
51 " " 3	96,000 00			
52 " " 3	64,000 00			
53 " " 2	30,000 00			
54-5 " " 8	5,250 00			
57-8 " " 4	44,800 00			
46 " " 25	89,600 00	Kingston, Napanee and Western Ry., formerly Napanee, Tamworth and Quebec Ry., Ontario...	208,732	89
49 " " 10	70,000 00			
50-1 " " 24	12,800 00			
52 " " 3	32,000 00			
55-6 " " 5	64,000 00	Pontiac Pacific Junction Railway, Quebec .....	193,578	00
47 " " 8	272,000 00			
51 " " 3	41,000 00			
53 " " 2	24,000 00	Caraquette, Railway, N.B. ....	224,000	00
46 " " 25	115,200 00			
47 " " 8	76,800 00			
50-1 " " 24	32,000 00			
47 " " 8	32,000 00	Canadian Northern Quebec Ry. Co., formerly Great Northern Ry., Quebec .....	557,788	31
49 " " 10	57,600 00			
52 " " 3	22,400 00			
53 " " 2	48,000 00			
56 " " 2	48,000 00			
57-8 " " 4	70,400 00			
47 " " 8	48,000 00	Kingston and Pembroke Railway, Ontario .....	48,000	00
45 " " 14	660,000 00	Northern and Pacific Junction Railway, Quebec .....	1,320,000	00
46 " " 26	660,000 00			
53 " " 2				
47 " " 8	128,000 00	Canada Eastern Ry., formerly Northern and Western Ry., N.B., including also Chatham Branch Ry..	374,839	84
48-9 " " 59	19,200 00			
49 " " 10	32,000 00			
48-9 " " 59	24,439 84			
51 " " 3	140,800 00			
57-8 " " 4	35,200 00			
62-3 " " 7	*	Quebec Central Railway, Quebec .....	348,342	00
47 " " 8	60,342 00			
51 " " 3				
53 " " 2	288,000 00	Montreal and Sorel Railway, Quebec .....	93,757	57
48-9 " " 59	72,000 00			
53 " " 2	40,000 00			
48-9 " " 59	30,000 00	Montreal and Champlain Junction Railway, Quebec.	103,600	00
50-1 " " 24	64,000 00			
51 " " 3	9,600 00			
46 " " 25	38,400 00	Elgin, Petitediac and Havelock Railway, Quebec...	82,652	82
51 " " 3	44,252 82			
47 " " 8	22,400 00	St. Louis and Richibucto Railway, N.B. ....	22,400	00
48-9 " " 59	96,000 00			
49 " " 10	38,400 00	Canada Atlantic Railway, Ontario .....	282,355	20
50-1 " " 24	180,000 00			
47 " " 6	750,000 00			
47 " " 8	96,000 00	Esquimalt and Nanaimo Railway, B. C. ....	750,000	00
46 " " 25	320,000 00	Erie and Huron Railway, Ontario .....	96,000	00
47 " " 8	300,000 00	Baie des Chaleurs Railway, Quebec .....	620,000	00
52 " " 3				
Carried forward .....			6,489,590	04

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have been entered into and Payments made up to March 31, 1910.

PAYMENTS.							Total March 31, 1910.
1903-1904.	1904-1905.	1905-1906.	1906-1907.	1907-1908.	1908-1909.	1909-1910.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
							156,800 00
		86,016 00	67,712 00	73,472 00			1,233,943 50
							208,732 80
							193,578 00
							224,000 00
				256,870 40	55,449 60	164,172 29	1,034,280 60
							48,000 00
							1,320,000 00
							374,839 84
				55,638 69			403,980 69
							93,757 57
							103,600 00
							82,652 82
							22,400 00
							282,355 20
							750,000 00
							96,000 00
							620,000 00
		86,016 00	67,712 00	385,981 09	55,449 60	164,172 29	248,921 02

1 GEORGE V., A. 1911

## STATEMENT showing Subsidies Voted for Railways as to which Contracts have

SUBSIDIES VOTED.		RAILWAYS.		July 1, 1883 to June 30, 1903.
Authority.	Amount.			
	\$ cts.			\$ cts.
		Brought forward .....		6,489,590 04
48-9 Vic., c. 59	118,400 00	New Brunswick and Prince Edward Island, Ry. N. B..		113,440 00
50-1 " 24	217,600 00	Laurentian Railway, formerly St. Lawrence, Lower Laurentian and Saguenay Ry., Quebec .....		217,600 00
49 " 10	11,200 00	L'Assomption Railway, Quebec.....		11,200 00
49 " 10	32,000 00			
50-1 " 24	96,000 00	} Great Eastern Railway, Quebec.....		40,345 00
56 " 2	64,000 00			
53 " 2	37,500 00			
47 " 8	160,000 00	} Irondale, Bancroft and Ottawa Railway, Ontario.....		144,000 00
52 " 3				
49 " 10	96,000 00	} Buctouche and Moucton Railway, N.B. ....		101,600 00
50-1 " 24	6,400 00			
47 " 8	51,200 00	} Albert Southern Railway, N. B.....		50,460 00
52 " 3				
50-1 " 24	65,200 00	} Lake Temiscamingue Colonization Railway, Quebec..		310,335 95
57-8 " 4	274,940 00			
49 " 10	38,400 00	} Joggins Railway, N.S. ....		37,500 00
50-1 " 24	4,000 00			
45 " 14	240,000 00	} Témiscouata Railway, N.B., and Quebec.....		645,950 00
48-9 " 58	258,000 00			
51 " 3	100,000 00			
53 " 2	51,200 00	} Leamington and Saint Clair Railway, Ontario.....		51,200 00
48-9 " 59	44,800 00			
50-1 " 24	6,400 00	} Toronto, Grey and Bruce Railway, Ontario.....		14,656 00
49 " 10	16,000 00			
50-1 " 24	22,400 00	} Dominion Line Co., Quebec.....		15,360 00
49 " 10	256,000 00		} West Ontario Pacific Railway and Ontario and Quebec Railway .....	
53 " 2				
50-1 " 24	96,000 00	} Drummond County Railway, Quebec .....		423,936 00
52 " 3	14,400 00			
53 " 2	76,800 00			
57-8 " 4	96,000 00	} Brockville, Westport and Sault Ste. Marie Ry., Ont..		105,200 00
48-9 " 59	128,000 00			
53 " 2	64,000 00	} Montreal and Lake Maskinongé Railway, Québec....		41,280 00
54-5 " 8				
49 " 10	32,000 00	} South Norfolk Railway, Ontario .....		54,400 00
53 " 2	10,200 00			
50-1 " 24	54,400 00	} Guelph Junction Railway, Ontario.....		46,000 00
50-1 " 24	51,200 00			
48-9 " 59	22,400 00	} Belleville and North Hastings Railway, Ontario.....		21,888 00
49 " 10				
49 " 10	108,800 00	} Hereford Railway, Quebec.....		155,200 00
52 " 3	48,000 00			
50-1 " 24	118,400 00	} Lake Erie and Detroit River Railway, Ontario.....		475,851 00
55-6 " 5	224,000 00			
62-3 " 7	*	} Beauharnois Junction Railway, Quebec.....		62,400 00
50-1 " 24	62,400 00			
50-1 " 24	138,400 00	} St. Catharines and Niagara Central Railway, Ontario		38,400 00
55-6 " 5	108,000 00			
57-8 " 4	108,800 00	} Fredericton and St. Mary's Railway Bridge Co., N. B..		30,000 00
52 " 3	30,000 00			
50-1 " 24	9,600 00	} Harvey Branch Railway Co., N.-B.....		5,553 57
55-6 " 5	240,000 00		} Nova Scotia Central Railway Co., N. S.....	
61 " 1				
50-1 " 24	44,800 00	} Cumberland Railway and Coal Co., N. S.....		39,850 00
52 " 3	19,200 00			
52 " 3	54,400 00	} Pontiac and Renfrew Railway Co., Ontario.....		13,600 00
52 " 3	54,400 00			
63-4 " 8	*	} Thousand Islands Railway Co., Ontario.....		29,840 00
		Carried forward.....		10,277,835 56

SESSIONAL PAPER No. 20

been entered into and Payments made up to March 31, 1910—Continued.

PAYMENTS.							Total March 31, 1910.
1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
		86,016 00	67,712 00	385,981 09	55,449 60	164,172 29	248,921 02
							113,440 00
							217,600 00
							11,200 00
							40,345 00
							144,000 00
							101,600 00
							50,460 00
							310,335 95
							37,500 00
							645,950 00
							51,200 00
							14,656 00
							15,360 00
							256,000 00
							423,936 00
			35,600 00				140,800 00
							41,280 00
							54,400 00
							46,000 00
							21,888 00
							155,200 00
							475,851 00
							62,400 00
							38,400 00
							30,000 00
							5,553 57
							235,200 00
							39,850 00
							13,600 00
							29,840 00
		86,016 00	103,312 00	385,981 09	55,449 60	164,172 29	11,072,766 54



1 GEORGE V., A. 1911

STATEMENT showing the subsidies voted for Railways as to which Contracts have

SUBSIDIES VOTED.		RAILWAYS.		July 1, 1883, to June 30, 1903.
Authority.	Amount.			
	§ c.			§ cts.
		Brought forward.....		10,277,835 56
52 Vic., chap. 3	96,000 00	Quebec. Moutmorency and Charlevoix. Ry. Co. Quebec		96,000 00
56 "	375,000 00	St. Clair Froutier Tunnel Co., Ontario.....		375,000 00
52 "	57,600 00	Brantford, Waterloo and Lake Erie, Railway, Ontario		57,600 00
50-1 "	24	287,200 00 Port Arthur, Duluth and Western Railway, Ontario...		271,200 00
57-8 "	4			
51 "	3			
53 "	2			
50-1 "	24	192,000 00 Montreal and Ottawa Railway, Ontario.....		192,000 00
53 "	2			
54-5 "	8			
57-8 "	4	44,800 00 Cornwallis Valley Railway, N.S.....		44,800 00
50-1 "	24			
52 "	3			
52 "	3	320,000 00 } Ottawa, Northern and Western Ry., Quebec, formerly Ottawa and Gatineau Railway.....		292,320 00
57-8 "	6			
60-1 "	4			
47 "	8	83,612 54 } Central Railway, N.B.....		226,012 54
51 "	3			
52 "	3			
53 "	2	142,400 00 }		
57-8 "	4			
61 "	1			
62-3 "	1	361,270 00 Montreal and Western Railway, Quebec.....		361,270 00
53 "	2			
52 "	3			
57-8 "	4	128,000 00 Parry Sound Colonization Railway, Ontario.....		152,800 00
52 "	3			
52 "	3			
54-5 "	8	163,200 00 } Shuswap and Okanagan, Railway, B.C.....		163,200 00
53 "	2			
55-6 "	5			
53 "	2	89,600 00 } Tobique, Valley Railway N. B. ....		134,016 00
53 "	2			
53 "	2			
55-6 "	5	9,600 00 }		
53 "	2			
53 "	2			
53 "	2	112,000 00 Columbia and Kootenay Railway, B.C.....		88,800 00
55-6 "	5			
53 "	2			
53 "	2	35,200 00 Waterloo Junction Railway, Ontario.....		32,800 00
53 "	2			
53 "	2			
55-6 "	5	99,200 00 Orford, Mountain Railway, Quebec.....		84,800 00
53 "	2			
53 "	2			
55-6 "	5	57,600 00 } St. Lawrence and Adirondack Railway, Quebec.....		149,481 60
55-6 "	5			
56 "	2			
57-8 "	4	40,000 00 New Glasgow Iron, Coal and Railway Co., N.S.....		39,840 00
55-6 "	5			
56 "	2			
57-8 "	4	102,400 00 } United Counties Railway, Quebec.....		188,816 00
55-6 "	5			
55-6 "	5			
56 "	2	*21,600 00 Philipsburg Junction Ry. Quarry Company, Quebec...		23,712 00
57-8 "	4			
56 "	2			
57-8 "	4	*430,400 00 Ottawa, Arnprior and Parry Sound Railway, Ontario..		779,712 00
60-61 "	4			
55-6 "	5			
56 "	2	67,200 00 }		
57-8 "	4			
60-61 "	4			
55-6 "	5	38,400 00 } Montfort Colonization Railway, Quebec.....		167,440 00
57-8 "	4			
56 "	2			
55-6 "	5	48,000 00 Lotbinière and Mégantic Railway, Quebec... ..		96,000 00
57-8 "	4			
56 "	2			
55-6 "	5	48,000 00 Grand Trunk, Georgian Bay and Lake Erie Ry., Ont...		39,744 00
57-8 "	4			
56 "	2			
55-6 "	5	80,000 00 Canadian Pacific Ry., B.C., Revelstoke to Arrow Lake.		80,000 00
57-8 "	4			
55-7 "	5			
56 "	2	121,600 00 Nakusp and Slocan, Railway, B.C.....		117,760 00
57-8 "	4			
56 "	2			
55-7 "	5	89,600 00 Dominion Coal Company, N.S.....		87,808 00
56 "	2			
57-8 "	4			
56 "	2	22,400 00 Oshawa Railway and Navigation Company, Ontario...		22,400 00
57-8 "	4			
56 "	2			
57-8 "	4	*51,200 00 Tilsonburg, Lake Erie and Pacific Railway, Ontario...		113,431 43
56 "	2			
57-8 "	4			
57-8 "	4	*11,200 00 St. Stephen's and Milltown Railway, N.B.....		14,848 00
56 "	2			
57-8 "	4			
57-8 "	4	*38,400 00 Gulf Shore Railway Company, N.B.....		53,699 20
56 "	2			
57-8 "	4			
56 "	2	9,000 00 Cap de la Madeleine Railway, Quebec.....		7,424 00
56 "	2			
56 "	2			
56 "	2	32,000 00 Ontario, Belmont and Northern Ry. Company, Ont...		30,720 00
56 "	2			
56 "	2			
56 "	2	*32,000 00 Coast line of Nova Scotia, now Halifax and Yarmouth R.		150,400 00
56 "	2			
56 "	2			
56 "	2	*32,000 00 Ottawa and New York Railway Company, Ontario....		262,384 00
56 "	2			
56 "	2			
		Carried forward.....		15,276,074 38

SESSIONAL PAPER No. 20

been entered into and Payments made up to March 31, 1910—Continued.

PAYMENTS.							Total March 31, 1910.
1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
		86,016 00	103,312 00	385,981 09	55,449 60	164,172 29	11,072,766 54
							96,000 00
							375,000 00
							57,600 00
							271,200 00
							192,000 00
							44,800 00
118,368 00				4,243 20			414,931 20
							226,012 54
							361,270 00
							152,800 00
							163,200 00
							134,016 00
							88,800 00
							32,800 00
	38,250 00	45,764 50		24,123 00			192,942 50
							149,481 60
							39,840 00
							188,816 00
							23,712 00
							779,712 00
							167,440 00
							96,000 00
							39,744 00
							80,000 00
							117,760 00
							87,808 00
							22,400 00
4,000 00							117,431 48
							14,848 00
							53,699 20
							7,424 00
							30,720 00
9,600 00							160,000 00
							262,384 00
131,968 00	38,250 00	131,780 50	103,312 00	414,352 29	55,449 60	164,172 29	16,323,359 06

1 GEORGE V., A. 1911

STATEMENT showing Subsidies Voted for Railways as to which Contracts have

SUBSIDIES VOTED.		RAILWAYS.		July 1, 1883, to June 30, 1903.
Authority.	Amount.			
	\$ c.			\$ cts.
		Brought forward . . . . .		15,276,074 38
60-61 Vic., c. 5	3,630,000 00	Canadian Pacific Railway Co., B.C. (Crow's nest Pass).		3,381,774 00
60-61 " 4	500,000 00	Grand Trunk Ry. Co., 'Victoria Jubilee Bridge,' Que.		500,000 00
63 " 3				
" "	*	International Ry. of New Brunswick, formerly Restigouche and Western Ry. Co. . . . .		46,930 00
" "	*	East Rich-lieu Railway Co., Que-bee . . . . .		69,952 00
" "	*	South Shore Railway (Que-bee, Montreal and Southern)		119,290 19
" "	*	Pembroke Southern Railway, Ontario . . . . .		64,000 00
" "	*	Massawippi Valley Railway Co., Quebec. . . . .		5,376 00
" "	*	Inverness and Richmond Co., N.S., now Inverness Ry. and Coal Co. . . . .		311,375 53
" "	*	Canadian Northern Railway Co., Ontario, Manitoba and N.W.T. . . . .		1,534,976 00
" "	*	Canadian Pacific Railway Co. (Pipstone Branch). . . . .		160,000 00
" "	*	Central Ontario Railway Co., Ontario. . . . .		67,200 00
" "	*	Midland Railway Co., N.S. . . . .		360,450 30
62-3 Vic., c. 7	1,000,000 00	Quebec Bridge Co., Quebec. . . . .		374,353 33
63-4 " 8				
60-1 Vic., c. 4	212,500 00	St. Mary River Railway Co., N.W.T. . . . .		75,000 00
63-4 " 2				
1 Ed. VII, c. 7	*	{ Pontiac and Pacific and Ottawa and Gatineau Ry. Co. (Interprovincial Bridge over Ottawa River) . . . . .		212,500 00
1 " 7	*	Atlantic and Lake Superior Railway Quebec . . . . .		67,153 98
62-3 Vic., c. 7	*	Montreal and Province Line Railway, Quebec. . . . .		58,560 00
62-3 " 7	}	York and Carleton Railway, N.B. . . . .		18,336 00
63-4 " 8				
1 Ed. VII, c. 7	*	Algoma Central and Hudson Bay Railway, Ontario. . . . .		583,536 00
" "	*	Cape Breton Extension Railway, N.S. . . . .		65,280 00
" "	*	Can. Pacific Ry. Co. (Kootenay and Arrowhead Br'ch).		42,771 00
" "	*	" (Selkirk Branch). . . . .		83,200 00
" "	*	" (Dymont Branch). . . . .		23,336 00
" "	*	" (Waskada Branch). . . . .		50,480 00
" "	*	Manitoulin and North Shore Railway Co., Ont. . . . .		32,000 00
" "	*	Bay of Quinté Railway Ont. . . . .		19,200 00
" "	*	Bruce Mines and Algoma Railway, Ont. . . . .		28,800 00
" "	*	Magnetawan River Railway Co., Ont. . . . .		3,552 00
" "	*	The Canadian Northern Quebec Ry., formerly Chateauguay and Northern Ry., Quebec . . . . .		
" "	*	Canadian Pacific Ry. Co. (Pheasant Hill Branch). . . . .		
" "	*	Halifax and Southwestern Railway Co., N.S. . . . .		
" "	*	Northern Colonization Railway Co., Quebec. . . . .		
" "	*	New Brunswick Coal and Railway Co., N.B. . . . .		
" "	*	Schomberg and Aurora Railway Co., Ont. . . . .		
" "	*	Lindsay, Bobcaygeon and Pontypool Ry. Co., Ont. . . . .		
" "	*	Middleton and Victoria Beach Ry. Co., N.S. . . . .		
" "	*	Beersville Coal and Railway Co., N.B. . . . .		
3 Ed. VII, c. 57	*	Nicola, Kamloops and Similkameen Coal and Ry. Co. . . . .		
4 " 34	*	Canadian Pacific Railway (Staynerville Branch). . . . .		
6 " 43	*	Klondike Mines Railway . . . . .		
6 " 43	*	Kettle River Valley Ry. Co., B.C. . . . .		
6 " 43	*	Colchester Coal and Ry. Co., N.S. . . . .		
3 " 57	*	Minudie Coal Co., N.S. . . . .		
6 " 43	*	Atlantic, Quebec and Western Ry. Co., Quebec. . . . .		
6 " 43	*	Napierville Jct. Ry. Co., Quebec. . . . .		
6-7 " 40	*	Edmonton, Yukon and Pacific Ry. Co., Alberta. . . . .		
6-7 " 40	*	Canadian Northern Ontario Ry. Co., formerly James Bay Ry. Co., Ontario . . . . .		
		Carried forward. . . . .		23,657,402 71

† Of this amount \$16,164.43 were in connection with subsidy to Montreal and Sorel Railway.

SESSIONAL PAPER No. 20

been entered into and Payments made up to March 31, 1910—Continued.

PAYMENTS.							Total March 31, 1910.
1903-1904.	1904-1905.	1905-1906.	1906-1907.	1907-1908.	1908-1909.	1909-1910.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
131,968 00	38,250 00	131,780 50	103,312 00	414,352 29	55,449 60	164,172 29	16,323,359 06
							3,404,726 00
							500,000 00
30,208 00		50,070 07	51,200 00		189,849 60	187,494 40	555,752 07
					43,414 55		69,952 00
80,494 16	3,456 46					184,320 00	430,975 36
							64,000 00
							5,376 00
57,170 44							368,545 97
374,156 00							1,909,132 00
							160,000 00
				76,861 36	35,404 64		179,466 00
1,750 00			4,967 70	31,892 40			399,060 40
							374,353 33
40,960 00	32,134 00						148,094 00
							212,500 00
37,000 00	42,336 86		‡1,521 82				144,969 02
							58,560 00
				14,560 00			32,896 00
	341,440 00						924,976 00
117,120 00						14,400 60	196,800 00
17,842 85	4,176 15	89,076 00					153,866 00
							83,200 00
							22,336 00
13,520 00							64,000 00
							32,000 00
49,920 00			72,602 45				141,722 45
	25,120 00						53,920 00
							3,552 00
191,595 00		116,000 00	84,224 75				391,819 75
378,624 00	56,576 00						435,200 00
185,422 00	291,842 00	176,512 00	268,107 20	316,567 73			1,238,450 93
58,384 00		75,376 00			68,320 00	153,120 00	355,200 00
48,000 00							48,000 00
46,144 00							46,144 00
	185,173 06						185,173 06
	47,789 00	50,303 80	27,667 20				125,760 00
	20,736 00						20,736 00
		110,592 00		190,208 00			300,800 00
			9,600 00	3,424 00			13,024 00
			96,000 00	101,184 00			197,184 00
				97,771 52			97,771 52
				12,800 00			12,800 00
				18,544 00			18,544 00
				64,000 00	92,672 00	208,896 00	365,568 00
				173,440 00			173,440 00
				91,200 00			91,200 00
		651,264 00	420,608 00	244,224 00	556,864 00	250,982 40	2,123,942 40
1,860,278 45	1,089,029 53	1,450,974 37	1,136,767 48	1,851,029 30	1,041,974 39	1,163,385 09	32,087,456 23

† Amount actually paid after deductions amounting to \$1,521.82 made in 1905-06 (being for refunds, duplicate claims, &c.) from the total of \$146,490.84, previously reported, for which cheques had issued.

‡ Refunds for duplicate claims and claims still unpaid.

1 GEORGE V., A. 1911

## STATEMENT showing Subsidies voted for Railways as to which Contracts

SUBSIDIES VOTED.		RAILWAYS.	July 1, 1883 to June 30, 1903.	
Authority.	Amount.		§	cts.
	§ cts.		§	cts.
		Brought forward.....	23,657,402	71
7-8 Ed. VII, c.63	*	Maritime Coal and Ry. Co.....		
7-8 " 63	*	St. Mary and Western Ontario Ry. Co.....		
7-8 " 63	*	North Shore Ry. Co.....		
7-8 " 63	*	St. Maurice Valley Ry. Co.....		
7-8 " 63	*	Grand Trunk Pacific Ry. Co.....		
6 " 43	*	Canadian Pacific Ry. Co., Teulon to Icelandic River....		
7-8 " 63	*	Canadian Pacific Ry. Co., Moosejaw northwesterly....		
			23,657,402	71
	186,600 annually for 20 years.	Atlantic and Northwestern Railway.....	2,425,800	00
37 Vic., ch. 14	} 1,525,250 00	Canada Central Railway.....	1,525,250	00
46 " 2				
47 " 8	} 1,500,000 00	Canadian Pacific, extension.....	1,500,000	00
48-9 " 58				
		Totals.....	29,295,052	71

\* 60-61 Victoria, Cap. 4, 62-63 Victoria, Cap. 7, 63-64 Victoria, Cap. 8, 1 Edward VII., Cap. 7, 40, and 7-8 Edward VII., Cap. 63, authorize \$3,200 per mile subsidy if the cost does not average of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not

DEPARTMENT OF RAILWAYS AND CANALS,  
OTTAWA, July 23, 1910.

SESSIONAL PAPER No. 20

have been entered into and Payments made up to March 31, 1910 — *Concluded.*

PAYMENTS.							Total March 31, 1910.
1903-1904.	1904-1905	1905-1906.	1906-1907.	1907-1908.	1908-1909.	1909-1910.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1,860,278 45	1,089,029 53	1,450,974 37	1,136,767 48	1,851,029 30	1,041,974 39	1,163,385 09	32,087,456 23
.....	.....	.....	.....	.....	3,200 00	.....	3,200 00
.....	.....	.....	.....	.....	67,344 00	.....	67,344 00
.....	.....	.....	.....	.....	6,880 00	.....	6,880 00
.....	.....	.....	.....	.....	112,640 00	.....	112,640 00
.....	.....	.....	.....	.....	367,249 00	550,551 96	367,249 00
.....	.....	.....	.....	.....	.....	30,800 00	30,800 00
.....	.....	.....	.....	.....	.....	303,360 00	303,360 00
1,860,278 45	1,089,029 53	1,450,974 37	1,136,767 48	1,851,029 30	1,599,287 39	2,048,097 05	34,695,866 28
186,600 00	186,600 00	186,600 00	186,600 00	186,600 00	186,600 00	.....	3,732,000 00
.....	.....	.....	.....	.....	.....	.....	1,525,250 00
.....	.....	.....	.....	.....	.....	.....	1,500,000 00
2,046,878 45	1,275,629 53	1,637,574 37	1,323,367 48	2,037,629 30	1,785,887 39	2,048,097 05	41,450,116 28

3 Edward VII., Cap. 57, 4 Edward VII., Cap. 34, 6 Edward VII., Cap. 43, 6-7 Edward VII., Cap. more than \$15,000 per mile, if over that amount, a further sum of fifty per cent on so much exceeding in the whole the sum of \$6,400 per mile.

W. C. LITTLE,  
*Accountant.*





PART II

STATEMENTS

OF THE

DEPARTMENTAL SOLICITOR

FOR THE YEAR 1909-10

SHOWING

- (1) Money subsidy agreements with railway companies.
- (2) Contracts entered into during the year.
- (3) Leases of water-powers and properties granted.
- (4) Property conveyed by the Crown and lands conveyed to the Crown.
- (5) Damages released.

1 GEORGE V., A. 1911

## SUBSIDY AGREEMENTS for the construction of Railways

No. of Contract.	Date of Signature.	Railway Company.	Line of Railway or Work Subsidized.	AUTHORITY FOR EXECUTION.	
				Act of Parliament.	Order in Council.
	1909.				1909.
17992	Oct. 20 . . .	Atlantic, Quebec and Western Ry. Co.	25 bridges on line of company's railway.	Can., 1908, c. 63.	July 29 . . .
17631*	April 5 . . .	Canadian Northern Quebec Ry. Co.	From or from near Garneau Jct. to Quebec, with branch lines towards Quebec bridge.	Can., 1908, c. 63.	Feb. 1 . . .
17792	June 28 . . .	" "	From Hawkesbury to Ottawa, 60 miles.	Can., 1908, c. 63.	March 9 . . .
17802†	July 7 . . .	Cape Breton Ry. Co., Ltd.	From Point Hawkesbury or Point Tupper on Strait of Canso to St. Peters.	Can., 1908, c. 63.	May 15 . . .
17831	July 22 . . .	Matane and Gaspé Ry. Co.	From point at or near Ste. Flavie on I.C. Ry. to Matane in lieu of subsidy granted by c. 43 of 1906.	Can., 1908, c. 63.	April 16 . . .
					1908.
18053‡	Nov. 23 . . .	The Manitoulin and North Shore Ry. Co.	(a) From a point on the said line of railway, between Little Current and Sudbury westerly towards the Algoma Central and Hudson Bay Railway, 100 miles; (b) from Little Current crossing C.P.R. at or near Stanley and thence to Sudbury, 64 miles. (c) from point near Sudbury, northerly 30 miles in lieu of the subsidies granted by Cap. 43 of 1906, S. 1, item 1, not exceeding in all 194 miles.	Can., 1908, c. 63.	Nov. 21 . . .
					1909.
18069	Dec. 7 . . .	Quebec Central Ry. Co.	From St. George to or towards St. Justine.	Can., 1908, c. 63.	July 29 . . .
18082	Dec. 14 . . .	Tobique & Campbellton Ry. Co.	From point on Canadian Pacific Railway at or near Plaster Rock to Riley Brook.	Can., 1908, c. 63.	Nov. 1 . . .
	1910.				
18114	Jan. 10 . . .	Quebec and Lake St. John Ry. Co.	From end of 35th mile of La Tuque branch on St. Maurice river, to La Tuque Falls.	Can., 1908, c. 63.	Dec. 9 . . .

\*Assigned to Canadian Northern Ontario Railway Company by Assignment No. 17931, dated Aug. 30, 1909.

†Cancels and supersedes No. 13948 of Sept. 15, 1900.

‡Cancels and supersedes No. 14690 of May 15, 1902.

SESSIONAL PAPER No. 20

entered into during the Fiscal Year ended March 31, 1910.

AMOUNT OF SUBSIDY.		Number of Miles Subsidized.	Maximum Grade Feet per Mile.	Radius of Curvature not less than	Width of Clearing each Side.	Width of Cutting.	Embankment.	Steel Rails, lbs. per lineal yard.	Date for Completion.
Per Mile.	Not exceeding								
\$	\$		Feet.	Feet.	Feet.	Feet.	Feet.	Lbs.	
	250,000								Aug. 1, 1912
3,200	6,400	83	152.80	955	50	20	15	56	July 31, 1910
3,200	6,400	60	26	955	50	20	15	56	Aug. 1, 1910
3,200	6,400	31	80	819	50	20	15	56	Dec. 31, 1910
3,200	6,400	38	42	955	50	20	15	56	Aug. 1, 1912
3,200	6,400	194	79	12°	50	20	15	56	Nov. 30, 1911
3,200	6,400	30	63	955	50	20	15	56	Dec. 1, 1910
3,200	6,400	28	80	819 or 7°	50	20	15	56	Dec. 1, 1911
3,200	6,400	5	152.80	717	50	20	15	56	Sept. 1, 1910

H. F. ALWARD,  
Departmental Solicitor.

## CONTRACTS entered into during the Fiscal Year ended March 31, 1910.

## INTERCOLONIAL RAILWAY.

No. of Contract.	Date of Signature.	Contractors.	Description.
1909.			
17625	April 1.	New Brunswick Wire Fence Company, Ltd.	Erection of fencing on line of Intercolonial Railway.
17632	" 16.	Wm. Hood & Sons.	Repairs to railway between Indiantown and Blackville
17653	" 23.	Rhodes, Curry & Company, Ltd.	Deliver 150 box cars.
17673	" 16.	The Vaughan Electric Company, Ltd.	Install fire alarm box, &c., for yard station grain elevators and sheds at St. John, N.B.
17689	May 4.	Farquhar Brothers.	Electric wiring of passenger station, &c., at Maccan, N.S.
17690	" 4.	Bahcock & Wilcox, Ltd.	Complete installation of present 500 h.p., and install additional Bahcock boiler of 500 h.p., &c.
17693	" 4.	New Brunswick Telephone Company	Replacing of telephone instruments in the several stations and offices of the Intercolonial Railway in the towns and cities along company's long line system in New Brunswick.
17694	" 5.	Rhodes, Curry and Company, Ltd.	Deliver 2,500 33-inch car wheels, 5-in. core.
17704	" 12.	Canada Foundry Company, Ltd.	Supply, &c., 15-inch lap-welded steam heater for the boilers in power house at Moncton, N.B.
17705	" 10.	Canada Iron and Foundry Company, Ltd.	Deliver 1,500 33-inch car wheels, 4½-inch core.
17707	" 12.	Emil A. Wallberg.	Supply, &c., fan system of heating for machine shop, erecting shop, &c., at Rivière du Loup, Que.
17709	" 12.	W. I. Snook & Company.	Electric wiring of round house, &c., at Newcastle, N.B.
17710	" 25.	Jno. L. Richardson & Company.	Deliver 1,000 33-inch car wheels, 5-inch core.
17738	June 3.	A. A. Portugais.	Install hot water heating plant at Amqui, Que.
17786	" 11.	A. Charles Thompson.	Install plumbing and heating system in Iona station, N.S.
17787	" 21.	Wm. Gallas (The Shade Electric Co.)	Electric wiring of new train service building at Chaudière Junction, Que.
17790	" 24.	Crossen Car Mfg. Co. of Cohourg.	Deliver three (3) baggage cars.
17791	" 26.	Wm. A. and John M. Skidd.	Install ten 16 c.p. incandescent lamps at new freight shed at Bathurst, N.B.
17823	July 23.	F. A. Ronan & Company	Erect fencing on Intercolonial Railway in district No. 10, Dartmouth to Windsor.
17827	" 22.	Montreal Steel Works, Ltd.	Install mechanical interlocking switch and signal plant with electric lock on machine at Buctouche Junction, on line of Intercolonial Railway.
17869	Aug. 7.	George H. Evans.	Supply, &c., one 10-ton, 3 motor electric travelling crane in Intercolonial Railway shops at Rivière du Loup, Que.
17874	" 10.	W. C. Wetmore & Company.	Install hot water heating apparatus in station building at Maccan, N.S.
17917	Sept. 1.	Hiram G. V. Farrar.	Electric wiring freight shed at Campbellton, N.B.
17918	Aug. 4.	Chappell Bros. & Co., Ltd.	Addition to freight shed at Merigomish, N.S.
17919	" 1.	Goulette & Laviolette.	Construct and erect freight shed at Loggieville, N.B.
17920	" 1.	S. E. Bowser & Company, Ltd.	Supply and install necessary equipment in Intercolonial Railway oil houses at Kempt Road yards, Halifax, N.S.
17921	" 1.	Fred Forrester.	Erect, &c., combined baggage, coal and oil building at Hampton, N.B.
17922	" 1.	Florian Dumont.	Erect, &c., combined baggage, coal and oil building at Montmagny, Que.
17923	" 1.	T. A. Barnhill & Company.	Erect rest house at Point Tupper.
17924	" 1.	C. E. Fish.	Extension to water system at Harcourt, N.S.
17925	" 1.	Frank W. Wilson.	Extension of water system at Sussex, N.B.
17945	" 22.	Preston Car & Coach Co., Ltd.	Deliver one (1) baggage car.
17955	" 25.	H. J. McManus.	Extension to water works at St. Charles Junction and Little Metis, Que.
17956	" 18.	Cloutier & Gaudreau.	Erect combined station, &c., at Carmel, Que.
17963	Oct. 1.	Zenon Ouellet.	Erect addition to existing freight shed and baggage room at St. Pascal, Que.
17965	" 5.	Zenon Ouellet.	Construct combined station and dwelling, combined freight and baggage building and a combined coal oil and privy building at Daveluyville, Que.
17986	" 11.	Chappel Bros. & Co., Ltd.	Erect addition to freight shed on wharf at North Sydney, C.B.
17999	" 28.	Frank W. Wilson.	Erect 50,000 gallon water tanks at Windsor Junction, N.S., Rogersville and Beaver Brook, N.B., and Cedar Hall, Que.
18009	" 29.	Oxford Foundry & Machine Co.	Addition to freight office and installation of hot water heating in freight shed at New Glasgow.

## SESSIONAL PAPER No. 20

CONTRACTS entered into during the Fiscal Year ended March 31, 1910—Continued.

## INTERCOLONIAL RAILWAY.

No. of Contract.	Date of Signature.	Contractors.	Description.
1909.			
18025	Nov. 8.	H. Boulay et Cie.....	Erect freight shed, &c., at Lac au Saumon, Que.
18026	" 2.	Dumont & McLean.....	Construct addition of six (6) stalls to brick engine house at Rivière du Loup, Que.
18033	" 8.	Corporation of the Town of Stellarton.	Supply water.
18041	" 17.	Provincial Steel Company.....	For the reolling of used rails weighing 110 lbs. per yard His Majesty furnishing the used rails.
18042	Nov. 17.	H. Boulay & Cie.....	Erect and complete extension to existing freight shed at St. Alexis, Que.
18052	" 20.	A. E. Hamilton.....	Erect car repair shop at St. John, N.B.
18070	Dec. 7.	Rhodes, Curry & Company, Ltd.....	Delivery of 5,500, 33 in. car wheels.
18071	" 11.	Wm. Watson.....	Install toilet accommodation and plumbing in station at Dorchester, N.B.
18085	" 14.	Rhodes, Curry & Co.....	Deliver six (6) 80,000 lbs. box-baggage cars.
18104	" 27.	H. G. Hagen.....	Construct and complete 6 in. terra cotta drain for station building at Dorchester, N.B.
1910.			
18112	Jan. 7.	Canadian Locomotive Company, Limited.	10 simple consolidation locomotives.
18119	" 10.	Henry Swim.....	Erect, &c., combined station and dwelling at Cross Creek station, county of Northumberland, N.B.
18183	" 29.	Allis-Chalmers Bullock, Ltd.....	Supply and install electric power plant in Tower bouse at Rivière du Loup, Que.
18210	Feb. 15.	Lacbance & Fils.....	Addition to freight shed and enlarging of office at Rivière du Loup, Que.
18211	" 15.	Montreal Locomotive Works, Limited.	Deliver one (1) 'Pacific Type' passenger locomotive.
18239	Oct. 8.	Great Northwestern Telegraph Company.	For repeating of messages at Quebec.
18240	March 7.	Laura M. McManus.....	Extension of water service pipe line and construction of dam at Cedar Hall, Que.
18250	" 15.	Renous Bridge Lumber Company, Limited.	Erect combined passenger station and freight room at Renous, N.B.
18253	" 15.	Louis E. Couture.....	Construction of siding at Lévis, Que.
18254	" 19.	Laura M. McManus.....	Erect fencing from Campbellton, &c.
18271	Feb. 7.	City of Halifax.....	Supply water at Richmond street station, Deep Water Terminus and Willow Park yards, all in Halifax.

## PRINCE EDWARD ISLAND RAILWAY.

1909.			
17624	April 1.	John M. Clark.....	Erect extension to railway wharf at Souris.
1908.			
17675*	Aug. 15.	E. A. Wallberg.....	Erection of power house and a chimney at Charlottetown, P.E.I.
1909.			
17826	July 23.	Thomas Campbell.....	Erect extension to railway wharf at Charlottetown, P.E.I.
17832	" 26.	J. M. Clark.....	Erect freight shed on wharf at Charlottetown, P.E.I.
17926	Sept. 1.	Whitehead Bros.....	Construct branch line of railway from Harmony station to Elmira.
17944	" 18.	D. R. Morrison & P. G. Clark.....	Construct 20-stall brick engine bouse, turntable foundation, &c., at Charlottetown, P.E.I.
18043	Nov. 17.	Canada Foundry Co., Ltd.....	Deliver one (1) 55-foot steel through turntable at Charlottetown, P.E.I.

## QUEBEC BRIDGE.

1910.			
18113	Jan. 10.	M. P. and J. T. Davis.....	Substructure of Quebec bridge.

\* Too late for last year's report.



1 GEORGE V., A. 1911

CONTRACTS entered into during the Fiscal Year ended March 31, 1910—*Continued.*

## BEAUHARNOIS CANAL.

No. of Contract.	Date of Signature.	Contractors.	Description.
	1909.		
17981	Oct. 5..	Alfred Cossette.....	Crushed stone for macadamizing portion of public road on Hungry Bay Dyke, county of Beauharnois, Que.

## CHAMBLY CANAL.

	1909.		
18101	Dec. 27..	Phoenix Bridge and Iron Works, Limited.	Structural steel work for new power house at Chambly Canton, Que.

## CORNWALL CANAL.

	1909.		
18038	Nov. 10..	Gordon R. Phillips.....	Extension of concrete wall across wash-out in south bank of canal at lock No. 18.
18242	March 15..	Canada Cement Company, Limited.	Deliver 1,000 barrels of cement.

## FARRAN'S POINT.

	1910.		
18248	March 15..	Canada Cement Company, Limited.	Deliver 3,350 barrels of cement for Ontario St. Lawrence Canals.

## GALOPS CANAL.

	1909.		
17868	Aug. 6..	McCoy and Wilford.....	Removal of old wooden piers and bridges above and below lock 27 of canal, and rebuild same with concrete and steel.

## LACHINE CANAL.

	1909.		
17766	June 1..	S. Paul.....	Furnish tug for towing of vessels through lock No. 2.
17825	July 15..	Canada Foundry Company, Limited.	Supply and erect roller lift bridge over canal.
	1910.		
18247	Mar. 15..	Canada Cement Company, Limited.	Deliver 34,750 barrels of cement.
18280	" 23..	M. Connolly.....	Construct concrete walls to improve the approach to the St. Gabriel locks.

## RIDEAU CANAL.

	1909.		
17706	May 12..	Hurdman Lumber Company.....	Supply timber for 1909 and 1910.
17822	July 20..	Fallon Brothers.....	Construct abutments and approaches of highway bridge at Kingston Mills, Ont.
17824	" 22..	Hamilton Bridge Works Company, Limited.	Erect highway bridge at Kingston Mills lock station.
18023	Nov. 4..	International Marine Signal Company, Limited.	To lay rectangular steel plate covering required on timber retaining dam at Black Rapids lock station.
	1910.		
18244	Mar. 15..	Canada Cement Company, Limited.	Deliver 1,500 barrels of cement.

SESSIONAL PAPER No. 20

CONTRACTS entered into during the Fiscal Year ended March 31, 1910—*Continued.*

## SAULT STE. MARIE CANAL.

No. of Contract.	Date of Signature.	Contractors.	Description.
1909.			
17957	Sept. 18..	J. J. Collins.....	Rebuild north pier of upper entrance to canal.
17992	Oct. 16..	Roger Miller & Sons.....	Construct 7 pairs of gates for lift lock of canal.
17998	" 23..	J. J. Collins.....	Deepen and widen channel way of upper entrance of canal.
1910.			
18249	Mar. 15..	Canada Cement Company, Limited.	Deliver 250 barrels of cement.

## SOULANGES CANAL.

1909.			
17736	June 3..	The Hall Engineering Works.....	Construct, &c., 2 winches on deck of gate lifter.

## TRENT CANAL.

1909.			
17703	May 7..	Herbert B. Collier.....	Deliver 96 operating machines, 96 sets of anchorage fittings and 96 pivots for lock gates.
17938	Sept. 10..	William Hamilton, Company Limited.	Deliver metal-works for lock gates of Rosedale and Lindsay locks.
18086	Dec. 14..	Bishop & Buchanan.....	Concrete metal-works for lock gates of Rosedale and Lindsay locks.
1910.			
18245	Mar. 15..	Canada Cement Company, Limited.	Deliver 102,000 barrels of cement.

## WELLAND CANAL.

1909.			
17616	April 1..	David Walker and Wm. Walker....	Repair foundation at lock No. 2.
17746	June 9..	David Walker.....	Placing of stone protection along certain portions of summit level of canal, between Thorold and Port Colborne, Ont.
17959	Sept. 23..	Hamilton Bridge Works Company, Limited.	Erection of steel highway bridge over raceway near old lock No. 2 of Old Welland canal, St. Catharines, Ont.
1910.			
18118	Jan. 10..	M. Beatty & Sons, Limited.....	Construct steel pontoon gate lifter.
18246	Mar. 15..	Canada Cement Company, Limited.	Deliver 800 barrels of cement.

H. F. ALWARD,  
*Departmental Solicitor.*

## WATER POWER and other Public Property leased by the Department of

## INTERCOLONIAL

No. of Lease.	Date of Signature.	Lessee.	Lands or Rights demised.
	1909.		
17672	April 26	Transcontinental Railway Commissioners.	Re granting permission to cross Intercolonial Railway by Transcontinental Railway at mileage 4.65, county of Lévis, Que.
17754	June 9	Emile Paturel.	Land at Point du Chene, N.B.
17801	" 30	James H. Adams.	Land at Glen Emma, Bonaventure county, Que.
17838	July 23	Albert Cowperthwaite.	Privilege to lay, &c., 1 inch iron pipe across lands and under tracks of railway about 2 miles north of Durham station.
17870	Aug. 7	Robert Finley.	Land at Aulac, N.B.
17927	Sept. 1	Geo. Cooper and Jas. P. Cunningham.	Land at Shediac station, N.B.
17932	" 10	Louison Lumber Co., Ltd.	Land at Nashes Creek, Restigouche county, N.B.
17934	" 1	E. A. Goodwin.	Privilege to lay, &c., a 14-in. gas pipe along railway lands at Moncton, N.B.
17935	" 10	Angus McLellan.	Land on Dalhousie St., Campbellton, N.B.
17946	" 22	Starr Mfg. Co., Ltd.	Privilege to lay, &c., 8-in. terra cotta sewer pipe across lands and tracks of railway at Dartmouth, N.S.
17967	" 29	Ronald Chisholm.	Land at Yankee Grant, N.B.
17988	Oct. 9	Robert Crawford.	The right, &c., to lay, &c., 6-in. terra cotta sewer pipe across Intercolonial Railway right of way at Campbellton, N.B.
17989	" 11	S. H. Dimock.	To erect, &c., telephone line over and across Intercolonial Railway right of way about 3 miles east of Campbellton, N.B.
18002	" 23	Transcontinental Railway Commissioners.	Right and privilege to lay 6 in. cast iron water pipe across Intercolonial Railway right of way at McGivney's Junction, N.B.
18004	" 23	James Jocelyn.	Privilege to lay and maintain 1 in. water pipe across lands and under tracks of the Intercolonial Railway at Antigonish, N.S.
18012	" 29	J. E. Morissette.	Land at Assametquaghan, Que.
18027	Nov. 8	MacKay Milling Co., Ltd.	Land at North Sydney, C.B., N.S.
18031	" 9	Corporation of the Town of Fraserville, Que.	Land at Fraserville, Que.
18046	" 17	Wilfred Irvine.	Land at Assametquaghan, county of Bonaventure, Que.
18056	" 23	British Nathaniel Tryan Underhill.	Two parcels of railway land at Underhill, county of Northumberland, N.B.
18063	" 26	Ernest Charette.	Land at Rivière du Loup, county of Temiscouata, Que.
18073	Dec. 1	Brown Machine Co., Ltd.	Lay 6 in. water pipe at New Glasgow, N.S.
18074	Nov. 24	Stephen Bros.	Land at Windsor Junction, N.S.
18083	Dec. 14	Jas. D. LeBlanc.	Land at Moncton, N.B.
18084	" 14	Arch. Fraser.	Land at Falleh Station, county of Colchester, N.S.
18089	" 18	The MacKay Mining Co., Ltd.	Land at Sydney, N.S.
18099	" 9	Imperial Oil Co., Ltd.	Privilege to pass and repass over strip of land on Campbell Road, city and county of Halifax, N.S.
18100	Sept. 15	Imperial Oil Co., Ltd.	Land and right of way over 906 square feet of land on Campbell Road, city and county of Halifax, N.S.
*18102	Dec. 27	Spence McLean.	Land on west side of Stanley St., St. John, N.B.; and sale of dwelling house thereon.
	1910.		
18116	Jan. 7	R. W. Scribner.	Land at Anagance, Kings county, N.B.
18173	" 22	Albert Caron.	Land at St. Fabien, Rimouski.
18174	" 22	Blaise Vaillancourt.	Land at St. Fabien, Rimouski.
18175	" 22	Alphonse Leclerc.	Land at St. Fabien, Rimouski.
18176	" 22	Thos. Belanger.	The right, &c., to lay 1 in. galvanized iron water pipe across railway right of way, about one-half mile west of St. Simon, county of Rimouski, Que.
18177	" 22	Sixte Belanger.	Land at St. Fabien, county of Rimouski, Que.
18178	" 22	Antoine Ouellet.	Land at St. Fabien, county of Rimouski, Que.
18179	" 22	Theophile Michaud.	Land at St. Fabien, county of Rimouski, Que.
18180	" 22	Joseph Michaud.	Land at St. Fabien, county of Rimouski, Que.
18184	" 22	Town of Truro.	Privilege to lay, &c., 18 in. sewer pipe under tracks of railway on line of Cottage St.

\* Price of house \$450.

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1910.

RAILWAY.

Area.	Amount of Water Power.	Term.	Commencement of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each Year.	First Instalment Due.
				\$	cts.	
1,667½ sq. ft.		During pleasure.	April 1, 1909.	1 00	April 1.	April 1, 1909
547 sq. ft.			May 1, 1909. Jan. 1, 1909.	1 00 1 00	May 1. Jan. 1.	May 1, 1909 Jan. 1, 1909
5,000 sq. ft.		"	May 1, 1909. Dec. 1, 1908.	1 00 2 00	May 1. Dec. 1.	May 1, 1909 Dec. 1, 1908
6,824 sq. ft.		"	Nov. 1, 1906	5 00	Nov. 1.	Nov. 1, 1906
1,210 sq. ft.		"	Feb. 1, 1909.	1 00	Feb. 1.	Feb 1, 1909
2.07 acres.		"	July 1, 1909. Aug. 1, 1909.	1 00 10 00	July 1. Aug. 1.	July 1, 1909 Aug. 1, 1909
465 sq. ft.		"	July 1, 1909. " 1, 1909.	1 00 1 00	July 1. " 1.	July 1, 1909 " 1, 1909
		"	Sept. 1, 1909.	1 00	Sept. 1.	Sept. 1, 1909
		"	" 1, 1909.	1 00	" 1.	" 1, 1909
		"	" 1, 1909.	1 00	" 1.	" 1, 1909
		"	" 1, 1909.	1 00	" 1.	" 1, 1909
10,000 sq. ft.		"	July 1, 1909.	1 00	July 1.	July 1, 1909
0.1891 acre.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
903 sq. ft.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
0.22 acre.		"	Sept. 1, 1909.	1 00	Sept. 1.	Sept. 1, 1909
7,925 sq. ft.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
3,893 sq. ft.		"	Oct. 1, 1909.	4 00	Oct. 1.	Oct. 1, 1909
		"	Nov. 1, 1909.	1 00	Nov. 1.	Nov. 1, 1909
0.22 acre.		"	Oct. 1, 1909.	1 00	Oct. 1.	Oct. 1, 1909
120 sq. ft.		"	Nov. 1, 1909.	1 00	Nov. 1.	Nov. 1, 1909
6,409 sq. ft.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
4,440 sq. ft.		"	" 1, 1909.	5 00	" 1.	" 1, 1909
		21 yrs., renewable	Jan. 1, 1909.	1 00	Jan. 1.	Jan. 1, 1909
1,952 sq. ft.		During pleasure.	" 1, 1009.	2 00	" 1.	" 1, 1909
2,960 sq. ft.		"	Nov. 1, 1909.	5 00	Nov. 1.	Nov. 1, 1909
750 sq. ft.		"	Dec. 1, 1909.	1 00	Dec. 1.	Dec. 1, 1909
0.137 acre.		"	Nov. 1, 1909.	1 00	Nov. 1.	Nov. 1, 1909
0.126 acre.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
0.085 acre.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
		"	" 1, 1909.	1 00	" 1.	" 1, 1909
0.116 acre.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
0.135 acre.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
0.007 acre.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
0,054 acre.		"	" 1, 1909.	1 00	" 1.	" 1, 1909
		"	July 1, 1909.	1 00	July 1.	July 1, 1909

\* Cancelled.

1 GEORGE V., A. 1911

## WATER POWER and other Public Property leased by the Department of

## INTERCOLONIAL

No. of Lease.	Date of Signature.	Lessee.	Lands or Rights demised.
1910.			
18186	Jan. 25..	Imperial Oil Company.....	Privilege to lay, &c., 9 wrought iron pipes across railway right of way at Fairview, N.S.....
18212	Feb. 15..	Trustees Y.M.C.A. of Campbellton.	Land at Campbellton, N.B.....
18213	" 15..	George St. Pierre & Co.....	Land at Rivière du Loup, Temiscouata county, Que....
18214	" 15..	Sterling L. Stockton.....	Land at Petitcodiac, N.B.....
18241	March 7..	The Dartmouth Ferry Commission	Privilege to lay, &c., 2-12 in. sewer pipes, at Ferry Slip Crossing, Dartmouth, N.S.....
18255	" 18..	Corporation of the City of Sydney.	Right to lay, &c., 20 in. salt glazed vitrified clay sewage pipe over railway right of way at Sydney, C.B.....
18256	" 23..	Emile Paturel.....	Land at Point du Chêne, Westmorland county, N.B.....
18273	" 30..	The Swedish-Canadian Lumber Co., Ltd.	Land at Kent Junction, N.B.....
18274	" 30..	J. H. Stewart.....	Land at Antigonish, N.S.....

## PRINCE EDWARD

1909.			
17840	July 26..	Dept. Marine and Fisheries.....	Land in Souris, county of Kings, P.E.I.....
18005	Oct. 20..	J. T. Arbing.....	Land in lot No. 67, Queen's county, P.E.I.....
18006	" 20..	Benedict Richard.....	Land Lot No. 1, county of Prince, P.E.I.....

## BEAUHARNOIS

1909.			
18078	Dec. 11..	Valleyfield Electric Co., Ltd.....	Part lot S30 on Grande Isle de Beauharnois, town Valleyfield, Que., and surplus water from River St. Lawrence at foot of St. Francis lake, &c.....

## CORNWALL

1909.			
17982	Oct. 7..	Montreal and Cornwall Nav. Co..	Land on south side of Water street, Cornwall, Ont.....
17983	" 7..	Richelieu and Ontario Nav. Co..	Land on south side of Water street, Cornwall, Ont.....

## GALOPS

1909.			
17783	June 17..	Customs Department.....	Certain buildings at Old Lock No. 26, Cardinal, Ont.....
17785	" 23..	W. E. Burchill, Hugh McArthur and Jas. W. Leacy.	Two parcels of canal reserve, village of Cardinal, township of Edwardsburg, county Grenville, Ont.....
17933	Sept. 1..	George Robinson.....	Land and land covered with water on north side of public highway on west half lot 30, concession 1, township of Matilda, county of Dundas, Ont.....
17947	" 22..	Mahlon F. Beach.....	Privilege to erect, &c., electric transmission line at the village of Iroquois.....

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1910—Continued.

RAILWAY—Concluded.

Area.	Amount of Water Power.	Term.	Commencement of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each Year.	First Instalment Due.
				\$      cts.		
.....		During pleasure.	May 1, 1909.	1 00	May 1..	May 1, 1909
0.29 acres.....		21 yrs., renewable	Oct. 1, 1909.	10 00	Oct. 1..	Oct. 1, 1909
5.540 sq. ft.....		During pleasure..	" 1, 1909.	5 00	" 1..	" 1, 1909
1,800 sq. ft.....		" ..	July 1, 1909.	10 00	July 1..	July 1, 1909
.....		" ..	Dec. 1, 1909.	1 00	Dec. 1..	Dec. 1, 1909
.....		" ..	" 1, 1909.	1 00	" 1..	" 1, 1909
3,197 sq. ft.....		" ..	May 1, 1910.	1 00	May 1..	May 1, 1910
3,015 sq. ft.....		" ..	Jan. 1, 1910.	5 00	Jan. 1..	Jan. 1, 1910
13,100 sq. ft.....		" ..	Oct. 1, 1910.	2 50	Oct. 1..	Oct. 1, 1909

ISLAND RAILWAY.

4,800 sq. ft.....		During pleasure..	Sept. 1, 1904.	1 00	Sept. 1..	Sept. 1, 1904
270 sq. ft.....		" ..	July 1, 1909.	1 00	July 1..	July 1, 1909
1,200 sq. ft.....		" ..	Sept. 1, 1909.	1 00	Sept. 1..	Sept. 1, 1909

CANAL.

2,700 sq. ft....	135 h.p.....	9 years.....	Jan. 1, 1910.	250 00	Jan. & July	Jan. 1, 1910
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CANAL.

1,980 sq. ft.....		10 years.....	Aug. 1, 1909.	15 00	Aug. 1..	Aug. 1, 1909
980 sq. ft.....		10 years.....	" 1, 1909.	10 00	" 1..	" 1, 1909

CANAL.

.....		During pleasure..	June 1, 1909.	60 00	June 1..	June 1, 1909
.....		" ..	" 1, 1909.	5 00	" 1..	" 1, 1909
1.43 acres.....		" ..	July 1, 1909.	1 00	July 1..	July 1, 1909
.....		13 yrs., renewable	" 1, 1909.	1 00	" 1..	" 1, 1909



1 GEORGE V., A. 1911

## WATER POWER and other Public Property leased by the Department of

LACHINE

No. of Lease.	Date of Signature.	Lessee.	Lands on Rights demised.
1909.			
17634	April 13.	Ottawa Forwarding Co., Ltd.	Space in flour shed No. 1 between flour basins Nos. 3 and 4.
17654	" 14.	Montreal Water and Power Co.	Privilege to lay, &c., 14 in. cast iron pipe across land and under canal in St. Henri.
17696	" 28.	Philomene Decarie.	Privilege to lay, &c., 1 in. water pipe from canal to lot 1011, Lachine, and draw water.
17697	May 3.	The Davies, Limited.	Privilege to lay, &c., 8 in. iron water pipe from canal at Wellington basin, St. Ann's ward, Montreal.
17698	April 28.	Canada Car Co., Ltd.	Land on north side of canal.
17699	May 5.	Messrs. Latour & Dupuis.	Canal reserve on south side of canal, above Côte St. Paul bridge, Montreal, P. Q.
17714	" 21.	Dominion Guarantee Co., Ltd.	Privilege to lay, &c., 3 in. iron conduit under canal west of Seigneurs street bridge, &c.
17755	June 9.	Parish Priest, parish of Holy Angels of Lachine.	Land forming south bank of old abandoned entrance to canal.
17784	May 1.	Canadian Pacific Railway Co.	Land on south side of canal, town of St. Paul, parish of Montreal, Que.
17818	July 5.	Jno. H. Hutchison.	Privilege to erect, &c., overhead travelling crane on canal lands in St. Henri, Montreal.
17820	June 30.	Pariseau Freres.	Land between St. Gabriel basins 2 and 3, St. Ann's Ward, Montreal.
17834	July 21.	Farquhar Robertson.	Part of northeast wharf, St. Gabriel basin, No. 3, St. Ann's ward, Montreal.
17835	July 21.	Merchants Cotton Co.	Land on north side of canal in town of St. Henri, Montreal.
17837	July 21.	L. Monette and H. Cardinal.	Land on northwest side of canal in town of St. Henri, parish of Montreal, Que.
17839	July 22.	Capt. Zephirin Leroux.	Land on north wharf of basin No. 2, St. Ann's ward, Montreal, and right to erect freight shed and office thereon.
17871	Aug. 3.	Montreal Street Ry. Co.	Privilege to lay, &c., railway siding on north side of canal between Wellington street bridge and Seminary st.
17873	" 3.	Montreal Warehousing Co.	Wharf lot on west side of Flour basin No. 4, St. Ann's ward, Montreal.
17876	" 4.	Grand Trunk Ry. Co. of Canada.	Privilege to maintain, &c., railway siding on north bank of canal from main track opposite Canada Car Company's works at Montreal, west.
17878	" 10.	F. E. Hall & Co.	Privilege to erect and maintain two-ton derrick on north west wall of Flour basin No. 4.
17936	" 18.	Montreal Rolling Mills Company.	Two parcels of land on north bank of canal in town of St. Henri, Montreal.
17958	Sept. 10.	Joseph Touzin.	Wharf lot on northeast side of St. Gabriel basin No. 1, St. Ann's ward, Montreal.
17968	" 11.	D. G. Loomis & Sons.	Land on south side of canal, above Côte St. Paul bridge, parish of Montreal, Que.
17987	Oct. 1.	Molsons Bank.	Land on north side of canal in town of Lachine, Que.
17990	Sept. 25.	Inland Navigation Co., Limited.	Land along north side of old basin No. 1.
18013	Oct. 22.	Canadian Lake Transportation Co.	Space in St. Gabriel shed No. 1, St. Gabriel basin No. 1.
18024	Nov. 4.	Canadian Pacific Ry. Co.	Substituting for land leased to the Canadian Pacific Railway by lease dated August 15th, 1904, but required in connection with the widening of the canal at Côte St. Paul, certain other land in the vicinity; also granting permission to lessee to use bridge across entrance to basin.
18029	" 9.	Dominion Bridge Co., Ltd.	Land on north side of canal, parish of Lachine, Que.
18030	" 9.	Adolph Goldwater.	Land on St. Joseph street, town of Lachine, Que.
18040	" 8.	J. H. Redfern.	Land on south side of canal, St. Gabriel ward, Montreal, Que.
18044	" 10.	The Bishop Construction Company, Ltd.	Land on north side of canal above Côte St. Paul bridge.
1910.			
18120	Jan. 13.	J. T. Steel & Co.	Land at Boulevard St. Paul, Montreal, Que.
18172	" 14.	R. MacFarlane & Co., Ltd.	Part of wharf fronting on canal between St. Gabriel basins 3 and 4, St. Ann's ward, Montreal, Que.
18185	" 29.	Canadian Oil Company, Ltd.	Wharf lots Nos. 1, 2 and 3, Montreal, Que.
18251	Mar. 1.	Montreal Stock yards Company.	Part cadastral lot 326, St. Ann's ward, Montreal, and buildings thereon; and water power.
18289	" 22.	Ogdensburg Coal and Towing Company.	Land on north side of canal in town of St. Henri, Montreal, and privilege to erect coal elevator thereon.

## SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1910—Continued.

## CANAL.

Area.	Amount of Water Power.	Term.	Commencement of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each Year.	First Instalment Due.
				\$	cts.	
12,355 sq. ft.		During pleasure.	May 1, 1909.	1,087	24	May 1, 1909
		"	Mar. 18, 1908.	5	00	Mar. 18, 1908
		"	May 1, 1909.	10	00	May 1, 1909
		"	" 1, 1909.	360	00	" 1, 1909
13,500 sq. ft.		"	Jan 1, 1909.	135	00	Jan. 1, 1909
26,507 } 1,870 } sq. ft.		"	May 1, 1909.	225	00	May 1, 1909
9,165 }		"	" 1, 1909.	10	00	" 1, 1909
101,246 sq. ft.		21 yrs. renewable.	May 1, 1908.	5	00	May 1, 1908
7,000 sq. ft.		During pleasure.	" 1, 1909.	140	00	" 1, 1909
		"	Mar. 18, 1909 .	25	00	Mar. 18, 1909
2,500 sq. ft.		"	June 1, 1909.	100	00	June 1, 1909
7,300 sq. ft.		"	May 1, 1909.	292	00	May 1, 1909
3,745 sq. ft.		"	June 1, 1909.	74	90	June 1, 1909
5,200 sq. ft.		"	May 1, 1909.	104	00	May 1, 1909
325 sq. ft.		"	May 1, 1909.	13	00	May 1, 1909
		"	July 1, 1909.	50	00	July 1, 1909
7,275 sq. ft.		"	May 1, 1909	291	00	May 1, 1909
		17 years.	Jan. 1, 1908.	166	00	Jan. 1, 1908
{ 2,100 sq. ft. } { 2,400 sq. ft. }		During pleasure.	June 1, 1909.	10	00	June 1, 1909
		"	May 1, 1909.	90	00	May 1, 1909
2,375 sq. ft.		"	July 1, 1909.	95	00	July 1, 1909
{ 2,200 sq. ft. } { 1,750 sq. ft. } { 6,875 sq. ft. }		"	July 1, 1909.	90	76	July 1, 1909
1,269 sq. ft.		21 yrs. renewable.	Oct. 1, 1909.	12	69	Oct. 1, 1909
34,802 sq. ft.		During pleasure.	July 1, 1908.	1,376	08	July 1, 1908
22,000 sq. ft.		"	Oct. 1, 1909.	1,856	25	Apl.-Oct. 1, 1909
107,580 sq. ft.		During pleasure.	April 1, 1909.	645	54	April 1, 1909
1,046 sq. ft.		"	Oct. 1, 1909.	10	46	Oct. 1, 1909
18,475 sq. ft.		"	Nov. 1, 1909.	389	50	Nov. 1, 1909
6,000 sq. ft.		"	Oct. 1, 1909.	60	00	Oct. 1, 1909
1,935 sq. ft.		"	May 1, 1909.	9	23	May 1, 1909
2,500 sq. ft.		"	Jan. 1, 1910.	100	00	Jan. 1, 1910
2.37 acres.		21 years.	May 1, 1910.	2,300	00	May 1, 1910
22,443 sq. ft.		"	Mar. 1, 1909.	2,000	00	Mar-Sep. 1, 1909
3,600 sq. ft.		"	Mar. 1, 1910.	144	00	March. 1, 1910

1 GEORGE V., A. 1911

## WATER POWER and other Public Property leased by the Department of

RIDEAU

No. of Lease.	Date of Signature.	Lessee.	Lands or Rights demised.
1909.			
17763	June 11.	Rideau Canoe Club, Limited.....	Submerged land, part of lot 'I', concession 'C,' township Nepean, county of Carleton, Ont.
17793	June 23.	Henry K. Wampole & Co., Ltd..	Lay and maintain water pipe in town of Perth, Ont.
17819	July 10.	Elgin-Chaffey's Lock Telephone Company.	Privilege to lay, &c., telephone line on canal lands at Chaffey's lock station and to place telephone in lock house of each section.....
18003	Oct. 23.	E. P. McGrath.....	2.25 acres of land at Long island lock station on Nichol's island, part north half of lot No. 8, 1st concession of the township of Nepean, county of Carleton, Ont.
18054	Nov. 23.	Canadian Northern Ontario Railway Company.	Land at south end of "deep cut," lot 'F,' concession 'D,' township of Nepean, county of Carleton.....

TRENT

1909.			
17829	July 8.	Jno. G. G. Kerry.....	All surplus water at Steppen's mill site, dam 1, section 5, of canal and right of way.....
17872	Aug. 6.	Crusbed Stone, Limited.....	Parts of lots 32 and 48, concession 8, township of Eldon, county of Victoria, Ont.....
18094	Dec. 21.	Henry Pierce.....	Land west of Colborne street, Fenelon Falls, Ont.....
18095	Dec 21.	The Fenelon Falls Milling Co....	Land west of Colborne street, Fenelon Falls, Ont.....
18096	" 21.	H. A. McIntosh.....	Land west of Colborne street, Fenelon Falls, Ont.....
18097	" 21.	L. L. Arnold.....	Land west of Colborne street, Fenelon Falls, Ont.....
1910.			
18108	Jan. 3.	Jas. Healey.....	Land in city of Peterborough.....
18109	Jan. 3.	Samuel Edwards.....	Lots 1 and 2, concession 12, township of Douro, county of Peterborough, Ont.....
1909..			
18115	Dec. 25.	Town of Campbellford.....	Part lot 15, concession 6, township of Seymour, county of Northumberland, Ont., surplus water at point "X . . . . . X" on plan.....
1910.			
18117	Jan. 11.	William Kean.....	Part of lot No. 6, concession 11, township of Thorold, county of Ontario, Ont.....
18275	Mar. 30.	Edward Mayhew.....	Part of lot 49, concession 'A,' township of Eldon, Victoria county, Ont.....
18276	Mar 30.	Wm. H. Gryles.....	Part of lot 49, concession 'A' township of Eldon, Victoria county, Ont.....

WELLAND

1909.			
17633	April 6.	Reuben Hains.....	Parts lots Nos. 143 and 186, in township of Thorold, County of Welland, Ont.....
17636	" 7.	Bell Telephone Company.....	Privilege to lay, &c., telephone cable across canal lands and under canal between 6th and 7th concessions, township of Crowland.....
17676	" 23.	Niagara, St. Catharines and Toronto Railway Company.....	Privilege to lay, &c., railway siding on canal lands, from point near lessee's swing bridge to Welland Vale Mfg. Company's works.....
17737	June 3.	Samuel Lambert.....	Parts lots 25 and 26, concession 'S,' township of Crowland, county of Welland, Ont.....
17836	" 23.	S. W. Dickinson.....	Land on west side of canal, between George and Haney streets, Humberstone, Ont.....
17877	Aug. 12.	C. T. Ware.....	Part of lot 14, township of Thorold, county of Welland, Ont.....

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1910—Continued.

CANAL.

Area.	Amount of Water Power.	Term.	Commencement of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each Year.	First Instalment Due.
				\$	cts.	
21,000 sq. ft.		During pleasure..	June 1, 1909.	1 00	June 1..	June 1, 1909
			" 1, 1909.	1 00	" 1..	" 1, 1909
		" ..	" 1, 1909.	6 00	" 1..	" 1, 1909
2.25 ac.		" ..	Oct. 1, 1909.	5 00	Oct. 1..	Oct. 1, 1909
0.573 ac.		99 years.....	Oct. 1, 1909.	50 00	" 1..	" 1, 1909

CANAL.

		21 years.....	Nov. 1, 1909.	2 00 per h.p.	Nov. 1..	Nov. 1, 1909
		During pleasure..	June 1, 1909.	10 00	June 1..	June 1, 1909
700 sq. ft.		" ..	Jan. 1, 1909.	7 50	Jan. 1..	Jan. 1, 1909
0.32 ac.		" ..	Jan. 1, 1909.	50 00	Jan. 1..	Jan. 1, 1909
0.35 ac.		" ..	" 1, 1909.	10 00	" 1..	" 1, 1909
0.47 ac.		" ..	" 1, 1909.	7 50	" 1..	" 1, 1909
1.11 ac.		" ..	Dec. 1, 1909.	10 00	Dec. 1..	Dec. 1, 1909
10.64 ac.		" ..	Jan. 1, 1910.	10 00	Jan. 1..	Jan. 1, 1910
6.5 ac.		21 years.....	" 1, 1910.	1 00	" 1..	" 1, 1910
5,922 sq. ft.		During pleasure..	" 1, 1910.	1 00	" 1..	" 1, 1910
4.91 ac.		" ..	Mar. 1, 1910.	10 00	Mar. 1..	Mar. 1, 1910
1.65 ac.		" ..	" 1, 1910.	15 00	" 1..	" 1, 1910

CANAL.

10.25 } acres		During pleasure..	April 1, 1909.	10 00	April 1..	April 1, 1909
5.06 }		" ..	July 1, 1909.	5 00	July 1..	July 1, 1909
		" ..	April 1, 1909.	50 00	April 1..	April 1, 1909
1.21 ac.		" ..	" 1, 1909.	60 00	" 1..	" 1, 1909
0.8 ac.		" ..	July 1, 1909.	10 00	July 1..	July 1, 1909
14.06 ac.		" ..	June 1, 1909.	14 00	June 1..	June 1, 1909

1 GEORGE V., A. 1911

## WATER POWER and other Public Property leased by the Department of

## WELLAND

No. of Lease.	Date of Signature.	Lessee.	Lands or Rights demised.
1909.			
17937	Sept. 1..	The Hedley Shaw Milling Company, Limited.	Land and land covered with water on Port Colborne harbour, county of Welland, Ont.
17976	Oct. 5..	Joseph Battle.....	Part of lot 26, concession 6, township of Crowland, county of Welland, Ont.
18010	" 29..	Western Co-operative Grape Shipping Co.	Part of lot 21, concession 5, township of Grantham, county of Lincoln.
18028	Nov. 8..	Thorold Natural Gas Co., Limited.	Right to lay, &c., 6 in. gas pipe line along Welland canal reserve land, in Dunnville, Ont.
18036	" 12..	Canadian Portland Cement Company, Limited.	Land on west pier at Port Colborne, Ont., and privileges.
18055	" 20..	Robert Cooper.....	Part of lot 25, concession 5, township of Crowland, county of Welland, Ont., and water power.....
18072	Dec. 7..	W. J. Aikins.....	Land on south side of feeder, Dunnville, Ont., and 25 h.p. surplus water.....
1909.			
18076	Dec. 1..	Ontario Power Co., Ltd.....	Privilege to lay, &c., cable across canal land and under canal, together with a short transmission line on canal lands near Thorold, Ont.
18077	" 7..	Ontario Hydro-Electric Power Commission.	Privilege to lay, &c., telephone cable across canal lands and under new and old canal at Allanburg, county of Welland, Ont.
18098	Nov. 1..	Provincial Natural Gas and Fuel Co., Ltd.	Privilege to lay, &c., 4 in. gas pipe across reserve land and under canal at Welland, Ont.
1910.			
18252	Mar. 12..	The Rector and Church Wardens of Christ Church, village of Marshville.	Land on west side of millrace, being part of lot No. 19, concession 4, township of Wainfleet, county of Welland, Ont.
18277	" 23..	The Corporation of the Town of Dunnville.	The right and privilege to lay and maintain a 15 in. sewage pipe across the Welland canal feeder at Dunnville, county of Haldimand, Ont.

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1910—Continued..

CANAL—Concluded.

Area.	Amount of Water Power.	Term.	Commencement of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each Year.	First Instalment Due.
				\$    cts.		
6.43 ac.....		20 years.....	May 1, 1909.	1,000 00	May 1..	May 1, 1909
0.12 ac.....		During pleasure..	Aug. 1, 1909.	25 00	Aug. 1..	Aug. 1, 1909
0.15 ac.....	"	.....	Sept. 1, 1909.	10 00	Sept. 1..	Sept. 1, 1909
.....		"	.. Nov. 1, 1909.	10 00	Nov. 1..	Nov. 1, 1909
1.15 ac.....		21 yrs., renewable	June 1, 1909.	167 00	June 1..	June 1, 1909
0.13 ac.....	100 cu. ft. per second.	21 " ..	Nov. 1, 1909.	413 00	Nov. 1..	Nov. 1, 1909
0.05 ac.....	25 h.p.....	During pleasure..	May 1, 1909.	100 00	May 1..	May 1, 1909
.....		During pleasure..	Nov. 1, 1909.	10 00	Nov. 1..	Nov. 1, 1909
.....		" ..	Sept. 1, 1909.	5 00	Sept. 1..	Sept. 1, 1909
.....		" ..	Nov. 1, 1909.	5 00	Nov. 1..	Nov. 1, 1909
.....		" ..	Jan. 1, 1910.	1 00	Jan. 1..	Jan. 1, 1910
.....		" ..	" 1, 1910.	5 00	" 1..	" 1, 1910



1 GEORGE V., A. 1911

PROPERTY leased to the Department of Railways and Canals by-  
INTERCOLONIAL

No. of Lease.	Date of Signature.	Lessor.	Lands or Rights demised.
	1909.		
17715	May 18..	Montreal Board of Trade.....	Rooms 6, 7, 8, 9 and 10 ground floor, building (Board of Trade), Montreal, Que.....
17966	Sept. 27..	Town of Campbellton.....	To lay, &c., 6 in. water main along Sugar Loaf street, in Campbellton, N.B.....
18103	Dec. 28..	Town of Amherst*.....	Permission to connect sewer pipe of Intercolonial Railway with those of the town at a point at the intersection of the centre lines of Crescent avenue and Station street.....

## QUEBEC

	1909.		
17695	May 4	Quebec Board of Trade.....	The east half of the first floor of the Board of Trade building, Quebec.....

## TRENT

	1909.		
17635	April 1..	Jno. Collins.....	Land in village of Hastings, county of Northumberland, Ont.....
18047	Nov. 20..	Jno. Jos. English, Ernest F. Mason and the Randolph McDonald Co., Ltd.	Certain tracks of land in village of Hastings, county of Northumberland, estimated at two or three-quarter acre, composed of park lots 2 and 3, for storage purposes <i>re</i> contract No. 17156.....

\*Consideration certain work by the Intercolonial Railway.

## SESSIONAL PAPER No. 20

various parties during the Fiscal Year ended March 31, 1910.

## RAILWAY.

Area.	Term.	Commence- ment of Term.	TERMS OF PAYMENT.		
			Annual Rental.	Due each year.	First Instalment due.
			\$ cts.		
.....	3 years.....	May 1, 1909.	1,896 00	Quarterly..	May 1, 1909
465 sq. ft. ....	During pleasure.....	July 1, 1909.	1 00	July 1..	July 1, 1909
.....	In perpetuity.....	Apr. 20, 1909.	.....	.....	.....

## BRIDGE.

.....	2 years.....	May 1, 1909.	600 00	May 1..	May 1, 1909
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## CANAL.

.....	3 years.....	Mar. 1, 1909.	25 00	Mar. 1..	Mar. 1, 1909
.....	To March 31, 1910.....	Nov. 20, 1909.	1 00	Nov. 20..	Nov. 20, 1909

H. F. ALWARD,  
*Departmental Solicitor.*

PROPERTY CONVEYED to the Department of Railways and Canals and  
INTERCOLONIAL

No. of Deed.	Date of Deed.	Grantor.	Lot.
1909.			
17896	June 16..	W. Clowater <i>et ux.</i> .....	Land at.....
*17897	Mar. 30..	M. MacDonald <i>et ux.</i> .....	Land at.....
17915	Aug. 20..	Town of Drummondville.....	Public road in north ward.....
17943	June 11..	Jno. Morris <i>et ux.</i> .....	Land at.....
17960	May 31..	Henry Appleton (trustee).....	Land on Campbell road.....
*17961	Feb. 22..	James McNeil <i>et ux.</i> .....	Land at.....
17962	May 17..	Ida Woodworth.....	Land in north suburbs of.....
1908.			
*17964	April 29..	Minnie S. King <i>et vir.</i> .....	Land at.....
1909.			
17969	July 22..	Isaac Creighton <i>et ux.</i> .....	Land near Campbell road.....
17970	" 3..	Geo. H. Taylor, assignee, <i>et al.</i> .....	Land in north suburb of.....
18051	" 21..	Walter Thomas.....	Land in north suburb of.....
18059	May 12..	Ann Brown <i>et vir.</i> .....	Land at Africville, city of Halifax.....
18060	July 30..	Walter U. Jones.....	Land near Campbell road, city of Halifax, N.S. ....
18064	" 10..	Geo. W. Johnson <i>et ux.</i> .....	Land on southwest side of Gottinger St., Halifax.....
1907.			
*18065	Jan. 31..	Jno. Greenaway.....	Land on west side of Upper Water St. ....
1909.			
18079	Oct. 12..	Alex. McKay <i>et ux.</i> .....	Lots 14, 21 and 23.....
18080	" 14..	Alex. C. Hamilton <i>et ux.</i> .....	Land at.....
18090	May 14..	James White <i>et ux.</i> .....	Land on Campbell road.....
18105	July 9..	Hannab Spurr.....	Land at Moncton.....
18106	Aug. 16..	Edwin E. D. Record <i>et al.</i> .....	Land on north side of Mountain road.....
1908.			
*18111	Mar. 26..	Isaie Laplante.....	Part of lot 529.....
1906.			
*18163	June 30 and Oct. 1	Robt. A. Lowerison.....	Of certain rights and privileges for installation of a water system at Milton Mill Brook, to supply Intercolonial Railway with water.....
1908.			
*18218	Mar. 11..	Precille Blanchard.....	Part of cadastral lots 172 and 176.....
*18219	May 6..	Urbic Belisle.....	Parts of cadastral lot 167.....
*18220	" 6..	Samuel Langlier.....	" " 179.....
*18221	" 6..	Alfred Dufresne.....	" " 162 and 163.....
*18222	" 6..	Philias Benoit.....	" " 165.....
*18223	" 6..	Isaie Desmarais.....	" " 130.....
*18224	Feb. 18..	Edmond Simard.....	" " 163.....
*18225	Mar. 11..	Dieudonne Vertefeuille.....	" " 168.....
1909.			
18226	July 7..	David Cameron <i>et ux.</i> .....	Land on north east side of Kempt road.....
18257	Aug. 17..	Ed. Clayton <i>et al.</i> .....	Land near Campbell road.....
18258	Nov. 30..	Jno. Fulton <i>et ux.</i> .....	Land at Truro.....
18259	July 31..	Harry Lynds.....	".....
18260	" 31..	Jno. C. McDonald.....	".....
18261	" 30..	Peter McLean.....	".....
18263	Nov. 23..	Jno. W. Francis <i>et ux.</i> .....	Land between.....

\*Too late for last year's report.

SESSIONAL PAPER No. 20

Letters Patent granted during the Fiscal Year ended March 31, 1910.

RAILWAY.

District	County.	Area.	Amount.	Remarks.
			\$    cts.	
Durham.....	York, N.B.....	½ acre.....	175 00	
North Sydney.....	Cape Breton.....	864 sq. ft.....	342 82	
Drummondville.....	Drummondville, Que.....		1,300 00	
Mulgrave.....	Guysborough, N.S.....	0,3061 sq. ft.....	300 00	
Halifax.....	Halifax, N.S.....	0,027 acre.....	240 04	
		0,031 acre.....		
Sydney.....	Cape Breton, N.S.....	5,355 sq. ft.....	900 00	
Halifax.....	Halifax, N.S.....	2,030 sq. ft.....	367 60	
		39,990 sq. ft... }		
Lakeview.....	".....	0,105 acre.....	56 50	
Halifax.....	".....	0,022 acre.....	93 99	
".....	".....	12,045 sq. ft.....	100 00	
".....	".....	5,538 sq. ft.....	125 39	
".....	".....	7,305 sq. ft.....	150 00	
".....	".....	2,636 sq. ft.....	394 37	
".....	".....	13,146 sq. ft.....	300 00	
".....	".....	860 sq. ft.....	1,100 00	
North Sydney.....	Cape Breton, N.S.....	{ 2,484 sq. ft... }	671 37	
".....	".....	{ 2,461 sq. ft... }		
".....	".....	{ 4,683 sq. ft... }		
Halifax.....	Halifax, N.S.....	42,649.2 sq. ft.....	1,100 00	
Moncton.....	Westmorland, N.B.....	920 sq. ft.....	82 80	
".....	".....	0,322 acres.....	2,000 00	
".....	".....	3,795 sq. ft.....	150 00	
Mitchell.....	Nicolet, Que.....	0.3 acre.....	50 00	
}.....	Sackville, N.B.....		1,100 00	
			1 00	
St. Rosalie.....	Bagot, Que.....	1,98 acres.....	1,000 00	
".....	".....	2,14 acres.....	3,000 00	
".....	".....	0,09 acre.....	75 00	
".....	".....	0.3 acre.....	1,500 00	
".....	".....	1,44 acres.....	3,500 00	
".....	".....	0.53 acre.....	1,200 00	
".....	".....	0,184 acre.....	250 00	
".....	".....	2,94 acres.....	2,000 00	
Halifax.....	Halifax, N.S.....	4,225 sq. ft.....	1,161 94	
".....	".....	780 sq. ft.....	78 33	
Truro.....	Colchester, N.S.....	32,120 sq. ft.....	334 49	
".....	".....	0.28 acre.....	227 56	
".....	".....	35,000 sq. ft.....	757 94	
".....	".....	25,137 sq. ft.....		
".....	".....	10,800 sq. ft.....	270 54	
North Sidney and Sydney Mines.....	Cape Breton.....	51,645 sq. ft.....	750 00	

PROPERTY CONVEYED to the Department of Railways and Canals and  
INTERCOLONIAL

No. of Deed.	Date of Deed.	Grantor.	Lot.
1908.			
*18264	Sept. 25.	James S. Byron <i>et al.</i>	Land at, and courses of water pipes through other lands.
*18265	May 6.	Zacharie Belisle	Parts cadastral lot 166
*18266	Dec. 16.	Irene Bilodeau <i>et al.</i>	Land in
*18267	May 14.	Mrs. M. Tanguay	Part cadastral lot 176
*18268	" 14.	Hector Girard	" " 170
*18269	June 11.	Henri Girard	" " 132
*18270	Sept. 1.	Government of Nova Scotia	Land at
1909.			
18272	Nov. 10.	Geo. Aikenhead	Land near Campbell road
18300	Aug. 26.	Clarence Hay <i>et ux.</i>	Land in parish of Harecourt
1906.			
*18301	Sept. 25.	Eunice Smith <i>et al.</i>	Land on west side of Upper Water St.
1909.			
18302	Dec. 30.	Onésime Poulin	Of privilege to take water for railway purposes from Lake Beaumont, situated between parishes of St. Charles and de Beaumont
18417	Nov. 13.	Alphonse Lauzier	Part of lot 279, and privilege to lay water pipe
18418	" 13.	Etienne Couture	Right of entry in and upon lands and privilege to lay, &c., water pipe
1905.			
*18436	Mar. 11.	Mrs. J. F. Rioux	Part of lot 613
1910.			
18437	Jan. 13.	Stafford Loggie <i>et al.</i>	Land at
18438	" 29.	James Adams <i>et ux.</i>	Land on Kempt Road
18439	" 15.	Susan A. Veith <i>et al.</i> (Estate Geo. A. Veith)	Land in north suburbs
1909.			
18440	Oct. 30.	Nellie A. Archibald	Land at
18441	Nov. 6.	Frank Stanfield <i>et ux.</i>	"
18442	Oct. 13.	Henry A. McKenzie	"
18443	Dec. 24.	Robt. Millar	Land in ward 6
1910.			
18444	Feb. 17.	Donald McDougal <i>et ux.</i>	Land at Loggieville
1909.			
18445	Dec. 22.	Alex. T. McCrae	Land at
SOULANGES			
1909.			
17899	May 25.	Nerce Moreau	Parts lots 423 and 425

\*Too late for last year's report.

SESSIONAL PAPER No. 20

Letters Patent granted during the Fiscal Year ended March 31, 1910—*Continued.*RAILWAY—*Continued.*

District.	County.	Area.	Amount.	Remarks.
			\$    cts.	
Morton.....	Kings, N.S.....	5·000 sq ft.....	350 00	
St. Rosalie.....	Bagot, Que.....	1·91 acres.....	3,000 00	
".....	".....	5·83 arpent.....	1,800 00	
".....	".....	0·28 acre.....	150 00	
".....	".....	0·766 acres.....	182 00	
".....	".....	1·3 acre.....	300 00	
Truro.....	Colchester, N.S.....	4·1 acres.....	927 50	
Halifax.....	Halifax, N.S.....	1,607 sq ft.....	151 05	
Harcourt.....	Kent, N.B.....	0·1762 acre.....	400 00	
Halifax, N.S.....	Halifax, N.S.....	2,553 sq. ft.....	3,896 96	
St. Pierre du Lac (Cedar Hall).	Bellechasse.....		4,000 00	
"	Rimouski.....	½ acre.....	200 00	
"	".....	10,000 sq. ft.....	50 00	
Fraserville, Que.....			800 00	
Loggieville.....	Northumberland, N.B.....	0·29 acres.....	294 43	
Halifax.....	Halifax, N.S.....	9,870 sq. ft.....	1,950 65	
".....	".....	39,726 sq. ft.....	258 08	
Truro.....	Colchester, N.S.....	2·3 acre.....	2,012 82	
".....	".....	1·05 acre.....	2,173 56	
Springhill Jct.....	Cumberland, N.S.....	7·10 acre.....	532 50	
Halifax.....	Halifax, N.S.....	1·15 acre.....	402 50	
Loggieville.....	Northumberland, N.B.....	0·37 } acre.....	276 28	
".....	".....	0·28 }		
Glengarry.....	Pictou, N.S.....	9,830 sq. ft.....	10 00	

## CANAL.

Parish of St. Joseph de Soulanges.	Soulanges.....	0·65 } acres.....	2,424 79	
		3·02 }		
		1·18 }		





## SESSIONAL PAPER No. 20

Letters Patent during the Fiscal Year ended March 31, 1910—Continued.

## CANAL.

District.	County.	Area.	Amount.		Remarks.
			\$	cts.	
Seymour.....	Northumberland.....	0.06 acre.....	1	00	
".....	".....	14.83 acres.....	1	00	
".....	".....	0.15 acre.....	100	00	
".....	".....	19.37 acres.....	1	00	And lease of surplus water.
Trenton.....	Hastings.....	.....	700	00	
".....	".....	4 acres.....	600	00	
Sydney.....	".....	.....	2,350	00	
".....	".....	.....	1,075	00	
".....	".....	.....	1,500	00	
".....	".....	.....	800	00	
Trenton.....	".....	.....	250	00	
Sydney.....	".....	.....	6,252	50	
Murray.....	".....	0.6 acre.....	50	00	
Sydney.....	".....	0.16 acre.....	225	00	
".....	".....	6.8 acres.....	1,700	00	
".....	".....	6.10 acres.....	444	00	
".....	".....	13.89 acres.....	555	60	
".....	".....	7.6 acres.....	900	00	
Sydney.....	Hastings.....	0.48 acre.....	2,500	00	
Seymour.....	Northumberland.....	6.55 acres.....	1	00	Exchange, see 18182.
".....	".....	.....	1	00	Lease No. 18115, dated Dec. 29, 1909, in perpetuity, of 6.5 acres of land and all surplus water at dam at Middle Falls, together with right of way for electrical transmission line.
Thorah.....	Victoria.....	0.75 acre.....	100	00	

## CANAL.

Port Colborne.....	Welland, Ont.....	0.25 acres.....	2,000	00	
Humberstone.....	".....	0.16 acres.....	275	00	
".....	".....	0.16 acres.....	275	00	
".....	".....	0.16 acres.....	275	00	
".....	".....	0.16 acres.....	275	00	
".....	".....	0.16 acres.....	275	00	
".....	".....	0.16 acres.....	275	00	
".....	".....	0.16 acres.....	275	00	
Welland, Ont.....	".....	.....	350	00	
".....	".....	.....	1,600	00	
Port Colborne.....	".....	0.75 acres.....	1,800	00	

1 GEORGE V., A. 1911

PROPERTY CONVEYED by the Department of Railways and Canals by Letters

INTERCOLONIAL

No. of Deed.	Date of Deed.	Grantor.	Lot.
18034	1909. Oct. 19.	The Imperial Oil Company, Ltd.	Land on south shore of Bedford river.....

TRENT

18182	1910. Jan. 10.	The Corporation of the Town of Seymour.	Parts of lots 12, 13 and 14, concession 7, and lot 14, concession 8 and 9, township of Seymour, county of Northumberland.....
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SESSIONAL PAPER No. 20

Letters Patent during the Fiscal Year ended March 31, 1910—*Continued.*

RAILWAY.

District.	County.	Area.	Amount.	Remarks.
			\$ cts.	
Halifax.....	Halifax, N.S.....	16,988 sq. ft.....		Letters patent.

CANAL.

} Seymour.....	Northumberland.....	0.62 acre .....	} .....	Letters Patent Exchange. See No. 18,299.
		1.46 acres.....		
		4.00 acres.....		
		0.84 acre .....		
		3.2 acres.....		

H. F. ALWARD,  
*Departmental Solicitor.*

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910.

## INTERCOLONIAL RAILWAY.

No. of Release.	Date of Release.	Grantor.	Description.	Amount.
	1909.			\$ cts.
17973	Aug. 25..	Amelia Groslet (widow F. Savary, employee Inter-colonial Railway.	Of all claims arising out of the death of her late husband, Francois Savary.	250 00
18035	Oct. 25..	A. F. Jardine.....	Injuries sustained at station of Derby Junction, N. B., whilst travelling as a passenger.	3,000 00
18110	Dec. 29..	J. M. Slayter.....	For all claims for damages, &c., that may at any time arise in exercise of privileges of travelling on I. C. Ry. engines for purpose of acquiring knowledge of engine driving.	200 00
17683	April 6..	George Foster.....	For damages to property consequent upon the erection of the Stanley street bridge, St. John, N.B.	200 00

## SOULANGES CANAL

	1909.			
18067	Oct. 20..	Quebec Transportation and Forwarding Co., Ltd.	For damages to barge <i>Ad</i> , by striking of swing bridge against said barge.	55 00

## WELLAND CANAL

	1909.			
17702	May S..	Chas. E. Stewart.....	For damages consequent upon injuries to a horse..	50 00

## QUEBEC BRIDGE.

	1910.			\$ cts.
18242	Mar. 12..	Phoenix Bridge Company.	Releasing the company from all liability in connection with the collapse of the Quebec bridge.	100,000

## TRENT CANAL.

	1909.			
17649	April 6..	Jno. O'Keefe <i>et ux</i> .....	Damages by water to lot 10, concession 4, and to lot 10, concession 5, township of Otonabee, county of Peterborough, Ont.	200 00
17650	" 10..	Robt. A. Robertson <i>et ux</i> ..	Damages by water to part of west half of lot 5, concession 8, township of Monaghan, county of Peterborough, Ont.	50 00
17700	" 21..	Annie Davis <i>et al.</i> .....	Damages by water to lots 1, 2 and 3, concession 18, township of Harvey, county of Peterborough, Ont.	210 00
17701	" 16..	Jas. Kiley <i>et ux</i> .....	Damages by water to lot No. 3, block 'A' and part of lot 4, Lot 'A', Hiawatha, Indian reservation, township of Otonabee, county of Peterborough, Ont.	135 00
17718	May 5..	A. W. McIntyre <i>et al.</i> .....	Release for damages by water to lot 6, concession 9, township of Otonabee, county of Peterborough, Ont.	460 00
17719	April 15..	Wm. T. Smith <i>et al.</i> .....	Damages by water to east half of lot No. 2 and west half of lot No. 3, concession 5, township of Monaghan, county of Northumberland, Ont.	180 00
17720	" 15..	Edmund C. Foley <i>et al.</i> ....	Damages by water to east half of lots 11 and 12, concession 4, township of Otonabee, county of Peterborough, Ont.	380 00
17722	May S..	Jno. J. Lundy.....	Damages by water to lots 5 and 6, concession 11, township of Ennisnore, county of Peterborough, Ont.	50 00

## SESSIONAL PAPER No. 20

## DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—Continued.

## TRENT CANAL—Continued.

No. of Release.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ cts.
17725	April 27..	Robt. J. Adamson <i>et al.</i> ...	Damages by water to east half of lot 8, concession 9, township of Otonabee, county of Peterborough, Ont.	200 00
17727	" 9..	Herbert A. Cairnduff, <i>et al.</i>	Damages by water to north three-quarters of lot 20, concession 16, township of Harvey, county of Peterborough, Ont.	100 00
17728	" 28..	Quintin Moore <i>et ux.</i> .....	Damages by water to east half of lot 21, concession 17, township of Harvey, county of Peterborough, Ont.	200 00
17729	May 8..	Raglan Richmond <i>et al.</i> ...	Damages by water to part of lot 19 and west half lot 20, concession 15, township of Harvey, county of Peterborough, Ont.	100 00
17730	" 13..	Wm. P. Chase <i>et ux.</i> .....	Damages by water to lot 'A' in the 16th concession of the township of Harvey, county of Peterborough, Ont.	175 00
17731	" 1..	Jane Coward <i>et al.</i> .....	Damages by water to part of lot 10, concession 11, and broken lots 7 and 8, concession 12, township of Otonabee, county of Peterborough, Ont.	320 00
17732	April 9..	Francis McElroy <i>et ux.</i> ....	Damages by water to north half of lot No. 2 and east half of lot No. 3, in concession 5, and to lot 3, concession 6, township of Carden, county of Victoria, Ont.	180 00
17733	" 10..	Selena Jane McQuade <i>et al.</i>	Damages by water to south half of lot No. 9, southeast quarter lot 8, concession 5, and to northeast quarter of lot 8 and west half of lot 9, in 4th concession of township of Emily, county of Victoria, Ont.	400 00
17734	" 13..	Wm. E. Burke <i>et ux.</i> .....	Damages by water to lot No. 2, concession 4, township of Carden, county of Victoria, Ont.	120 00
17753	" 27..	Micbael F. Lynch <i>et ux.</i> ....	Damages by water to east half of lots Nos. 1 and 2 in the 2nd concession, and to lot No. 1 in the 3rd concession of the township of Aspodel, county of Peterborough, Ont.	1,050 00
17760	" 11..	Jno. D. McGregor <i>et al.</i> ....	Damages by water to west half of lots 9 and 10, concession 7, township of Otonabee, county of Peterborough, Ont.	200 00
17761	May 20..	Pbæbe Wedlock.....	Damages by water to parts of broken lot No. 18, concession 2, township of South Monaghan, county of Northumberland, Ont.	20 00
17762	April 27..	Adam A. Humphries <i>et ux.</i>	Damages by water to block 'A' in 1st concession, block 'A' and west part of lot No. 1, concession 2, township of Aspodel, county of Peterborough, Ont.	911 00
17769	" 30..	James D. Byers.....	Damages to south 50 acres of No. 35 in 9th concession of Hamilton, county of Northumberland, Ont.	180 00
17770	" 30..	D. Heaslip.....	Damages to north half lot No. 34, concession 9 of township of Hamilton, county of Northumberland, Ont.	675 00
17771	" 29..	H. Allen.....	Damages to west half lot 3, 14th concession of Harvey, county of Peterborough.	120 00
17774	May 26..	Mary Ann Scriver <i>et al.</i> ....	Damages to an island in the Trent River, north of lot No. 7, in the 11th concession, township of Percy, county of Northumberland, Ont.	36 00
17775	April 24..	John Kerr <i>et al.</i> .....	Damages to lots 18 and 19, concession 3, township of South Monaghan, county of Northumberland, Ont.	1,000 00
17776	" 2..	Roland M. Waddell.....	Damages to north half lot 3, and east half lot 2, concession 3½, township of South Monaghan, county of Northumberland, Ont.	700 00
17777	May 29..	Robt. E. Sberwin <i>et ux.</i> ....	Damages to south east quarter lot 4, concession 2, township of Alnwick, county of Northumberland, Ont.	64 00
17782	" 31..	Jas. & Francis McCulloch..	Damages to parts lots 2 and 3, concession 9, township of Hamilton, county of Northumberland, Ont.	304 00
17797	" 8..	Alexander Thompson <i>et al.</i>	Damages to east half lots 1 and 2 in the 15th concession of the township of Harvey, county of Peterborough, Ont.	60 00
17798	June 19..	Wm. J. Laing <i>et al.</i> .....	Damages to east two-thirds of west half of lot 5, concession 8, township of North Monaghan, county of Peterborough, Ont.	100 00
17799	" 19..	Julia A. Kent.....	Damages to lots 32 and 33, concession 9, township of Hamilton, county of Northumberland, Ont.	240 00
17800	" 19..	John C. Lynch.....	Damages to west half of lot 3, concession 6, township of Aspodel, county of Peterborough, Ont.	40 00



1 GEORGE V., A. 1911

## DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—Continued.

## TRENT CANAL—Continued.

No. of Release.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ cts,
17803	May 19..	Garrett Galvin <i>et ux.</i> .....	Damages by water to lot No. 1, concession 16, township of Harvey, county of Peterborough, Ont.	400 00
17804	June 22..	Wm. J. Isaac <i>et ux.</i> .....	Damages by water to lot 1, concession 9, township of Hamilton, county of Northumberland, Ont.	400 00
17805	June 23..	Alexander E. Kennedy <i>et ux.</i>	Damages by water to lot No. 23 in the 15th concession of the township of Smith, county of Peterborough, Ont.	75 00
17806	" 19..	Thomas Williamson <i>et ux.</i> ..	Damages to west half of lot 11, concession 11, township of Percy, county of Northumberland, Ont.	48 00
17807	" 19..	Jno. Breckenbridge <i>et ux.</i> ..	Damages to west half of lot 5, concession 3, township 1 of Asphodel, county of Peterborough, Ont.	60 00
17808	" 23..	Charles Fox <i>et ux.</i> .....	Damages to west half of lot 6, concession 1, township of Asphodel county of Peterborough, Ont.	360 00
17809	" 23..	Fowlds Co., Ltd.....	Damages to portion of land lying south of Front St., east of William St. and west of New St., Hastings, county of Northumberland, Ont.	150 00
17851	May S..	William Graham <i>et al.</i> .....	Damages to hlock 'A', township of South Burleigh, county of Peterborough, Ont.	300 00
17852	July 17..	Wm. J. Johnston <i>et ux.</i> .....	Damages to lot 1 and part of north half lot 2, concession 1, township of Alnwick, county of Northumberland, Ont.	340 00
17853	" 3..	Andrew Smith.....	Damages to north half lot 7, concession 3, and to lot 8, concession 4, township of Alnwick, county of Northumberland, Ont.	600 00
17854	June 30..	Peter Nicholls <i>et al.</i> .....	Damages to lot 27, concession 15, township of Smith, county of Peterborough, Ont.	90 00
17855	" 26..	James A. Fife <i>et ux.</i> .....	Damages to lots 4 and 5, concession 5, township of Smith, county of Peterborough, Ont.	50 00
17856	" 24..	David Armstrong <i>et ux.</i> .....	Damages by water to north part of lot 35, concession 9, township of Hamilton, county of Northumberland, Ont.	400 00
17857	July 3..	Robert Hill <i>et al.</i> .....	Damages to part of lot 9, concession 9, township of Harvey, county of Peterborough, Ont.	80 00
17858	June 26..	Nixon D. Timlon <i>et al.</i> .....	Damages to lot 8, concession 3, township of Alnwick, county of Northumberland, Ont.	492 00
17859	" 23..	Albert A. Hollingshead <i>et al.</i>	Damages by water to part of lot No. 3, township of Smith, county of Peterborough, Ont.	65 00
17860	July 6..	John James Howden <i>et ux.</i> ..	Damages to lots 11 and 12, concession 11, township of Otonabee, county of Peterborough, Ont.	440 00
17861	June 30..	John Dowler <i>et al.</i> .....	Damages to south half lot 7, concession 3, township of Alnwick, county of Northumberland, Ont.	216 00
17862	May 7..	Margaret Burrison.....	Damage to south half of lot 9, concession 3, township of Alnwick, county of Northumberland, Ont.	400 00
17863	June 30..	David Conroy <i>et ux.</i> .....	Damages by water to north half of lot No. 10, and to west 55 acres of south half of lot No. 10, concession 16, and lot 9, concession 17, township of Harvey, county of Peterborough, Ont.	100 00
17864	May 29..	Richard Corkery <i>et al.</i> .....	Damages to part of lot 19, concession 4 township of South Monaghan, county of Northumberland, Ont.	150 00
*17865	Mar. 9..	Wm. Whitfield.....	Damages to parts of lots 7 and 8, concession 9, township of North Monaghan, county of Peterborough, Ont.	800 00
17866	June 12..	Louis Whitfield.....	Damages to part of lot 8, concession 8, and part of lot 10, concession 10, township of North Monaghan, county of Peterborough, Ont.	480 00
17867	" 19..	Wm. McClelland <i>et al.</i> .....	Damages by water to part of lot 15, concession 3, township of South Monaghan, county of Northumberland, Ont.	80 00
17879	July 27..	S. A. Northey <i>et al.</i> .....	Damages to lot 26, concession 14, township of Smith, county of Peterborough, Ont.	60 00
17880	May 20..	John P. Ayotte <i>et al.</i> .....	Damages to lots 20 and 21, concession 12, township of Smith, county of Peterborough, Ont.	250 00
17881	April 17..	J. Laura Phalen.....	Damages to lot 16 in the 8th concession of the township of Ennismore, county of Peterborough, Ont.	30 00
17882	June 26..	John Weatherup <i>et al.</i> .....	Damages to west half of south 100 acres of lot No. 4, part of northwest half of lot 4, concession 2 of the township of Alnwick, county of Northumberland, Ont.	120 00
17883	July 24..	F. B. Herald <i>et al.</i> .....	Damages to lot 16 in the broken lot of the township of South Monaghan, county of Northumberland, Ont.	200 00

## SESSIONAL PAPER No. 20

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—Continued.

## TRENT CANAL—Continued.

No. of Re-lease.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ cts.
17884	July 24.	Alfred E. Saunders <i>et al.</i>	Damages to part of lot No. 11 in the 11th concession of the township of North Monaghan, county of Peterborough, Ont.	75 00
17885	June 10.	John Carleton Read <i>et al.</i>	Damages to lots Nos. 10 and 11 in the 12th concession of the township of Otonabee, in the county of Peterborough, Ont.	200 00
17886	April 17.	John Riddell <i>et al.</i>	Damages to west half of lot 13 in the 4th concession of the township of South Monaghan, in the county of Northumberland, Ont.	500 00
17887	June 26.	Albert T. Reid <i>et al.</i>	Damages to lot 3 in the 3rd concession of the township of Burleigh, in the county of Peterborough, Ont.	120 00
17888	July 24.	Alex. M. Laing	Damages to the northeast quarter of lot No. 2 in the 8th concession of the township of North Monaghan, in the county of Peterborough, Ont.	40 00
19889	May 15.	Thomas Henry Fulton <i>et ux</i>	Damages to the east half of lot 7 and 8 in the 16th concession of the township of Harvey, county of Peterborough, Ont.	50 00
17890	June 17.	John C. Taylor <i>et al.</i>	Damages to the east half of lots 7 and 8 in the 10th concession of the township of Harvey, county of Peterborough, Ont.	620 00
17891	Aug. 10.	William Lowes <i>et ux.</i>	Damages to north half of lot 17 in the 7th concession, and southeast part of lot 17 in the 8th concession of the township of Otonabee, county of Peterborough, Ont.	230 00
17892	June 30.	Alexander Nicholls <i>et al.</i>	Damages to islands 'C,' 'D' and 'E' in Buckhorn Lake, in the township of Harvey, county of Peterborough, Ont.	120 00
17893	Aug. 5.	Robert H. Johnson	Damages to the southwest quarter of lot No. 8 in the 5th concession, and the southeast quarter of lot No. 8, at West Pigeon River, in the township of Emily, county of Victoria, Ont.	120 00
17894	" 5.	Thomas H. Fee <i>et al.</i>	Damages to the northwest quarter of lot No. 12 in the 6th concession, and northeast quarter of lot No. 12 in the 6th concession, and southeast quarter of lot No. 13 in the 7th concession of the township of Emily, county of Victoria, Ont.	140 00
17895	June 25.	William O. Harvie <i>et al.</i>	Damages to lot No. 7 in the 4th concession, and part of lot No. 7 in the 3rd concession of the township of Alnwick, county of Northumberland, Ont.	240 00
17901	Aug. 7.	Peter Brady	Damages to the east half of lot No. 10 in the 11th concession of the township of Percy, county of Northumberland, Ont.	64 00
17902	" 12.	John J. Lamb	Damages to park lot No. 3, in the village of Omenee, county of Victoria, Ont.	20 00
17903	" 6.	George A. Balfour	Damages to park lot No. 2, in the village of Omenee, county of Victoria, Ont.	20 00
17904	May 4.	John S. Matchett <i>et al.</i>	Damages to the east half of lot No. 7 and part of lot No. 8 in the 8th concession of the township of North Monaghan, county of Peterborough, Ont.	2,000 00
*17905	Feb. 1.	Thomasina F. Orde <i>et al.</i>	Damages to lot No. 9 in the 11th concession of the township of Otonabee, county of Peterborough, Ont.	500 00
17906	Aug. 5.	Robert H. McQuade <i>et al.</i>	Damages to the northwest quarter of lot No. 9 in the 5th concession, and to the southeast half of lot No. 9, and northeast quarter of lot No. 9 in the northwest of Pigeon River, township of Emily, county of Victoria, Ont.	220 00
17907	" 3.	O. Stewart <i>et al.</i>	Damages to lots Nos. 12, 13, 14, 15 and 16, in the 18th concession, and lot No. 15 in the 17th concession, in the township of Otonabee, county of Peterborough, Ont.	1,200 00
17908	" 19.	John Morrissey <i>et ux.</i>	Damages to part of lot No. 16, in the 7th concession of the township of Emily, county of Victoria, Ont.	30 00
17909	Aug. 11.	John McCarrell <i>et ux.</i>	Damages to the southeast quarter of lot No. 21 in the 4th concession of the township of Emily, county of Victoria.	130 00
17910	" 6.	John Carroll <i>et al.</i>	Damages to part of lot No. 16 in the 7th concession of the township of Emily, county of Victoria.	100 00
17911	" 7.	Samuel F. Fee <i>et al.</i>	Damages to the north half of lot No. 12 in the 5th concession of the township of Emily, county of Victoria.	90 00

1 GEORGE V., A. 1911

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—*Continued.*TRENT CANAL—*Continued.*

No. of Release.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ cts.
17912	May 3..	Benjamin N. Harris <i>et al.</i> ..	Damages to lot No. 20 in the 17th concession of the township of Harvey, county of Peterborough, Ont.	60 00
17913	June 30..	James C. Dickey <i>et al.</i> .....	Damages to broken lot No. 6 and north part of lot No. 8 in the 11th concession of the township of Percy, county of Northumberland, Ont.	136 00
17914	July 17..	Matthew Brackenridge <i>et al.</i> ..	Damages to the west half of lots Nos. 2 and 3 in the 3rd concession of the township of Asphodel, county of Peterborough, Ont.	380 00
17930	Aug. 11..	Mosom Boyd Company....	Damages to lots Nos. 12 and 13 in the 19th concession of the township of Verulam, county of Victoria, Ont.	280 00
17939	" 21..	David F. Weir <i>et al.</i> .....	Damages to the south half of lot No. 18 and the north half of lot No. 19, in the 8th concession of the township of Emily, county of Victoria.	100 00
17949	" 21..	Wm. A. Nurse <i>et al.</i> .....	Damages to the west half of lot No. 17 in the 2nd concession of the township of South Monaghan, county of Northumberland, Ont.	150 00
17950	" 19..	James Kerr <i>et al.</i> .....	Damages to lot No. 1 in the 10th concession of the township of Verulam, county of Victoria Ont.	80 00
17951	" 31..	Francis McGuire <i>et ux.</i> ....	Damages to the east half of lot No. 11 in the 11th concession of the township of Percy, county of Northumberland, Ont.	24 00
17952	" 30..	Martha Chambers.....	Damages to the east half of lot No. 20 and southwest half of lot No. 21 in the 4th concession of the township of Emily, county of Victoria, Ont.	300 00
17974	June 23..	Joseph Harrington <i>et al.</i> ..	Damages to part of island 'A' and whole island 'B' in the township of Harvey, county of Peterborough, Ont.	500 00
17975	Sept. 2..	Andrew and Jos. McCarroll <i>et al.</i>	Damages to southeast quarter of lot No. 19, concession 4, township of Emily, county of Victoria, Ont.	40 00
17984	Aug. 16..	Mary Atwell <i>et al.</i> .....	Damages to south half of lot No. 11, concession 7, township of Emily, county of Victoria, Ont.	48 00
17985	" 16..	Thos. Atwell <i>et ux.</i> .....	Damages to southwest quarter of lot No. 12, concession 7, township of Emily, county of Victoria, Ont.	32 00
17995	Sept. 18..	Thomas Woods <i>e ux.</i> .....	Damages to the north part of lot No. 11 and south half of lot No. 12, in the 6th concession of the township of Emily, county of Victoria, Ont.	180 00
17996	Aug. 9..	Thomas J. Wallace <i>et al.</i> ..	Damages to southwest quarter of the east half of lot No. 10, in the 7th concession of the township of Otonabee, county of Peterborough, Ont.	70 00
17997	July 13..	Alfred Dawson <i>et ux.</i> ....	Damages to lot No. 31 and part of lot No. 35, in the 9th concession of the township of Hamilton, county of Northumberland, Ont.	120 00
18007	" 16..	William D. Monerief <i>et al.</i> ..	Damages to part of lots Nos. 28 and 29, in the 10th concession of the township of Hamilton, county of Northumberland, Ont.	60 00
18014	" 30..	William G. Brown <i>et al.</i> ....	Damages to part of lots 7 and 8 in the 8th concession of the township of Otonabec, county of Peterborough, Ont.	340 00
18015	" 31..	John E. Curtis <i>et al.</i> .....	Damages to lot No. 5, 3rd concession of the township of Alnwick, county of Northumberland, Ont.	376 00
18048	Oct. 23..	Wm. Wedlock <i>et al.</i> .....	Damages to part of lot 15 and part of lot 13 in the 6th concession of the township of Otonabee, county of Peterborough, Ont.	140 00
18066	Aug. 18..	Jno. J. Blackwell <i>et al.</i> ....	For damages to south quarter of lot No. 13 in the 7th concession of the township of Emily, county of Victoria, Ont.	40 00
18081	Nov. 19..	Jno. Brackenridge <i>et ux.</i> ..	Damages to lot No. 2 and west half of lot No. 3 in the 5th concession of the township of Asphodel, county of Peterborough, Ont.	110 00
18188	July 22..	Chas. McCaffrey <i>et ux.</i> .....	Damages to park lots 1 and 'N' in the village of Omeme, township of Emily, county of Victoria, Ont.	20 00
18189	" 22..	James Middleton.....	Damages to lot No. 21 in the 15th concession of the township of Smith, county of Peterborough, Ont.	25 00
18229	April 23..	Austin Sherwin.....	Damages to 40 acres of land: east half and east part of west half of lot No. 3 in the 2nd concession of the township of Alnwick, county of Northumberland, Ont.	40 00
18230	Nov. 15..	Chas. McIlmoyle <i>et ux.</i> ....	For damages to part of north half of lot No. 19 in the 16th concession of the township of Harvey, county of Peterborough, Ont.	30 00

## SESSIONAL PAPER No. 20

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—*Continued.*TRENT CANAL—*Continued.*

No. of Re-lease.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ cts.
*18233	Feb. 16..	Jas. R. Boate <i>et al.</i> .....	For damages to north half of lot No. 21, in the 4th concession, and to lot No. 22 in the 5th concession of the township of Emily, county of Victoria, Ont.	300 00
18234	May 22..	Thos. G. Gihbs <i>et ux.</i> .....	For damages to south half of lot 18 and to north-east quarter of lot No. 17 of the 16th concession of the township of Otonabee, county of Peterborough, Ont.	400 00
18235	Aug. 18..	Sndy Matchett <i>et ux.</i> .....	For damages to part of lot No. 19, concession 16, of the township of Otonabee, county of Peterborough, Ont.	255 00
18236	July 23..	John McCauley <i>et al.</i> .....	Damages to west part of lot No. 3 in the 5th concession of the township of South Burleigh, county of Peterborough, Ont.	128 00
18237	Dec. 28..	Patrick Bolin <i>et al.</i> .....	Damages to lots 8, 9 and 10, in the 7th concession of the township of Otonabee, county of Peterborough, Ont.	88 00
18238	July 10..	John Riddell <i>et al.</i> .....	Damages to east half of lot No. 13, concession 4, and east half of lot No. 13, concession 5, of the township of South Monaghan, county of Northumberland, Ont.	200 00
18291	Dec. 4..	Matthew McIlmoyle <i>et ux.</i> ..	For damages by water to south half of lot No. 19, concession 16, of the township of Harvey, county of Peterborough, Ont., also part of west half of north half of said lot No. 19.	12 00
	1910.			
18450	Mar. 19..	Bruce Savigny <i>et ux.</i> .....	Damages to the east half of lot No. 15, 17th concession of the township of Otonabee, county of Peterborough, Ont.	156 00
	1909.			
18451	June 26..	Fred. W. Stockdale <i>et al.</i> ..	Damages to island 'A' in the township of Harvey, county of Peterborough, Ont.	133 00
18452	" 11..	George Brown <i>et ux.</i> .....	Damages to lot No. 20, in the 7th concession of the township of Alnwick, county of Northumberland, Ont.	30 00
18453	Dec. 31..	Thos. J. Cullen <i>et ux.</i> .....	Damages to lot No. 22 and to the north half of lot 23 in the 16th concession of the township of Smith, county of Peterborough, Ont.	100 00
18454	Sept. 23..	Wm. F. Trude <i>et al.</i> .....	Damages to lots Nos. 24 and 25 in the 15th concession of the township of Smith, county of Peterborough, Ont.	240 00
18455	May 3..	Thos. McCracken.....	Damages to lot No. 22 in the 7th concession of the township of Alnwick, county of Northumberland, Ont.	40 00
18456	Nov. 13..	Samuel Tate <i>et al.</i> .....	Damages to lots Nos. 16 and 17 in the 14th concession, and the east half of lot No. 18 in the 15th concession of the township of Harvey, county of Peterborough, Ont.	64 00
18457	June 26..	Patrick Crowley <i>et al.</i> .....	Damages to lot No. 3 in the 5th concession of the township of Asphodel, county of Peterborough, Ont.	320 00
18458	Aug. 7..	Patrick English.....	Damages to west half of lot No. 9 in the 11th concession of the township of Percy, county of Northumberland, Ont.	56 00
18460	April 22..	Wm. Windsor <i>et al.</i> .....	Damages to west quarter of lot No. 4 in the 3rd concession of the township of Burleigh, county of Peterborough, Ont.	100 00
18461	Oct. 9..	Thos. Davidson <i>et ux.</i> .....	Damages to lot No. 6 in the 2nd concession of the township of Asphodel, county of Peterborough, Ont.	45 00
18462	Nov. 29..	Richard Byrnell <i>et al.</i> .....	Damages to part of lot No. 23 in the 8th concession and part of lot No. 23 in the 9th concession of the township of Fenelon, county of Victoria, Ont.	40 00
	1910.			
18463	Jan. 10..	Elizabeth A. Fowler <i>et al.</i> ..	Damages to lots Nos. 15 and 15 in the 9th concession of the township of Smith, county of Peterborough, Ont.	16 00

\* Too late for last year's report.



1 GEORGE V., A. 1911

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—*Continued.*TRENT CANAL—*Continued.*

No. of Release.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ cts.
18464	July —	David J. Ball <i>et al.</i> . . . . .	Damages to west half of east half of lot No. 7 in the 10th concession of the township of Harvey, county of Peterborough, Ont.	12 00
18467	May 8	William S. Rutherford <i>et al.</i> . . . . .	For damages by water to north three-quarters of lot No. 6 in the 3rd concession of the township of South Monaghan, county of Northumberland, Ont.	220 00
18470	July 17	Archibald Johnston . . . . .	For damages by water to lots Nos. 1 and 2, and to lot "A," in the 14th concession of the township of Harvey, county of Peterborough, Ont.	200 00
18472	May 29	Hugh Allen <i>et ux.</i> . . . . .	For damages by water to the east half of lot No. 3, in the 14th concession of the township of Harvey, county of Peterborough, Ont.	96 00
18473	July 27	Michael D. Wallace <i>et ux.</i> . . . . .	For damages by water to the north half of the southwest quarter of lot No. 8; the north half of the southwest half of lot No. 9; the north half of the southeast quarter of lot No. 9, and the south half of the northwest quarter of lot No. 8, in the 7th concession of the township of Otonabee, county of Peterborough, Ont.	144 00
18471	Dec. 1	Alexander Reid <i>et al.</i> . . . . .	Damages by water to part of lot No. 3, in the 4th concession of the township of South Burleigh, in the county of Peterborough, Ont.	120 00
	1910.			
18474	Feb. 26	James Gilchrist Burnham <i>et al.</i> . . . . .	Damages by water to northeast quarter of lot No. 11, and to parts of lots 12, 13 and 14, concession 6, township of Otonabee, county of Peterborough, Ont.	424 00
	1909.			
*18475	Feb. 5	Darius G. Hall <i>et al.</i> . . . . .	For damages by water to lot No. 2, in the 11th concession of the township of Harvey, county of Peterborough, Ont.	130 00
18476	May 15	Isabel Eastwood <i>et al.</i> . . . . .	Damages by water to island No. 78, in Stoney lake, in the township of Burleigh, in the county of Peterborough, Ont.	200 00
*18477	Feb. 10	George W. Bennett <i>et al.</i> . . . . .	For damages by water to island No. 56, of the township of Peterborough, Ont.	150 00
18478	April 1	John Faux <i>et al.</i> . . . . .	Damages by water to parts of broken lots 12 and 13 in the 2nd concession of the township of Otonabee, county of Peterborough, Ont.	500 00
*18479	Jan. 26	William James Northey <i>et ux.</i> . . . . .	Damages by water to lot No. 27, in the 14th concession of the township of Smith, in the county of Peterborough, Ont.	42 00
18480	June 21	Archibald Wilson <i>et al.</i> . . . . .	For damages by water to lot No. 2, in the 16th concession of the township of Harvey, county of Peterborough, Ont.	245 00
	1910.			
18481	Feb. 8	Daniel Ward <i>et al.</i> . . . . .	For damages by water to the west half of lot No. 22, in the 16th concession of the township of Harvey, county of Peterborough, Ont.	300 00
	1909.			
18482	June 24	George Walford Hatton . . . . .	For damages by water to part of lot No. 3, in the 7th concession, and to the east half of lot No. 2, in the 6th concession of the township of South Burleigh, in the county of Peterborough, Ont.	192 00
	1910.			
18483	Jan. 29	Martha Perrin <i>et al.</i> . . . . .	For damages by water to parts of lots Nos. 17 and 18, in the 2nd concession of the township of South Monaghan, county of Northumberland, Ont.	240 00
	1909.			
18484	June 19	Robert James Gray <i>et al.</i> . . . . .	For damages by water to parts of west half of lot No. 8, and to parts of west half of lot No. 7, in 10th concession of the township of Otonabee, in the county of Peterborough, Ont.	500 00
18485	May 22	James Carlington Foley <i>et al.</i> . . . . .	Damages by water to the west half of lot 11, and to the west half of lot No. 12, in the 4th concession of the township of Otonabee, county of Peterborough, Ont.	320 00

\* Too late for last year's report.

## SESSIONAL PAPER No. 20

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—*Continued.*TRENT CANAL—*Continued.*

No. of Release.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ ots.
18486	Dec. 16..	John Moncrief <i>et ux.</i> .....	Damages by water to the southwest quarter of lot No. 13, in the 1st concession of the township of South Monaghan, county of Northumberland, Ont.	40 00
	1910.			
18487	Feb. 1..	John Brandon Beatty <i>et al.</i>	For damages by water to the south half of the west half of lot No. 25, in the 16th concession of the township of Harvey, county of Peterborough, Ont.	75 00
	1909.			
18488	Aug. 14..	William Melhnoyle <i>et ux.</i> ...	Damages by water to part of lot 21, in the 15th concession of the township of Smith, county of Peterborough, Ont.	25 00
	1910.			
18489	Feb. 26..	William Beatty <i>et al.</i> .....	Damages by water to the south quarter of lot No. 20, concession 16, of the township of Harvey, county of Peterborough, Ont.	24 00
	1909.			
18490	Oct. 23..	William Wedlock <i>et al.</i> ....	Damages by water to part of lot No. 13, parts of the southwest quarter of lot No. 14, part of the east half of lot No. 14, and parts of lot 15, in the 6th concession of the township of Otonabee, county of Peterborough, Ont.	600 00
*18491	Mar. 2..	Bruce Johnston <i>et al.</i> .....	For damages by water to part of lot No. 10, in the 10th concession of the township of North Monaghan, county of Peterborough, Ont.	720 <sup>00</sup>
	1910.			
18492	Feb. 26..	Morgan Adam <i>et al.</i> .....	For damages by water to east half of lot No. 28, in the 14th concession of the township of Smith, county of Peterborough, Ont.	24 00
18493	" 11..	George Whittington <i>et al.</i> ..	For damages by water to lot No. 17, and part of lot No. 16, in the 3rd concession of the township of South Monaghan, county of Northumberland, Ont.	240 <sup>00</sup>
	1909.			
18494	Dec. 30..	David Bardow <i>et al.</i> .....	For damages by water to the west half of lot No. 24, in the 16th concession of the township of Harvey, in the county of Peterborough, Ont.	50 00
	1910.			
18495	Jan. 15..	Frank Howard Savigny <i>et al.</i>	Damages by water to part of the east half of lot No. 15, in the 17th concession of the township of Otonabee, county of Peterborough, Ont.	65 00
18496	" 15..	Thomas Thomson <i>et ux.</i> ....	For damages by water to lot No. 4, and part of lot No. 1, hlock 'A,' township of Otonabee, county of Peterborough, Ont.	60 00
	1909.			
18497	May 22..	Henry G. Nisbett.....	For damages by water to west half of lots Nos. 4 and 5, in the 16th concession of the township of Harvey, county of Peterborough, Ont.	140 00
18498	June 19..	David Hutchison <i>et ux.</i> ....	For damages by water to lot No. 14, in the 17th concession of the township of Otonabee, county of Peterborough, Ont.	650 00
18499	June 19..	Walter Thompson <i>et ux.</i> ....	Damages by water to lot No. 7, in the 9th concession of the township of Otonabee, county of Peterborough, Ont.	1,100 00
	1910.			
18500	Feb. 1..	Rupert H. Bradburn <i>et al.</i>	For damages by water to west half of lot No. 12, in the 17th concession of the township of Otonabee, county of Peterborough, Ont.	240 00

\* Too late for last Year's report.



DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1910—*Concluded.*

TRENT CANAL—*Concluded.*

No. of Re-lease.	Date of Signature.	Grantor.	Description.	Amount.
	1909.			\$ cts.
18501	Dec. 21.	Lewis Parker <i>et al.</i> .....	For damages by water to part of lot 19, in the 15th concession, east of Eel's creek, township of Harvey, county of Peterborough, Ont.	60 00
18502	Nov. 24.	Benjamin Kindred <i>et al.</i> ....	For damages by water to northwest quarter of lot No. 8, in the 8th concession of the township of Otonabee, county of Peterborough, Ont.	160 00
18503	Dec. 17.	Matilda Wright <i>et al.</i> .....	Damages by water to the south half of lot No. 4, in the 7th concession of the township of North Monaghan, in the county of Peterborough, Ont.	200 00
18504	June 23.	Ellen Cadigan <i>et al.</i> .....	Damages by water to part of lot 4, and to the northeast quarter of lot 5, in the 10th concession of the township of Ennismore, county of Peterborough, Ont.	225 00
*18505	Mar. 8.	Daniel Cadigan <i>et al.</i> .....	Damages by water to parts of lots 4 and 5, in the 10th concession of the township of Ennismore, county of Peterborough, Ont.	250 00
18506	June 12.	Eleanor A. Allen.....	For damages by water to lot No. 4, in the 14th concession of the township of Harvey, county of Peterborough, Ont.	150 00
	1910.			
18507	Mar. 1.	Nathaniel Crowe <i>et al.</i> .....	Damages by water to part of the west half of lot No. 18, in the 15th concession of the township of Harvey, county of Peterborough, Ont.	35 00
	1909.			
18513	May 4.	John B. McWilliams <i>et ux.</i>	Damages by water to lots Nos. 2 and 3, in the 11th concession of the township of South Burleigh, and to island No. 47, in the township of Dummer, county of Peterborough, Ont.	400 00

\* Too late for last year's report.

H. F. ALWARD,  
*Departmental Solicitor.*

## PART III

REPORTS OF THE GOVERNMENT RAILWAY BOARD  
AND OTHER OFFICIALS FOR THE  
YEAR 1909-1910.

1. Government Railways Managing Board.  
W. B. MacKenzie, Chief Engineer, I.C.R.  
T. C. Burbee, Engineer of Maintenance, I.C.R.  
G. R. Joughins, Superintendent of Motive Power, I.C.R.  
S. L. Shannon, Comptroller, I.C.R.
2. T. C. Burbee, Engineer of Maintenance, Windsor Branch.  
S. L. Shannon, Comptroller, Windsor Branch.
3. W. B. MacKenzie, Chief Engineer, P.E.I. Ry.  
G. A. Sharpe, Superintendent, P.E.I. Ry.  
W. S. Poole, Mechanical Superintendent, P.E.I. Ry.  
W. T. Huggan, Accountant and Auditor, P.E.I. Ry.
4. Chairman and Secretary of Government Railways Provident Fund.



MONCTON, N.B., July 6, 1910.

SIR.—The Government Railways Managing Board have the honour to submit the following report on the working of the Government Railways during the fiscal year ended March 31, 1910.

The board was constituted by an order in council, dated April 20, 1909, and the following were appointed its members, namely:—

Mr. M. J. Butler, Deputy Minister and Chief Engineer of the Department of Railways and Canals, chairman of the board.

Mr. David Pottinger, I.S.O.

Mr. E. Tiffin, general traffic manager.

Mr. F. P. Brady, general superintendent.

Subsequently on February 5, 1910, Mr. Butler having resigned, Mr. A. W. Campbell, C.E., Deputy Minister of the Department of Railways and Canals, was appointed chairman of the board, and Mr. D. Pottinger, assistant chairman, by order in council, dated February 3, 1910.

The board, therefore, from February 5 to March 31, 1910, was constituted as follows:—

Mr. A. W. Campbell, C.E., chairman, Ottawa.

Mr. D. Pottinger, I.S.O., assistant chairman, Moncton.

Mr. E. Tiffin, general traffic manager, Moncton.

Mr. F. P. Brady, general superintendent, Moncton.

The board held its first meeting on May 26, 1909, at Montreal.

There were twenty-three meetings in all from that date to March 31, 1910, ten of them in Montreal, eleven in Moncton and two elsewhere along the line of railway.

The railways under the control of the board are:—

The Intercolonial railway, the Windsor Branch railway, and the Prince Edward Island railway.

Separate accounts are kept for each of these railways, and they will be considered separately in this report.

#### THE INTERCOLONIAL RAILWAY.

The following reports of officials are inclosed:—

Report of the Chief Engineer on the works charged to capital account.

Report of the Engineer of Maintenance on the repair and renewal of the permanent way buildings and works.

Report of the Superintendent of Motive Power, and of the Mechanical Department's Accountant, with the statements relating to the Mechanical Department.

Also the general accounts of the railway prepared by the comptroller, as follows:—

1. Capital account.
2. Revenue account.
3. Maintenance of way and structures.
4. Maintenance of equipment.
5. Traffic expenses.
6. Transportation expenses.
7. General expenses.
8. General stores account.
9. General balance.
10. Statement of averages.

Return of casualties:

9-10 EDWARD VII., A. 1910

The length of railway in operation during the year was the same as last year, 1,447.13 miles.

## CAPITAL ACCOUNT.

The cost of road and equipment on March 31, 1909, was \$90,994,664.06. The additions during the year were as follows:—

Campbellton—improvements . . . . .	\$ 1,988 49
Chatham—diversion of line and branch to wharf . . . . .	5,228 44
Chaudiere Junction—engine house, &c. . . . .	6,834 61
Dalhousie—extension to wharf . . . . .	27,500 00
Eastville—to provide a subway crossing, about one mile south of Londonderry station . . . . .	68 75
Halifax—increased accommodation. . . . .	179,953 93
Indiantown and Blackville—to put line into condition for operation. . . . .	49 991 90
Loggieville—improvements . . . . .	25,474 27
Moncton—locomotive and car shops with equipment and new freight yard. . . . .	399,400 49
Moncton—cut-off line at. . . . .	1,975 15
Mulgrave—improvements . . . . .	18,403 15
Newcastle—improvements . . . . .	2,472 16
North Sydney—improvements . . . . .	5,771 37
Pictou—increased accommodation. . . . .	800 64
Point Tupper—improvements. . . . .	3,998 88
Probert's—to provide an overhead crossing, about two miles north of Londonderry station. . . . .	43 14
Riviere du Loup—engine house, machine shops, &c . . . . .	156,945 33
Sackville—improvements . . . . .	7,875 81
Sydney Mines to River George—diversion of line. . . . .	20,256 36
St. Cyrille and Drummondville—diversion of public road to eliminate a crossing at rail level. . . . .	1,300 00
Ste. Flavie—increased accommodation . . . . .	3,754 26
Ste. Rosalie—improvements. . . . .	3,540 32
Truro—increased accommodation . . . . .	17,019 51
New machinery for locomotive and car shops. . . . .	95,799 43
Construction—original. . . . .	6,644 09
Double tracking parts of line . . . . .	68,977 65
Increased accommodation and facilities. . . . .	100,565 28
New turn-tables. . . . .	2,696 13
Strengthening bridges . . . . .	10,272 26
Rolling stock. . . . .	10,430 54
To increase water supply. . . . .	42,432 26

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\$1,278,467 60

Less:

To extension to Sydney Mines, 1908-09. . . . .	\$ 4 90
To increased accommodation at Stellarton, 1908-09. . . . .	53 25

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58 15

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1,278,409 45

Making the total cost on March 31, 1910. . . . . \$92,273,073 51

The explanation of the above deductions is as follows:

The \$4.90 is a refund of an amount overpaid for legal services.

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The amount of \$53.25 is composed of two sums, a cheque for \$50 was issued to pay for land, the person in whose favour the cheque was drawn refused to accept the amount offered, and the cheque was cancelled, the \$3.25 is a credit for express charges refunded.

Explanations in regard to the expenditures on capital account will be found in the report of the chief engineer, and in the report of the superintendent of motive power.

## REVENUE ACCOUNT.

The gross earnings and the working expenses for the year compare as follows:—

Gross earnings . . . . .	\$9,268,234 99
Working expenses . . . . .	8,645,070 33
	<hr/>
Net earnings . . . . .	\$ 623,164 66

The gross earnings compare as follows with those of the previous year:—

In 1909-10 . . . . .	\$9,268,234 99
1908-09 . . . . .	8,527,069 46
	<hr/>
Increase . . . . .	\$ 741,165 53

The earnings from passenger traffic compare as follows:—

In 1909-10 . . . . .	\$2,765,884 66
1908-09 . . . . .	2,628,218 57
	<hr/>
Increase . . . . .	\$ 137,666 09

The earnings from freight traffic compare as follows:—

In 1909-10 . . . . .	\$6,048,884 18
1908-09 . . . . .	5,502,550 58
	<hr/>
Increase . . . . .	\$ 546,333 60

The earnings from mails and express freight compare as follows:—

In 1909-10 . . . . .	\$453,466 15
1908-09 . . . . .	396,300 31
	<hr/>
Increase . . . . .	\$ 57,165 84

The earnings by mile of railway compare as follows:—

In 1909-10 . . . . .	\$6,404 56
1908-09 . . . . .	5,892 40
	<hr/>
Increase . . . . .	\$ 512 16

The earnings by train compare as follows:—

In 1909-10 . . . . .	\$1 39
1908-09 . . . . .	1 24

The number of passengers carried compares as follows:—

In 1909-10 . . . . .	\$3,122,324
1908-09 . . . . .	2,907,237
	<hr/>
Increase . . . . .	\$ 215,087

There was an increase of 217,330 in the number of local passengers, and a decrease of 2,243 in the number of through passengers.



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The weight of revenue producing freight compares as follows:—

	Tons.
In 1909-10. . . . .	3,927,240
1908-09. . . . .	3,573,972
	<hr/>
Increase . . . . .	353,268

There was an increase in local freight of 216,188 tons, and also an increase in through freight of 137,080 tons.

A number of statements which give detailed information in regard to the traffic are appended to this report. They are as follows:—

Statement of receipts, showing the receipts monthly from passenger traffic, freight traffic and mails and sundries.

Passenger statement showing monthly the number of local and of through passengers carried, and the mileage.

Freight statement showing monthly the number of tons of local and of through freight carried, and the mileage.

Comparative statement of the principal articles of freight carried during this year and the preceding year.

Descriptive statement of freight transported, showing a few of the principal articles.

Statement of coal transported showing the stations from which it was sent.

Statement showing the quantity of raw and of refined sugar, of fresh and salted fish, of grain for export, and of European freight carried over the railway.

Statements of the ocean borne passenger business at Halifax, at St. John and at Quebec, showing the number of passengers received by the railway from each of the steamers named.

Statements of ocean borne freight traffic at Halifax and at St. John, showing the quantity of freight imported and exported by the lines of steamers named and carried over the railway.

#### WORKING EXPENSES.

The working expenses compare as follows with the previous year:—

In 1909-10. . . . .	\$8,645,070 33
1908-09. . . . .	9,328,021 55
	<hr/>
Decrease. . . . .	\$ 682,951 22

The averages compare with those of last year as follows:—

Per mile run by engines—

In 1909-10. . . . .	1.0042
1908-09. . . . .	1.0129

Per mile run by trains—

In 1909-10. . . . .	1.29
1908-09. . . . .	1.35

Working expenses per mile of railway—

In 1909-10. . . . .	\$5,973 94
1908-09. . . . .	6,445 89

The Engineer of Maintenance reports that the track, bridges and structures of the railway have been kept in good repair.

During the year 600,163 ordinary ties and 288 sets of switch ties were put in. 56.38 miles of track were rebalasted, 67,659 cubic yards of ballast being used. 3.85 miles of additional sidings were provided at various points.

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Bridges, culverts, wharfs and buildings received necessary repairs.  
 The fences were repaired and 47.42 miles of fences were built.  
 The snow sheds and snow fences were repaired.  
 The Superintendent of Motive Power in his report which is sent herewith states that the general condition of the rolling stock is good.  
 One box freight car, sixteen platform cars and one flanger car were rebuilt in the railway shops to replace an equal number taken out of service.  
 Thirty steel side dump coal cars were purchased to replace coal cars of an equal capacity taken out of service. Six box baggage cars were purchased to replace an equal number of cars taken out of service.  
 All the above were charged to working expenses.

STORES.

The value of stores purchased was . . . . .	\$2,800,212 24
The value of stores used was . . . . .	3,363,105 44
The value of material sold . . . . .	225,144 67
The value of stores on hand at the end of the year was:—	
Miscellaneous . . . . .	\$ 511,892 90
Fuel . . . . .	416,911 37
Roadway and bridge material . . . . .	314,377 42
	<hr/>
Total . . . . .	\$1,243,181 69

ACCOUNTS.

During the session of parliament of 1908-09, the Select Standing Committee on Public Accounts inquired into and considered the various items composing the general balance of the railway, and recommended that items amounting to \$153,731.04 which were found to be uncollectable be eliminated from the general balance. This recommendation was approved by parliament and the items were transferred to Dominion account accordingly.

GENERAL.

The winter of 1909-10 was comparatively mild and more favourable to the working of the railway than the previous year. There were several heavy snowstorms, but they caused very little delay to trains. The expenditure for clearing snow and ice was \$91,124.29. The sudden and extreme changes of temperature experienced during the winter made it very trying to the rolling stock and also to the track.  
 On August 3, 1909, the coal shed at Richmond was destroyed by fire, together with about 50 tons of coal. The trestle leading to the coal shed was partly burned. Thirteen light box cars, one cattle car, one gondola car, seven large coal hopper cars and two small coal hoppers were also destroyed in the same fire. The balance of the coal in the shed was saved, some of it in a damaged condition.  
 On November 17, 1909, the car service building at Moncton, the ground floor of which was occupied by the trainmen's rest rooms and by the express companies, and the upper floor of which contained the offices of the car service department, was considerably damaged by fire, one end of the building being destroyed with all the car service records. Temporary accomodation was provided for the occupants of the building until it was rebuilt.  
 Between April 15 and 23, 1909, considerable trouble was experienced on the portion of the line between Gibson and Blackville in consequence of high water. Heavy rains set in and the freshets caused several washouts and earth slides; the ice jammed in the Miramichi river and the water rose and overflowed the track to a depth of several

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fect at a number of places, the track at McNamee's flats being under the water for some distance for several days. During that time the movement of freight traffic was interrupted, and passengers and mails were transported only with difficulty and some delay, a transfer having to be made by teams at places where the trains could not get through. When the water had subsided and the repairs to the roadway and track were being made it was found desirable to raise the track at McNamee's and an expenditure of \$1,000 was made on that account.

From September 27 to 30, 1909, trouble was again experienced on the same portion of the line from washouts, earth slides and overflow of water, in consequence of continual heavy rains. The movement of freight was again delayed. Passenger trains were also delayed on that account. The total cost of repairing the damage done on the above section of the road amounted to \$2,673.65.

On October 1, 1909, there were several washouts in the neighbourhood of Dorchester, caused by high tides in the Petitcodiac river, and trains, both passenger and freight, were delayed to some extent in consequence. When repairing these washouts, it was decided to raise the level of the track in certain places by filling so as to afford better protection for the future, and this was done at a cost of \$3,426.56—6,660 cubic yards of material being used for the purpose.

On October 25 and 26, 1909, a succession of heavy rain storms caused a number of washouts at different places on the line between New Glasgow and Mulgrave; the most serious ones being Sylvan Valley Mills, Pomquet, Afton and Delorey's. All traffic over that portion of the road was interrupted for twenty-four hours. The cost of repairing the damage done amounted to \$2,141.78.

#### WINDSOR BRANCH RAILWAY.

This line extends from Windsor Junction to Windsor, N.S., and is 32 miles in length. It is under lease to the Dominion Atlantic Railway Company, which operates the line, and which has also running powers over the Intercolonial railway between Windsor Junction and Halifax.

The Windsor branch is maintained by the government, and the company pays to the government one-third of the gross earnings.

The following statements of the accounts prepared by the comptroller are enclosed:—

- No. 1. Revenue account.
- No. 2. Maintenance of way and structures.
- No. 3. General balance.
- No. 4. Statement of earnings.

Also the report of the Engineer of Maintenance on the work done during the year, and on the condition of the branch.

The revenue ( $\frac{1}{3}$ earnings) was . . . . .	\$60,653 98
The cost of maintenance was . . . . .	23,549 90

Net earnings . . . . .	\$37,104 08
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The earnings increased considerably over those of the previous year as follows:—

Earnings, 1909-10 . . . . .	\$60,653 98
Earnings, 1908-09 . . . . .	56,031 33

Increase . . . . .	\$ 4,622 65
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The increase was in both passenger and freight traffic.

The Engineer of Maintenance reports that the track, bridges, and structures have been kept in good repair.

PRINCE EDWARD ISLAND RAILWAY.

This railway is 267.5 miles in length, and the gauge is 3 feet 6 inches.

The following reports of officials are enclosed:—

Report of the Chief Engineer on the works charged to capital account.

Report of the Superintendent, who sends statements of the various accounts prepared by the accountant and auditor, also the report of the Mechanical Superintendent and the statements in regard to that department, also the return of casualties which occurred during the year.

The cost of road and equipment on March 31, 1909,	
was . . . . .	\$8,258,967 94
The expenditure during the year was. . . . .	206,396 97

Making the total cost on March 31, 1910. . . . \$8,465,364 91

The report of the superintendent and the report of the chief engineer give the details and explanations in regard to capital expenditure.

The working expenses for the year were. . . . .	\$427,283 73
The gross earnings were. . . . .	319,074 74

Deficiency. . . . . \$108,208 99

The gross earnings compare with the previous year as follows:—

In 1909-10. . . . .	\$319,074 74
In 1908-09. . . . .	311,319 63

Increase. . . . . \$ 7,755 11

The increase was in both passenger and freight traffic.

The working expenses compare with the previous year as follows:—

In 1909-10. . . . .	\$427,283 73
In 1908-09. . . . .	400,330 41

Increase. . . . . \$ 16,953 32

The necessary work was done to maintain the permanent way and works, and the rolling stock, and they are in a state of efficiency.

INTERCOLONIAL AND PRINCE EDWARD ISLAND RAILWAYS EMPLOYEES' PROVIDENT FUND.

The report of this fund which has been sent separately shows:—

Credit balance on March 31, 1909. . . . .	\$225,898 31
During the fiscal year the contributions of the employees amounted to . . . . .	69,949 70
The contributions of the railways amounted to. . . . .	69,949 70
Amounts received for refunds . . . . .	483 06

A total of. . . . . \$366,280 77

The total expenditure was. . . . . 117,010 01

Leaving a balance of. . . . . \$249,270 76

To which is to be added the interest. . . . . 6,314 32

Making a total amount to the credit of the fund on March 31, 1910. . . . . \$255,585 08

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During the year one hundred and sixty-eight employees were retired and placed upon the fund and seventeen have died, leaving three hundred and fifty-three persons on the list receiving an allowance from the fund at the end of the fiscal year. This is an increase of 151 persons compared with last year.

We have the honour to be, sir,

Your obedient servants,

A. W. CAMPBELL, Chairman.

D. POTTINGER, Assistant Chairman.

E. TIFFIN, General Traffic Manager.

F. P. BRADY, General Superintendent.

*Government Railways Managing Board.*

## INTERCOLONIAL RAILWAY OF CANADA.

OFFICE OF THE CHIEF ENGINEER.

MONCTON, N.B., June 30, 1910.

SIR,—I have the honour to submit the following report on Capital Account expenditure for the fiscal year ending March 31, 1910:—

### TOWARDS DOUBLE TRACKING PARTS OF THE LINE.

The double track between Moncton and Painsec Junction was completed and put in operation on August 22, 1909.

A concrete retaining wall with iron pipe railing was constructed for the protection of the street leading from Church street to St. George street; this was necessary on account of this street having been narrowed considerably by the excavation for the second track.

Electric signal gongs were installed for protection at the following crossings:—

Irishtown Road, Sunny Brae, and at Lutes, Queen, Robinson, Victoria, St. George and Church streets in the city of Moncton.

A signal tower was built and an interlocking plant installed for the protection of trains at the point where the Moncton and Buctouche railway crosses the Intercolonial.

.419 of an acre of land required for the right of way was purchased.

### IMPROVEMENTS AT MULGRAVE.

The work in connection with the extension of the water pipe line, and construction of a reservoir for additional water supply for which the contract was let in the fiscal year 1908-09 was completed.

.3061 of an acre of land required for the reservoir was purchased.

A second track was laid on the main line from Pirate Harbour to Mulgrave, a distance of 1,986 lineal feet.

A brick house with concrete foundation was erected for the hoisting engine in connection with the transfer bridge of the Strait of Canso ferry service.



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## IMPROVEMENTS AT LOGGIEVILLE.

The station facilities at this point were remodelled and enlarged.  
·688 of an acre of land was purchased.

A new five-stall brick engine house and annex, a standard cinder pit and ring wall for turntable were built. (The ring wall and turntable were charged to Capital Appropriation—'New Turntables.')

A steam heating apparatus was provided for the engine house.

A complete system of drainage was provided to carry drainage to the river about 900 feet distant from the engine house.

The water supply was extended from the existing tank through a line of 10-inch C. I. pipe to a stand pipe located near cinder pit, and from stand pipe to engine house and station. The tracks in yard were remodelled and lengthened by the laying of 2,805 feet of additional sidings.

The station was removed to a new location to suit the remodelled yard. It was also remodelled and extended. A new cellar and foundation was provided and new platform built. A new freight shed 20 feet by 60 feet with a freight platform was erected. On account of bad weather and early frost last fall, the work on the water service and drainage system was not completed.

The cast iron smoke jacks, water service and heating of engine house were not completed.

All the uncompleted work will be finished up early in the fiscal year of 1910-11.

All the work, excepting the freight house and platform was done by the day, as a large part of the material used was taken from other buildings that had been demolished. The freight house and platform were built under contract.

*To increase accommodation at Truro—*

The work in connection with the contract for the construction of a highway at the east end of the yard to take the place of Christie's lane was completed. The lane was closed by the construction of a track in the new yard.

The cribwork protection at the ends of the bridge abutments of the approaches to the new yard, was also completed.

An addition of six pockets were added to the existing coaling plant.

An office for the yardmaster was under construction by day labour, and will be completed in fiscal year 1910-11.

Some grading was done and 4,938 lineal feet of tracks laid in the new yard.

301,418 square feet of land required for yard accommodation were purchased.

*To increase accommodation at Pictou.*

A loading platform was provided and an addition added to the existing ice house.

*Cut-off Line at Moncton.*

Location surveys were made from Sunny Brae flag station to the vicinity of the new shops at Moncton, a total distance of 1.44 miles of double track.

Expropriation plans and descriptions for right of way were filed (October, 1909), and plans and specification prepared in readiness to ask tenders for construction.

*Original Construction.—*

Under this appropriation, the following amounts were paid: Marion S. Morrow, widow of Geoffrey Morrow; Chas. T. Mander, Deaf and Dumb Institution; and Henry N. Paint, \$5,906.25 for 118,125 square feet of land and land covered with water at Point Tupper. Imperial Oil Company, \$344 for repayment of expenses for removal of oil pipes and other property at Afrieville made necessary by the removal of the railway fence to the eastward in consequence of the double tracking of the Intercolonial railway between Richmond and Rockingham.



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R. T. MacIreith, \$219.94, for legal expenses in connection with the Imperial Oil Company's claim.

James Friel, \$10 for legal services *re* North River ballast pit.

P. S. Archibald, \$107.60, and Chief Engineer of the Intercolonial railway, \$38.15, for services and expenses in connection with case *Montgomery vs. The King—Dalhousie water supply.*

A. M. McLellan, \$18.15, for expenses *re* Cameron's siding, Sylvester.

#### *Improvements at North Sydney—*

An extension was built to the existing freight shed on the railway wharf.

#### *To Strengthen bridges—*

During the year bridges were erected at the following places:—

	Feet.	Inches.
St. Octave—1 beam span. . . . .	13	— 2
St. Octave—1 beam span. . . . .	14	— 0
Kempt—1 beam span. . . . .	12	— 9
Kempt—1 beam span. . . . .	14	— 9
Cedar Hall—1 beam span. . . . .	17	— 11
Cedar Hall—1 beam span. . . . .	17	— 5
Cedar Hall—1 beam span. . . . .	14	— 6
Amqui—1 beam span. . . . .	13	— 6
Amqui—1 beam span. . . . .	13	— 0
Beau Rivage—1 beam span. . . . .	17	— 6
Beau Rivage—1 deck plate girder span. . . . .	34	— 6
Trois Saumons—1 deck plate girder span. . . . .	25	— 0
Hadlow—1 deck plate girder skew span. . . . .	56	— 6
St. Romuald—1 beam span. . . . .	14	— 8
St. Romuald—1 beam span. . . . .	15	— 9
St. Romuald—1 beam span. . . . .	16	— 0
St. Romuald—1 through plate girder span. . . . .	25	— 5
St. Romuald—1 beam span. . . . .	13	— 5
St. Romuald—1 beam span. . . . .	17	— 3
St. Romuald—1 beam span. . . . .	16	— 3
St. Romuald—1 beam span. . . . .	17	— 4
St. Romuald—1 deck plate girder span. . . . .	34	— 6
St. Romuald—1 deck plate girder span. . . . .	18	— 9
St. Romuald—1 beam span. . . . .	18	— 9
St. Romuald—1 beam span. . . . .	21	— 0

The necessary alterations and painting in connection with the above bridges will be completed in fiscal year 1910-11.

The Hillside paving blocks that were delivered last year were laid on the Union street overhead bridge.

#### *Improvements at Sackville.*

The freight shed for which the contract was let last year was completed and the building wired for electric lighting. New freight scales were put in freight shed.

A cattle pen was provided. A roadway was made from the new freight shed on Intercolonial railway property to Lorne street.

The grading required around new freight house was completed and 775 lineal feet of tracks laid.

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*To increase accommodation at Halifax—*

The contract work in connection with the 36-stall engine house and concrete annex, power house and for the supply and installation of a fan-heating system, steam and water pipes, &c., for the engine house were completed, but the final estimates were not paid on account of the appropriation being exhausted.

The 3-280 H.P. boilers, supplied under contract by the Canada Foundry Co., were erected in place on concrete foundations in the boiler house.

The oil house was equipped with a set of tanks and pumps, supplied under contract by the S. F. Bowser & Co., Ltd.

Alterations were made to the coaling pockets to facilitate the handling of coal for the low engines.

Improvements were made to the water supply system.

The work in connection with the moving of the electric plant from North street to the Willow Park yard and wiring the new buildings and yard was carried on during the year.

The final estimate in favour of Beazley Bros., on their contract for submarine blasting and dredging at Deep Water terminus was paid.

The balance due the contractor in connection with the double tracking of the Cotton Factory branch which was completed in 1908-09, was paid.

A trackman's tool house was erected on the Cotton Factory branch.

5.215 acres of land required for right-of-way for Cotton Factory branch were purchased.

13,835 lineal feet of tracks were laid in the Willow Park yard and ballasted.

For details of machinery, see report of G. R. Joughins, superintendent of motive power and rolling stock.

*Diversion of line Sydney Mines to River George—*

Surveys were made for a single track diversion from near George's River station to Sydney Mines, via the shore of Little Bras d'Or lake, a distance of 9.09 miles. Plans and specifications have been prepared and tenders asked for.

*Diversion of line at Chatham and branch to wharf.*

Location has been made from Nelson station, easterly through the town of Chatham, thence to a point about  $1\frac{1}{2}$  miles east of the town limits three miles west of Loggieville and where the new line connects with the existing one. Length of new line, 8.28 miles.

Plans and specifications were prepared and tenders asked for.

*Locomotive and car shops with equipment and new freight yard at Moncton—*

Some additions and extensions were made to the internal arrangements of the locomotive and passenger car repair shops, and a terrano floor was put in the power house.

Additions were made to the water and drainage pipes.

10 96-inch diameter cast iron turntables were installed.

9 96-inch diameter steel turntables for trolley tracks were installed.

A 15-inch steam header for the steam boilers was erected.

2 chain grate stokers were provided for the boilers taken from the old shops.

A large area of excavation was made by steam shovel and 28,597 lineal feet of track laid and ballasted.

For details of machinery and electrical equipment, see report of G. R. Joughins.

*New turntables—*

The 75-foot steel turntable that was delivered at Loggieville in year 1908-09 was erected in place on a concrete centre foundation and ring wall.

*To increase water supply—*

The following work was done under this appropriation during the year:—

St. Apollinaire.—The work in connection with water supply and tank at this place has been completed. A piece of land for a reservoir on the brook was taken; but the amount offered the proprietor has been refused. Three mill-owners further down the brook claim that the taking of water from the brook by the railway produces a scarcity of water for the operation of their mills, and they are claiming damages.

Cedar Hall.—A survey was made, plans and specification prepared and tenders asked, and a contract let for an extension to the existing pipe line and for the construction of a reservoir and a 50,000 gallon water tank.

North Sydney.—The existing pipe line was extended 240 lineal feet and one fire hydrant erected for fire protection.

Contract was let for 50,000 gallon water tanks at Rogersville, Beaver Brook and Windsor Junction, and the work of construction is under way.

Little Metis.—The existing pipe line was extended and a pump house, pump and boiler provided.

Sussex.—The existing pipe line was extended and pump house, pump and boiler supplied.

St. Charles Junction.—The work in connection with the water supply at this place was completed.

Reservoirs were fenced at Springhill Junction, Piedmont and Bathurst.

Sydney.—The existing pipe line was extended 240 feet and three fire hydrants erected for fire protection.

*Increased accommodation and facilities along the line.*

Mackenzie.—A combined passenger station and dwelling was provided.

Boiesdale.—A passenger station was provided.

St. John.—A wooden car repair shop was provided. A fire alarm system was installed throughout the yard. Some grading was done and 5,579½ feet of track laid in the yard and ballasted.

Dorchester.—Toilet accommodations were installed in the station and agent's dwelling apartments.

Petit Rocher.—An electric semaphore was erected west of the station on the spur line to the wharf, but was only in operation a short time when it was taken down and is now stored at Moncton.

New Glasgow.—The freight office was enlarged and a hot water heating system installed.

Merigomish.—An addition to the freight shed was built.

Montmagny.—A building for baggage, coal and oil was provided.

Dalhousie.—A one-stall brick engine house was built by day labour.

Hampton.—A baggage room was provided.

Carrolls.—A shelter was provided.

Marysville.—The existing freight shed was extended.

St. Paschal.—The existing freight shed was extended and room provided for baggage, coal and oil.

Little Metis.—Plans and specification were prepared for a wooden station, tenders asked and contract let, which was cancelled before any work was done.

Lac au Salmon.—The freight shed was extended.

Hurley Brook.—A shelter and platform was provided.

McLeod's.—A shelter and platform was provided.

Amqui.—A sewer was put in for drainage from station to take the place of two cess pits.

St. Pierre.—A loading platform was built.

L'Islet.—A building for baggage, coal and oil was provided.

St. Alexis.—The freight shed was extended.

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Ivory's.—A shelter and platform was provided.  
 Weaver's.—A shelter and platform was provided.  
 Upper Blackville.—A building for baggage, coal and oil was provided.  
 St. Philippe de Neri.—A loading platform was built.  
 Aston Junction.—A building for baggage, coal and oil was provided  
 Astle's Crossing.—A shelter was provided.  
 Manzer's.—A shelter was provided.  
 Nashwaak.—A shelter and platform was provided.  
 Blissfield.—A shelter was provided.  
 Cushman's.—A shelter and platform was provided.  
 Clearwater.—A shelter was provided.  
 Forks.—A shelter and platform was provided.  
 St. Valier.—A loading platform was provided.  
 Renous.—A combined station and freight shed with freight and passenger platform was provided.  
 Crossing signal gongs were installed at the following places:—  
 Bedford.—One at crossing east of station.  
 Brookfield.—One at Dunmore road.  
 Sussex.—One at crossing east and one at crossing west of station.  
 Sydney.—One at King's road.  
 Sydney Mines.—One at Bras d'Or road.  
 Antigonish.—One at Sylvain road.  
 Halifax.—One on main line at Richmond and one on Cotton Factory branch.  
 Fencing.—During the year standard wire fencing was erected as follows:—

	Rods.
Drummond county division . . . . .	1,365
North No. 2 division . . . . .	26
North No. 1 division . . . . .	119
Canada Eastern division . . . . .	21,226½
Central division . . . . .	192
Eastern extension division . . . . .	57

An extension was made to the east cottage at Moncton.  
 St. Anaclet.—A building for baggage, coal and oil was provided.  
 St. Alexander.—A building for baggage, coal and oil was provided.  
 Bore holes for water.—Were bored at the following places: Leitches Creek, Scotsburn, West Bay road, Elmsdale, Shubenacadie, Boundary Creek, Salisbury, Daveluyville, Carmel, Cacouna, Tobin and East Mines.

*Sidings—*

Petit Rocher—New siding, 776 feet.  
 Upper Dorchester—Siding extended, 434 feet.  
 Dalhousie Wharf.—New siding, 504 feet.  
 Enfield.—New siding, 642 feet.  
 Bathurst.—New siding, 555½ feet.  
 Boiestown.—Siding extended, 1,504 feet.  
 Boiestown.—Spur siding, 567 feet.  
 Carrolls.—Siding extended, 687 feet.  
 Amqui.—Siding extended, 336 feet.  
 Tatamagouche.—Siding extended, 150 feet.  
 Windsor Junction.—Siding extended, 820 feet.  
 Lac au Saumon.—New siding, 428 feet.  
 Gibson—New siding, 3,700 feet.  
 Renous River Bridge.—New siding, 260 feet.

*Improvements at Ste. Flavie—*

The yard was improved by laying 3,840 additional feet of track.

*Improvements at Ste. Rosalie—*

A bore hole for water is being sunk. Improvements were made to the yard and 1,094 feet of track laid.

*Engine house, &c., Chaudiere Junction—*

Plans and specification were prepared for an addition of 6 stalls to the engine house.

The freight car repair shop for which the contract was let in 1908-09 was completed.

Improvements were made to the water service and coaling pockets.

1,116 feet of track was laid in the yard.

*Engine House, machine shop, &c., Riviere du Loup—*

The contract for the machine shop, boiler house and brick chimney was completed. 3—290 H.P. boilers were supplied and erected in place on concrete foundations in the boiler room.

2—60-ton 4-motor and controller electric cranes 66 foot span with 10-ton auxiliary hoist and one 10-ton 3-motor electric travelling crane, 37-foot span, 16-foot lift, alternating current, were delivered and erected in place in the machine shop.

A brick stores and office building was constructed.

Plans and specification were prepared, tenders asked and contract let for an addition of 6 stalls to the existing engine house and for an addition to the freight shed and the work of construction gone on with. A fan heating system was installed in the machine shop, erecting shop, boiler and wheel shop and blacksmith shop. The old engine house was torn down and the material used in constructing engine house at Loggieville and Dalhousie. A large amount of grading was done in the year and 10,393 lineal feet of new tracks laid. Improvements were made to the water service.

For details of power plant, electrical equipment and machinery, see report of G. R. Joughins, superintendent of motive power and rolling stock.

*Improvements at Drummondville—*

Nothing was done under this appropriation.

*Improvements at Newcastle—*

The engine house was wired for electric lighting.

*Improvements at Campbellton—*

The extension to the pipe line for water service for which the contract was let in 1908-09 was completed.

*Improvements at Point Tupper—*

A rest house for the accommodation of trainmen was provided.

The water supply was improved by raising dam at reservoir. A brick house with concrete foundation was erected for the hoisting engine in connection with the transfer bridge of the Strait of Canso ferry service.

*To provide an overhead crossing at Probert's. About 2 miles north of Londonderry Station—*

Nothing was done under this appropriation.

*To provide a subway crossing at Eastville. About one mile south of Londonderry Station—*

Nothing was done under this appropriation.



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*Rolling stock—*

For details of this appropriation, see report of G. R. Joughins, superintendent of motive power and rolling stock.

*New machinery for locomotive and car shops—*

For details of this appropriation, see report of G. R. Joughins, superintendent of motive power and rolling stock.

*To put railway between Indiantown and Blackville into condition for operation—*

This work was completed.

*Extension to Dalhousie wharf—*

The work in connection with the extension to this wharf was completed in the fiscal year 1908-09. The appropriation of 1909-10 for \$27,500 was to cover an amount held in suspense account for this work.

*Diversion of road to eliminate crossing at rail level, between St. Cyrille and Drummondville—*

This work was done in the fiscal year 1908-09 by the corporation of the town of Drummondville and the appropriation of \$1,300 for 1909-10 was to cover the cost which was held in suspense account.

I have the honour to be, sir,

Your obedient servant,

(Signed) WM. B. MACKENZIE,

*Chief Engineer.*

D. POTTINGLER, Esq., I.S.O.,

Assistant Chairman, Government Railways Managing Board,  
Moncton, N.B.

INTERCOLONIAL RAILWAY.

OFFICE OF THE ENGINEER OF MAINTENANCE.

MONCTON, N.B., June 1, 1910.

To the Canadian Government Railways Managing Board,  
Moncton, N.B.

GENTLEMEN,—I beg leave to submit the following annual report for the Maintenance of Way Department for the year 1909 and 1910.

TRACK.

During the year 38.40 miles of 56, 58, 67, 80 and 110 lb. rails were taken up and replaced with 67 and 80 lb. rails.

TIES.

During the year 600, 163 ordinary ties and 288 sets of switch ties were put in the track.



1 GEORGE V., A. 1911

## BALLASTING.

During the year 56.85 miles of track was ballasted, using 67,659 cubic yards of ashes and gravel.

## SWITCHES AND SEMAPHORES.

New semaphore signals were erected at the following stations:—

St. Wenceslas . . . . .	1
Carmel . . . . .	1
Riviere du Loup . . . . .	1
Trois Pistoles . . . . .	1
Salisbury . . . . .	1

176 new switches were installed during the year.

New telegraph signals were installed during the year at the following stations:—

Villeroy . . . . .	1
Daveluyville . . . . .	1
Carmel . . . . .	1
Tobin . . . . .	1
St. Simon . . . . .	1

Necessary repairs were made to all semaphores, switches and telegraph signals throughout the line.

## SIDINGS.

During the year 3.85 miles of additional siding accommodation has been provided at different points on the line for maintenance account.

## FENCE BUILT BY OUR OWN MEN.

2.86 miles of woven wire fence was built at different points on the line by our own men.

Built by contract, 44.56 miles of woven wire fencing.

Necessary repairs were made to fences throughout the line.

## SNOW FENCES.

There was built during the year 66.25 rods of stationary snow fence, eight feet high; 363 rods of portable snow fence.

Necessary repairs were made to snow sheds and snow fences, where required.

## WHARFS AND TRESTLES.

*Repairs.*

St. John, long wharf.	Gibson, wharf.
St. John, ballast wharf.	Loggieville, wharf.
Halifax, pier No. 2.	Moncton, public wharf.
Halifax, pier No. 3.	Mulgrave, wharf.
Halifax, pier No. 4.	Newcastle, coal trestle.
Halifax, pier No. 5.	North Sydney, wharf.
Halifax, Cunard wharf.	Prince's Pier, wharf.
Halifax, coal trestle, D.W.T.	Point du Chêne, wharf.
Richmond, pier No. 6.	Pietou, wharf.
Richmond, pier No. 7.	Point Tupper, wharf.
Richmond, pier No. 8.	Springhill Junction, coal trestle.
Richmond, coal trestle.	Stellarton, coal trestle.

## BRIDGES AND CULVERTS.

*Repairs.*

- Aston Jct., west of, culvert.  
 Antigonish,  $\frac{3}{4}$  mile west of, culvert.  
 Black River, bridge.  
 Bic, 2 culverts.  
 Boiestown, 2 culverts.  
 Blackville, 2 culverts.  
 Blackville, bridge.  
 Bedford, bridge.  
 Bayfield, culvert.  
 Carmel, east of, culverts.  
 Cap St. Ignace, west of, 3 culverts.  
 Chaudière Jct. & St. Romuald, bet., culvert.  
 Causapscal, culvert.  
 Causapscal, bridge.  
 Campbellton, west of, 2 culverts.  
 Campbellton, east of, 2 culverts.  
 Clearwater, bridge.  
 Chatham, culvert.  
 Cross Creek, bridge.  
 College Bridge, culvert.  
 Caldwell's Brook, culvert.  
 Calhoun's, aboideau.  
 Delotbinière, bridge.  
 Daveluyville, culverts.  
 Doaktown, 4 culverts.  
 Doaktown, bridge.  
 Durham, bridge.  
 Doyle Brook, bridge.  
 Dorchester, overhead bridge.  
 Debert, tunnel culvert.  
 Dartmouth, culvert.  
 Flatlands, culvert.  
 Folleigh, culvert.  
 Gibson, east of, culvert.  
 Hadlow, Bennett's bridge.  
 James River, culvert.  
 Kent Junction, Vaughan's siding, bridge.  
 Lemieux, bridge.  
 L'Islet,  $\frac{3}{4}$  mile east of, culvert.  
 L'Islet, culvert.  
 Lansé A Giles,  $\frac{3}{4}$  mile east of, culvert.  
 Ludlow, 2 culverts.  
 Lakeside, overhead bridge.  
 Londonderry, west of, overhead bridge.  
 Mitchell, east of, culverts.  
 Montmagny, bridge.  
 Montmagny, east of, 2 culverts.  
 Millstream, culvert.  
 Manzer's, bridge.  
 Marysville, bridge.  
 Moncton, Jonathan Creek, aboideau.  
 McCafferty's, overhead bridge.  
 McKinnon's Harbour, culvert.  
 Nelson, 2 culverts.  
 Nashwaak, 3 culverts.  
 Norton, culvert.  
 North River, bridge.  
 Otty's, overhead bridge.  
 Oxford Junction, culverts.  
 Oulton's, culvert.  
 Orangedale, east of, culvert.  
 Penniac, bridge.  
 Penniac, east of, 9 culverts.  
 Pugwash, draw bridge.  
 Pugwash Junction, east of, 2 culverts  
 Piedmont, west of, culvert.  
 Quispamsis, culvert.  
 Quispamsis, overhead bridge.  
 River Henry, bridge.  
 Rimouski, culvert.  
 Renous, bridge.  
 Rogersville, overhead bridge.  
 Rogersville, culvert.  
 Rocky Lake, bridge.  
 St. Cyrille, east of, culvert.  
 St. Perpetue, culvert.  
 St. Nicholas, culvert.  
 St. Appollinaire, east of, culvert.  
 St. Philippe de Néri, culvert.  
 St. Philippe de Néri, one mile west of, culvert.  
 St. Charles Junction, west of, culvert.  
 St. Eloi, bridge.  
 St. Luce, culvert.  
 St. Anaclet, culvert.  
 St. Simon, 2 culverts.  
 St. Moïse, culvert.  
 St. John, overhead bridge, Dorchester Street.  
 Stewart's, bridge.  
 Sackville, bridge.  
 South River, east of, bridge.  
 Sutherland's River, bridge.  
 Sylvester, bridge.  
 Trois Saumon's,  $\frac{3}{4}$  mile west of, bridge.  
 Taymouth, bridge.  
 Truro, west of, culverts.  
 Truro, bridge, Queen St.  
 Tracadie, 2 culverts.  
 Tatamagouche, culvert.  
 Upper Cross Creek, bridge.  
 Whetstone Brook, culvert.  
 West River, bridge.  
 Waverly, culvert.

## PAINTING.

*Bridges.*

- Adamsville, east of bridge.  
 Aulac, bridge.  
 Belledune, bridge.  
 Bathurst, bridge.  
 Beaver Brook, bridge.  
 Barnaby River, bridges Nos. 1, 2 and 3  
 George's River, east of, bridge.  
 Kent Junction, bridge.  
 Le Plancher River, bridge.  
 Linwood, west of, bridge.  
 Leitches' Creek, west of, 2 bridges.  
 Moffatt's, bridge.

1 GEORGE V., A. 1911

Barnaby River, east of, bridges.  
 Blackville, bridge.  
 Beaver Cove, east of, bridge.  
 Boisdale, east of, bridge.  
 Canaan, east of, 3 bridges.  
 Coal Branch, east of, 2 bridges.  
 Cushman's, bridge.  
 Calhoun's, east of, bridge.  
 Canso, ferry landing.  
 Clark's Brook, bridge.  
 Derby Junction, east of, bridge.  
 Dorchester, bridge.  
 East Adams, bridge.  
 Folley, east of, bridge.  
 Gloucester Junction, bridge.  
 Greenville, east of, bridge.  
 Grand Narrows, east of, bridge.

Miramichi north west, bridge.  
 Miramichi, south west bridge.  
 Missiquash River, bridge.  
 Meadowbrook, 2 bridges.  
 New Mills, bridge.  
 Nashes Creek, bridge.  
 Nigadoo, bridge.  
 Newcastle, east of, bridge.  
 Nelson, bridge.  
 Nappan, bridge.  
 Nepisiquit, bridge.  
 North Sydney Jct., east of, bridge.  
 Painsee Jct., bridge.  
 Sackville, bridge.  
 Shubenacadie, east of, bridge.  
 Tatagouche, bridge.

## PAINTING.

*Buildings.*

Anagance, station.  
 Amherst, tank.  
 Bathurst, station.  
 Belledune, tank.  
 Chaudière, station.  
 Canaan, tank.  
 Eureka, station.  
 Ferrona Jct., station.  
 Gloucester Jct., station.  
 Harcourt, freight house.  
 Londonderry, station.

Lakeside, station.  
 Mitchell, agent's dwelling.  
 Moncton, D. Pottinger's house.  
 Newcastle, round house.  
 New Glasgow, station roof.  
 Petit Rocher, station.  
 Red Pine, station.  
 Springhill Jct., tank.  
 Stellarton, tank.  
 Torryburn, station.  
 Trenton, station.

## BUILDINGS AND PLATFORMS.

*Repairs.*

Necessary repairs were made to stations, dwellings and outbuildings at the following places:—

Aston Junction.  
 Assametquaghan.  
 Adamsville.  
 Amos.  
 Astles.  
 Apohaqui.  
 Anagance.  
 Amherst.  
 Aulac.  
 Athol.  
 Avondale.  
 Antigonish.  
 Anqui.  
 Bagot.  
 Bic.  
 Beau Rivage.  
 Bersford.  
 Bathurst.  
 Bartibogue.  
 Belledune.  
 Beaver Brook.  
 Berry's Mills.  
 Blackville.  
 Boiestown.  
 Brookville.  
 Bloomfield.

Model Farm.  
 Maccan.  
 Memramcook.  
 Meadow Brook.  
 Milford.  
 Marshy Hope.  
 Monastery.  
 Mulgrave.  
 Merigomish.  
 Meadowville.  
 Malagash.  
 McLeod's.  
 McNamee's.  
 McKinnon's Harbour.  
 McCallum's.  
 New Mills.  
 Nash's Creek.  
 Newcastle.  
 Naskwaak.  
 Nelson.  
 Norton.  
 Nauwigewauk.  
 Nappan.  
 New Glasgow.  
 North Sydney.  
 Old Lake Road.

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Belmont.  
 Bedford.  
 Brookfield.  
 Barrachois.  
 Brown's Point.  
 Chaudière.  
 Carmel.  
 Cap St. Ignace.  
 Chaudière Curve.  
 Chaudière Junction.  
 Cacouna.  
 Campbellton.  
 Causapschal.  
 Cedar Hall.  
 Culligan's.  
 Charlo.  
 Chatham Junction.  
 Conn's Mills.  
 Catamount.  
 Coal Branch.  
 Canaan.  
 Cross Creek.  
 Chatham.  
 Carroll's.  
 Cold Brook.  
 College Bridge.  
 Calhoun's.  
 Drummondville.  
 Delotbinière.  
 Dessaint.  
 Dalhousie.  
 Dalhousie Junction.  
 Dickie's.  
 Derby Junction.  
 Durham.  
 Doaktown.  
 Dorchester.  
 Derbert.  
 Dewis.  
 Denmark.  
 Dartmouth.  
 Eel River.  
 East Mines.  
 Evans.  
 Elmsdale.  
 Eureka.  
 Enfield.  
 Flatlands.  
 Folley.  
 Ferrona Junction.  
 Gloucester Junction.  
 Gallagher Ridge.  
 Gibson.  
 Greenville.  
 Glengarry.  
 Grand Lake.  
 Graham Siding.  
 George's River.  
 Grand Narrows.  
 Harlaka Junction.  
 Hadlow.  
 Hadgin's.  
 Harcourt.  
 Humphrey's.  
 Hampton.  
 Hopewell.  
 Hilden.  
 Isle Verte.  
 Indiantown.

Oxford Junction.  
 Oakfield.  
 Orangedale.  
 Oxford.  
 Point Levis.  
 Petit Rocher.  
 Petitcodiac.  
 Point du Chêne.  
 Penobsquis.  
 Painsec Junction.  
 Pictou Landing.  
 Piedmont.  
 Point Tupper.  
 Pictou.  
 Pugwash.  
 Pugwash Junction.  
 Passekeag.  
 Quebec.  
 Quispamsis.  
 River Ouelle.  
 Rivière-du-Loup.  
 Rimouski.  
 Red Pine.  
 Rogersville.  
 Renforth.  
 Rothesay.  
 River Philip.  
 Riversdale.  
 River John.  
 St. Leonard.  
 St. Crville.  
 St. Wenceslas.  
 St. Germain.  
 St. Appollinaire.  
 St. Rosalie.  
 St. Eugene.  
 St. Nicholas.  
 Ste. Louise.  
 St. Michel.  
 St. Jean Chrysostome.  
 St. Francois.  
 St. Valier.  
 St. Charles Junction.  
 St. Jean Port Joli.  
 St. Romauld.  
 St. Joseph.  
 St. Pacome.  
 Ste. Luce.  
 Ste. Favier.  
 St. Simon.  
 Sacré-Cœur.  
 St. Aanclet.  
 St. Paschal.  
 St. Phillippe.  
 St. Arsene.  
 St. Fabien.  
 St. Alexander.  
 St. Helene.  
 Sayabec.  
 St. Octave.  
 St. Alexis.  
 St. Moise.  
 Sussex.  
 Shediac.  
 Springhill Junction.  
 Sackville.  
 Salt Springs.  
 Stewiacke.

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Iona.	Shubenacadie.
Jacquet River.	Stellarton.
Jubilee.	South River.
James River.	Sydney Mines.
Kent Junction.	Sydney.
Lavergne.	Shenacadie.
Lemieux.	Scotsburn.
Laurier.	Sylvester.
Levis.	Trois Pistoles.
Little Métis.	Thomson.
Lac au Saumon.	Truro.
Lakeside.	Trenton.
Londonderry.	Tracadie.
Lansdowne.	Tatamagouche.
Leitches' Creek.	Upper Dorchester.
Lyons' Brook.	Union.
Mitchell.	Villeroy.
Montmagny.	Westchester.
Millstream.	Wentworth.
Matapedia.	West River.
Moffatt's.	Westville.
Millerton.	Wallace.
Marysville.	Waverley.
Manzers'	

Iron bars were placed on freight shed doors and windows where required.

The following repairs were made to buildings, &c., at St. John:—

Sheds, Nos. 2, 3, 5, 7, 8, 9 and 10.	Station
Elevator.	Train shed.
Freight shed.	Train shed platform.
Coachman's house.	I. C. R. dwelling houses.
Gateman's House.	Round House.
Yard Office.	

The following repairs were made to buildings, &c., at Halifax and Richmond:—

Sheds, Nos. 1, 2, 3, 4 and 8.	Brick freight shed.
Richmond station.	City ticket office, Hollis street.
North street station.	Coal shed, Richmond.
Houses on Cunard property.	Immigration building.
Shops at Richmond.	Watch tower, D. W. T.
Cattle shed.	Blacksmith shop, D. W. T.
North street train shed.	Switch house.
D. A. R. shed.	Loading platform, D. W. T.
Postal building.	Car cleaner's building.
Kemp road buildings.	I. C. R. dwelling house, 218 Campbell road.
Mechanical repair shop, North street.	

The following repairs were made to buildings, &c., at Moncton:—

Transfer shed.	Station.
Station platform.	Car shop platform.
Erecting shop.	Turning shop.
Cattle shed.	Car mileage office.
Loading platform.	Engine house.
Track blacksmith shop.	Freight shed.
New shops.	Cottages on Bridge and Main streets.
Freight house platform.	Yard office.
Electrician's office.	Coaling plant.
Government cottage occupied by Mr. Pottinger.	Ice House.
Government cottage occupied by Mr. Tiffin.	

The following round houses and shops were repaired:—

Chaudière Junction.	Point Tupper.
Campbellton.	Pictou.
Drummondville.	Rivière-du-Loup.

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Dalhousie.  
 Dartmouth.  
 Nicolet.  
 Newcastle.  
 North Sydney.  
 Oxford Junction.  
 Point du Chêne.  
 Pirate Harbour.

St. Rosalie.  
 Ste. Flavie.  
 Sussex.  
 Springhill Junction.  
 Stellarton.  
 Sydney.  
 Truro.  
 Richmond.

Station and loading platforms were repaired at the following places:—

Aston Junction.  
 Assametquaghan.  
 Adamsville.  
 Armstrong's.  
 Apohaqui.  
 Amherst.  
 Atkinson's siding.  
 Athol.  
 Alton.  
 Antigonish.  
 Bagot.  
 Bathurst.  
 Bartibogue.  
 Bloomfield.  
 Bishop's Siding.  
 Belmont.  
 Barney's River.  
 Boisdale.  
 Campbellton.  
 Causapsal.  
 Cedar Hall.  
 Culligan's.  
 Charlo.  
 Chatham Junction.  
 Coal Branch.  
 Carroll's.  
 College Bridge.  
 Drummondville.  
 Dalhousie Junction.  
 Durham.  
 Dorchester.  
 Debert.  
 Dickie's.  
 Denmark.  
 Eel River.  
 East Mines.  
 Eureka.  
 Elmsdale.  
 Enfield.  
 Eden.  
 Fredericton.  
 Folleigh.  
 Fairview.  
 Fall River.  
 Gloucester Junction.  
 Green Point.  
 Gibson.  
 Grand Narrows.  
 Hampton.  
 Hopewell.  
 Isle Verte.  
 Jaquet River.  
 Jubilee.  
 Kent Junction.  
 Kinsac.  
 Laurier.  
 Lemieux.  
 Levis.

Memramcook.  
 Mulgrave.  
 Mines Road.  
 McLeod's.  
 McNamee's.  
 New Mills.  
 Nash's Creek.  
 Newcastle.  
 Nashwaak.  
 Norton.  
 Nauwigewauk.  
 Onslow.  
 Oxford Junction.  
 Orangedale.  
 Ottawa Brook.  
 Point Levis.  
 Petit Rocher.  
 Penobsquis.  
 Painsec Junction.  
 Point Tupper.  
 Pugwash.  
 Pomquet.  
 Quispamsis.  
 Riviere-du-Loup.  
 Rimouski.  
 Renforth.  
 River Philip.  
 River John.  
 St. Germain.  
 St. Cyrille.  
 St. Wenceslas.  
 St. Eugene.  
 Ste. Rosalie.  
 St. Jean Chyrsostome.  
 St. Francois.  
 St. Charles Junction.  
 St. Jean Port Joli.  
 Ste. Louise.  
 St. Luce.  
 Ste. Flavie.  
 St. Simon.  
 Sacre Cœur.  
 St. Analet.  
 St. Paschal.  
 Sayabec.  
 St. Octave.  
 St. Alexis.  
 Sussex.  
 Shediac.  
 Springhill Junction.  
 Sackville.  
 Stewiacke.  
 Stellarton.  
 Sydney River.  
 Shenacadie.  
 Scotsburn.  
 Trois Pistoles.  
 Turgeon's.



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Little Metis.  
 Londonderry.  
 Lakeview.  
 Leitches' Creek.  
 Lyon's Brook.  
 Mitchell.  
 Montmagny.  
 Millstream.  
 Matapedia.  
 Moffatt's.  
 Millerton.  
 Model Farm.

Thomson.  
 Truro.  
 Trenton.  
 Tatamagouche.  
 Upper Dorchester.  
 Westchester.  
 Wellington.  
 West River.  
 West Bay Road.  
 Westville.

New buildings were erected along the line as follows:—

Cross Creek, combined station and dwelling.	St. Cyrille, freight and baggage building.
Carmel, combined station, dwelling and freight shed.	McGivney's, dwelling.
Daveluyville, combined station, dwelling and freight shed.	Moncton, car service building rebuilt.

GENERAL.

New buffers were made and set up at different points on the line.

Repairs were made to crossings on the line at various places, where required.

Gates and cattle-guards have been repaired throughout the line.

Glass was put in and glazing done where necessary.

Ladders for buildings and semaphores were provided where necessary throughout the line.

Necessary repairs were made to turntables where required.

Semaphores, switches and telegraph signals have been painted throughout the line.

Necessary repairs have been made to hand cars, trollies, baggage trucks and wheel-barrow throughout the line.

Sign boards were made and put up where required.

Boxes were made for packing second hand bolts and spikes, when necessary.

Necessary repairs were made to steam shovels, steam cranes, pile drivers, &c.

The track of the Intercolonial railway, with bridges and structures, have been kept in good repair, and I can safely say that I do not think it was ever in better condition than now.

I am,

Yours faithfully,

T. C. BURPEE.

*Engineer of Maintenance.*

MONCTON, N.B., March 31, 1910.

INTERCOLONIAL RAILWAY OF CANADA.

OFFICE OF SUPERINTENDENT MOTIVE POWER AND ROLLING STOCK,

MONCTON, N.B., July 6, 1910.

SIR,—I have the honour to submit herewith the annual report of the operations of the motive power and rolling stock department for the year ending March 31, 1910.

I might add that the general condition of the rolling stock is good, with the exception of the cars and locomotives condemned as shown in the attached report. During the year we abandoned the old shops at Moncton and moved into the new ones which, of course, necessarily entailed a large amount of work and interfered

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with the regular repairs to locomotives and cars, but with the improved facilities at the new plant we have been able to overcome the decrease in the output during the transition period, and this with a considerable reduction in the staff. The locomotive repair shops at Halifax were also abandoned during the year, and the services of about 100 employees were dispensed with at this place and the repair work transferred to Moncton.

I am, sir,

Your obedient servant,

(Signed) G. R. JOUGHINS,

*Superintendent of Motive Power.*

D. POTTINGER, Esq., I.S.O.,

Assistant Chairman, Government Railways Managing Board,

Moncton, N.B.

## INTERCOLONIAL RAILWAY OF CANADA.

## OFFICE OF THE MECHANICAL ACCOUNTANT,

MONCTON, N.B., July 5, 1910.

SIR,—I beg to submit herewith the annual report of the operations of the mechanical department for the year ended March 31, 1910, as follows:—

A.—Statement showing the number of locomotives and the different classes of the other rolling stock on the line.

B.—Statement showing the mileage made, and the coal, oil, grease and waste consumed by locomotives.

Also a summary of the principal work done in the locomotive and car shops at Moncton, Richmond and River du Loup.

During the year the following rolling stock was purchased on renewals account (revenue):—

30 Hart-Otis steel side dump cars (coal), 100,000 lbs. capacity.

6 Box baggage cars.

1 Yard crane.

2 Coal cranes.

The thirty Hart-Otis dump cars, which have a total capacity of 1,500 tons, replaced 153 small hoppers and 29 twenty-ton coal cars, which were condemned, and which together equalled the same capacity as the dump cars.

The following rolling stock was rebuilt in the shops at Moncton on revenue account to replace the same number condemned:—

1 Box car.

16 Platform cars.

1 Diamond flanger.

The Diamond flanger was rebuilt from a platform car.

2 Platform cars were changed to pulpwood cars.

741 Box cars were fitted with side ladders.

53 freight cars, 13 snow ploughs and 5 flangers were fitted with air brakes, and 153 freight cars were fitted with straight air.

I have the honour to be, sir,

Your obedient servant,

(Signed) J. J. WALKER.

*Mechanical Accountant.*

G. R. JOUGHINS, Esq.,

Superintendent of Motive Power, I.C.R.,

Moncton, N.B.



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To be replaced on Mar. 31, 1909, as above.....	5	2	6	6	1	165	41	69	7	25	3	329	1	3	329	1	1	1	1
Condemned and destroyed during the present year, 1909-10.....	6	1	2	1	1	133	34	133	7	7	1	316	2	2	316	2	1	1	1
Total condemned and destroyed, Replaced during the year 1909-1910.....	11	3	8	6	2	298	75	202	7	32	4	645	5	5	645	5	1	1	1
Replaced by 30 50-ton steel dump cars, as explained above.....						1	17					18			18				
To be replaced on Mar. 31, 1910	11	1	8	6	2	297	58	49	7	3	4	445	5	5	445	5	1	1	1
Add serviceable and repairing..	403	40	47	9	12	6,798	3,000	997	10	439	130	144	200	23	114	12,525	52	20	2
Total equipment on Mar. 31, 1910, as above.....	414	41	50	9	12	7,095	3,058	1,046	17	442	130	148	200	23	119	12,970	53	20	2

MONCTON, N.B., March 31, 1910.

J. J. WALKER, Mechanical Accountant.

## INTERCOLONIAL RAILWAY.

STATEMENT of Mileage and Coal, Oil, Grease and Wool Waste consumed by Locomotives for year ended March 31, 1910.

MONTHS.	Locomotive Mileage.	CONSUMPTION.					AVERAGE CONSUMPTION PER 100 MILES.				
		Tons of Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of Grease.	Pounds of Wool Waste	Pounds Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of Grease.	Pounds of Wool Waste
1909.											
April.....	729,866	42,233	10,042	20,953	2,183	549	12,962	1.38	2.87	.30	.08
May.....	665,177	35,362	8,967	19,022	2,057	973	11,910	1.35	2.86	.31	.15
June.....	666,444	32,917	8,960	19,535	2,406	697	11,064	1.34	2.93	.36	.10
July.....	738,978	36,180	9,570	20,664	2,193	757	10,967	1.30	2.80	.30	.10
August.....	688,738	32,781	9,144	19,340	2,609	580	10,661	1.33	2.81	.38	.09
September.....	698,948	35,611	9,294	19,386	1,961	533	11,413	1.33	2.77	.28	.08
October.....	726,528	39,213	9,573	20,060	2,281	1,020	12,090	1.32	2.76	.31	.14
November.....	736,994	42,829	10,047	20,075	2,160	470	13,017	1.36	2.72	.29	.06
December.....	765,676	46,849	10,512	21,401	1,984	617	13,706	1.37	2.80	.26	.08
1910.											
January.....	727,778	44,817	10,088	19,642	2,013	453	13,794	1.39	2.70	.28	.06
February.....	686,791	43,445	9,593	19,539	2,342	779	14,170	1.40	2.84	.34	.11
March.....	776,568	46,276	10,343	22,011	2,508	836	13,348	1.33	2.83	.32	.11
Totals....	8,608,486	478,513	116,133	241,628	26,697	8,264	12,451	1.35	2.81	.31	.10

J. J. WALKER,

*Mechanical Accountant.*

MONCTON, N.B.

March 31, 1910.

The following is a report of the work done in the locomotive department at Moncton during the year:—

*Erecting shop—*

- 24 locomotives were partly rebuilt.
- 59 locomotives received general repairs.
- 10 locomotives received heavy repairs.
- 121 locomotives received light repairs.
- 2 locomotives were converted from compound to simple cylinder.

*Boiler shop—*

- 42 side sheets were made.
- 39 tube sheets were made.
- 15 door sheets were made.
- 61 fire boxes were patched.
- 2 fire boxes were made.
- 23,899 tubes were applied.
- 2,183 new tubes were made.
- 22,777 tubes were pieced.
- 86 boilers were tested.

## SESSIONAL PAPER No. 20

- 1 water service boiler was repaired.
- 187 smoke stacks were made.
- 24 ash pans were made.
- 61 ash pans were repaired.
- 60 ash pan sides were made.
- 41 front ends were made and 13 were repaired.
- 55 Sterlingworth trucks were repaired.
- 25,090 stay bolts were applied.
- 98 tender trucks were repaired.
- 51 smoke stacks and bonnets were made.
- 24 tanks were made.
- 25 coal buckets were made.
- 10 driving wheels were rivetted.
- 500 chain links were made.
- 25 shovelling plates were made.
- 47 tender frames were repaired.
- 8 cabs were repaired.
- 1 engine cab was rebuilt.
- 4 tenders were rebuilt.
- 4 snow ploughs were ironed.
- 6 coal chutes were made.
- 4 truck bolsters were rebuilt.
- 60,405 new copper ferrules were made.

*Blacksmith shop—*

The following was the output of this shop:—  
 1,781,788 lbs. iron forgings, including 642,933 lbs. bolts.  
 630,036 lbs. steel forgings.

*Brass foundry—*

The following was the output of this shop:—  
 350,510 lbs. bearings.  
 64,610 lbs. brass casting.  
 13,568 lbs. babbitt.  
 32,012 lbs. antimonial lead.  
 622 lbs. metallic packing.

*Pattern shop—*

The following patterns were made and repaired:—  
 299 for cast iron.  
 109 for steel and malleable.  
 455 for brass castings.  
 45 repaired for cast iron.  
 63 repaired for steel and malleable.  
 129 repaired for brass castings.  
 37 altered for cast iron.  
 8 altered for steel castings.  
 7 altered for brass castings.

*Machine shop—*

163 driving tires were applied.  
 19 driving axles were applied.  
 7 trailing tires were turned off, and 2 applied.  
 1,868 car tires were turned off, 588 bored and 419 applied.  
 347 driving tires were turned off.  
 287 engine truck tires were turned off and 241 bored and applied.



- 902 tender truck tires were turned off and 414 bored and applied.
- 84 tender axles were applied.
- 14 engine truck axles were applied.
- 3 driving wheels were centred and machined.
- 100 hose bag springs were made.
- 4,000 engine bolts and studs were made.
- 21,540 lbs. nuts were faced.
- 7,079 turned bolts were threaded.
- 17,000 stay bolts were threaded.
- 672,694 other bolts were threaded.
- 271,250 lbs. nuts were tapped.
- 6,800 lbs. nuts were retapped.
- 800 rings of pistons packing were made.
- 17,195 engine studs were turned.
- 15 crank pins were made.
- 6,000 patch bolts were made.
- 2 steam chests were made.
- 2 false valve faces and 6 piston rods were made.
- 7 pistons were made.
- 3 cylinder heads were made.
- 7 guide bars and blocks were made.
- 11 cylinders and half saddles were made.
- 16 smoke box doors and rings were made.
- 2 locomotive bells were made.
- 46 tender wheels and 8 engine truck wheels were applied to axles.

In addition to the above a large amount of work was done in repairing and making articles such as crossheads, smoke stacks and bases, yokes for trailer trucks, retorts, cheek plates, &c.

A large amount of work was done in connection with repairs to the motor car engines, and also to shop machinery.

#### *Motion Shop—*

- 166 knuckle joints were bored and applied.
- 612 knuckle joint nuts and washers were made and machined.
- 231 knuckle joint pins were made, and 24 pins and bushes applied.
- 490 driving boxes were bored and fitted to journals.
- 8 driving boxes were made and 450 were planed.
- 10 pump cylinders and 4 air cylinders were bored.
- 276 eccentric straps and pulleys were repaired.
- 112 link pins and bushes were renewed.
- 4 link boxes were made and applied.
- 258 eccentric rods were repaired.
- 42 slide valves were made and 34 faced.
- 164 other valves were repaired.
- 127 valve yokes were fitted and 26 were machined.
- 25 piston rods were repaired and 59 fitted to crossheads.
- 126 side rod bushes were bored.
- 273 big end bolts were applied.
- 178 small end brasses were applied.
- 149 big end brasses were made and applied.
- 108 driving box brasses were relined.
- 62 old brasses were lined.
- 235 new brasses were machined and applied.
- 52 main rod brasses were made and 19 refitted.

## SESSIONAL PAPER No. 20

- 132 main rod liners were applied and 152 bolts were made.  
 411 cheek plates were made and applied.  
 336 crank pins were repaired.  
 26 crank pin washers and 263 nuts were made.  
 46 crosshead pins were applied.  
 214 side rods were repaired.  
 526 side rod brasses were made and applied.  
 109 reverse shaft bushes were repaired and 10 fitted to journals.  
 8 throttle glands and 96 lever stems were repaired.  
 125 crossheads were rebabbited and planed.  
 60 crosshead nuts were made and 83 keys and pins applied.  
 9 rocker arms were made and 144 rebushed and applied.  
 69 rocker box bushes were made and applied.  
 36 main rods and 38 links were repaired.  
 129 eccentric straps were fitted to pulleys.  
 4 link blocks were made and 48 repaired.  
 36 reverse levers were repaired.  
 26 valve stem packing rings were made.  
 11 piston rings were bored and applied.  
 10 big end liners were planed.  
 98 main rod keys were made and applied.  
 1 crosshead was made.  
 82 main rod bolts were renewed.

*Brass Turning Shop—*

- 72 steam chest nipples were made.  
 150 injectors were repaired and 36 injector cheek valves were made.  
 20 air pumps were repaired.  
 24 bell ringers were made.  
 24 try cocks and 24 gauge glass cocks were made.  
 200 cylinder cocks were made.  
 72 small tender cocks and 18 blow-off cocks were made.  
 48 large tender cocks were made.  
 250 flag staff casings were made.  
 300 engine truck brasses were made.  
 150 brake cam screws and nuts were made.  
 800 piston rod oil cups were made.  
 24 steam chest release valves were made.  
 100 oil cups were made.  
 130 wheel defect gauges were made.  
 300 beading tools and 100 reamers were made.  
 550 steam gauges were repaired.  
 170 jacks were repaired.  
 300 taps were made.  
 50 sets tubes and 40 sets dies were made.  
 20 tube cutters were repaired.  
 60 electric headlights were repaired.

In addition to the above a large number of lubricators and regulators, air pumps and governors, brake and air cylinders, and boiler mountings received extensive repairs.

*Tender Shop—*

- 55 locomotive pilots and 5 cabs were made.  
 2,144 sledge hammer, 79 monkey wrench and 762 hammer and chisel handles were made.

- 32 brakemen's seats and cushions were made.
- 3 tenders were enlarged.
- 300 pump stays were made.
- 8 tender truck frames were repaired, and 7 tender trucks repaired.
- 10 tenders received light and 85 heavy repairs.
- 36 cabs were repaired.
- 10 tender frames were repaired.
- 16 bolsters were made.
- 3 complete tenders were made.
- 4 wheelbarrows, 7 hand carts and 3 trolleys were made.
- 66 wheelbarrows, hand carts and hand trucks were repaired.
- 189 running boards were made.
- 66 buffer beams were made.
- 114 headlight stands were made.
- 12 spring boards were made and applied.
- 23 brake beams were made.
- 55 tool, 36 drivers' outfit and 20 tender outfit boxes were made.
- 66 switch lamp bottoms were made.
- 507 shipping boxes were made.
- 31 aprons were made and applied.
- 175 cab curtains were made.
- 112 cushion boxes were made and 74 repaired.

*Tin and Copper shop—*

- 12,556 W. A. B. hose couplings were fitted to new hose.
- 5,188 signal and steam couplings were fitted to new hose.
- 18,622 bushes were lined.
- 23 tank pipes were made and 56 repaired.
- 142 tail lamps were repaired.
- 409 switch and 87 signal lamps were repaired.
- 128 oil cans and 119 oilers were repaired.
- 11 oil tanks were repaired.
- 219 headlights were repaired.
- 1,087 feet galvanizer pipe were fitted and applied.
- 622 sets metallic packing were made.
- 8,016 steam and air brake hose and couplings were repaired.
- 300 sets valve stem packing were made.
- 1,206 tin oil cup covers were made.
- 127 water cans were made.
- 10 steam gauge and 14 water gauge lamps were repaired.
- 135 hand lamps were made.
- 40 lamp fonts were made.

Steam and Westinghouse air brake pipes were repaired on 82 locomotives.

A great deal of work was done in repairing and remodelling the plumbing work in the following buildings: Yard office, freight shed, rest room, Moncton shops, car cleaning building and outside station.

At Norton station the heating boiler was given extensive repairs and was enlarged.

Repairs were made to wash stands, taps, ventilators, water closets, brass work and piping, &c., in the passenger cars repaired in the car department during the year.

Repairing and altering copper pipes, pumps, heater and blower-pipes, copper piping on locomotives, also repairs to all iron and air pipes, &c., and lagging was taken off, repaired and replaced on 82 locomotives.

## SESSIONAL PAPER No. 20

*Water service—*

This service has been maintained in efficient condition over the whole line.

*Car shops—*

The following cars were rebuilt:—

17 platform, 1 box.

The following cars were changed:—

2 platform to pulpwood, 1 platform to flanger.

The following cars received heavy repairs:—

6 parlour, 34 sleeping, 4 dining, 2 official, 79 first-class, 56 second-class, 29 colonist, 43 baggage, 15 postal, 15 vans, 302 freight, 2 flangers, 8 snow-ploughs.

The following cars received light repairs:—

2 parlour, 18 sleeping, 6 dining, 12 official, 45 first-class, 25 second-class, 15 colonist, 34 baggage, 20 postal, 3 vans, 2 auxiliary, 10,541 freight.

The following cars were burnt off, painted and varnished:—

2 parlour, 3 sleeping, 2 dining, 28 first-class, 4 second-class, 5 colonist, 4 baggage, 4 postal.

The following cars were painted and varnished:—

2 parlour, 7 sleeping, 1 dining, 28 first-class, 33 second-class, 8 colonist, 17 baggage, 6 postal.

The following cars were cleaned and varnished:—

2 parlour, 16 sleeping, 1 official, 29 first-class, 13 second-class, 4 colonist, 12 baggage, 6 postal, 2 motor cars.

The following cars were scraped, painted and varnished:—

2 parlour, 6 sleeping, 1 dining, 7 first-class, 7 second-class, 9 colonist, 10 baggage, 3 postal.

The following cars were cleaned, touched up and varnished:—

3 sleeping, 1 official, 3 first-class, 2 second-class, 3 colonist.

The following cars were painted and lettered:—

145 box, 121 platform, 19 gondolas, 5 hoppers, 2 flangers, 2 snow ploughs.

223 cars were reweighed and lettered.

462 cars had lettering changed from I.C.R. to I.R.C.

5,376 new chilled wheels were bored and pressed on axles.

3,140 second hand chilled wheels were bored and pressed on axles.

116 new steel wheels were bored and pressed on axles.

503 second-hand steel wheels were bored and pressed on axles,

1,600 steel tires were turned.

716 new axles were turned.

3,815 second hand axles were turned.

9,700 wheels were taken off axles.

117 engines and tenders were painted, lettered and varnished.

3 tenders were painted, lettered and varnished.

153 freight cars were fitted with straight air.

71 freight cars, ploughs and flangers were fitted with air brakes.

783 car buffers were made.

973 brake beams were made.

- 3 shanty cars were fitted up and painted.
- 596 freight cars were fitted with Acme uncoupling device.
- 5 Hart convertible cars had sides and ends raised.
- 200 new wooden freight car trucks were built and applied.
- 8 locomotive pilots were made.
- 180 truck spring boards were made.
- 345 new truck bolsters were made.
- 551 new truck sides were made.
- 1,098 car draft timbers were made.
- 923 engine curtains were made.
- 24 baggage and 104 freight trucks were repaired.
- 16 footboards and 2 gangways were repaired.
- 8 train safes were repaired.

A large amount of work was done during the year repairing ticket cases, book and letter cases, desks and chairs, tool boxes, step ladders, office doors and locks, replacing broken glass, &c., &c.

In addition to the lumber prepared for repairs, &c., 2,757.174 feet were milled on store orders.

Eight hundred and seventy-six manufactures orders were completed and delivered to store.

In addition to the above numerous small articles were made and repaired for this department at Moncton, and a great deal of work was done for the maintenance and traffic departments, and also in connection with new capital work.

The following special work was done at the new shops:—

- A water crane was installed at the south end of the erecting shop.
- An air hoist was installed at the gas plant.
- A crane was installed for removing coke and ashes from the gas plant.
- An air reservoir was installed in the basement of the gas plant.
- An air pump was installed in the gas plant.
- A chain hoist for lifting coal was installed.
- A generator was installed in the power house.
- An engine was installed for the stokers.
- Two Babcock and Wilcox boilers were removed from the old shops, were given extensive repairs, and were installed in the new power house.
- All the piping in the new shops for heating purposes was completed.

In addition to the above a large amount of work was done in connection with the fitting up the new shops before and after moving into them, installing machinery, making bins, boxes, tool racks, cupboards, building iron racks, coal sheds, small offices, sidewalks, &c., &c.

The following new machines were set up in the Moncton new shops:—

*Machine Shop—*

- 1 car axle lathe.
- 1 wheel press for locomotive wheels.
- 1 box press.
- 2 tool grinders.
- 10 high speed lathes of various sizes.
- 1 nut facing machine.
- 2 grinder heads for general work.
- 1 stay bolt machine.
- 1 nut tapper.
- 1 drill for general use.
- 1 boring mill.

## SESSIONAL PAPER No. 20

- 3 shapers.
- 3 drill presses.
- 1 locomotive axle lathe.
- 1 sottle for general use.
- 1 car wheel press.
- 1 car wheel borer.
- 1 cylinder borer.
- 1 radial drill.
- 1 locomotive rod drilling machine.
- 1 vertical milling machine for rods.
- 1 horizontal borer.
- 1 twist drill grinder for tools.
- 1 grinder.

*Erecting Shop—*

- 1 pipe threader.
- 1 32-inch drill for general use.
- 1 pipe bender.
- 2 bolt lathes.
- 1 tool grinder.

*Boiler Shop—*

- 1 slitting shear for general shearing.
- 1 shear for light sheets.
- 1 tool grinder.
- 1 flue cleaning machine.
- 1 6-spindle drill for flue sheets and mud rings.
- 1 plate clamp.
- 1 drill press for general use.
- 1 hydraulic sectional flange press.
- 1 punch.

*Motion Shop—*

- 2 tool room lathes for tool grinding and repairing.
- 2 power hack saws for general use.
- 1 grinder head for general use.
- 1 high speed lathe for general use.
- 2 bolt lathes for general use.
- 2 grinders for rods.
- 2 drill press.
- 3 shapers for keys, liners, &c.
- 1 universal tool grinder.
- 1 point twist drill grinder for tools.
- 1 side carriage lathe.
- 1 link grinder.

*Tin and Copper Shop—*

- 1 punch.
- 1 pipe threader.
- 1 circle and slitting shear.

*Blacksmith Shop—*

- 1 spring bending and stripping machine.
- 1 bolt shear.
- 1 tool grinder.



- 1 line file cutter.
- 1 stripping and abrading machine.
- 1 whetting machine.
- 1 grindstone.
- 1 nut machine.
- 2 blast fans for forge fires.
- 1 smoke exhaust fan for forge fires.

*Pattern Shop—*

- 1 grinder head for general use.
- 1 hand plainer and joiner for patterns.
- 1 saw bench.
- 1 lathe for patterns.
- 1 motor head speed lathe.
- 1 double disc sander for patterns.
- 1 emery grinder for tools.
- 1 band saw and re-saw for pattern.
- 1 core box machine.
- 1 single surfacer.
- 1 scroll saw.

*Freight Car Shop—*

- 1 drill press for general use.
- 1 pipe threader.

*Tender Shop—*

- 1 drill press for general use.
- 1 grindstone.

*Upholstering Shop—*

- 1 single sweeper vacuum cleaner.

*Cabinet Shop—*

- 1 moulder.
- 1 lathe.
- 1 band saw.
- 1 dado and saw.
- 1 emery grinder.
- 1 grindstone frame.
- 1 hand gainer machine.
- 1 moulder for door panels, &c.
- 1 embosser for moulding.
- 1 rip saw, 20-inch, for general use.

*Planing Mill—*

- 1 large tenoner for general use.
- 1 medium borer for general use.
- 1 grindstone frame for tools.

The following regular work was done in the locomotive department at Richmond:—

- 7 locomotives received heavy and 175 specific repairs.
- 24 boilers were tested.
- 3 fire-boxes were patched.
- 1 set driving wheels were re-tired.
- 3 driving tires were turned off.

## SESSIONAL PAPER No. 20

18 engine truck tires were turned off.

129 tender truck and car tires were turned off.

9 new tender truck wheels were applied.

11,880 bolts were forged.

28,200 bolts were screwed.

1,285 studs were screwed.

6 engines and tenders were painted.

221 sets metallic piston rod packing were made.

224 sets metallic valve stem packing were made.

In the car repair shop a large number of cars received repairs during the year.

A lot of special work was also done in the locomotive and car shops for the maintenance and traffic departments.

The following regular work was done in the locomotive department at Rivière du Loup:—

20 locomotives received general, 6 medium and 25 specific repairs.

1 new tube sheet and 1 new side sheet were applied.

44 new tubes were applied.

4,707 tubes were pieced and applied.

7 fireboxes were patched.

71 boilers were tested.

81 driving tires were turned off.

59 engine truck tires were turned off.

160 tender truck tires were turned off.

2 new cylinders with half saddles were applied.

1 new crank pin was made and applied.

23 pilots were made and applied.

8,000 bolts were forged.

38,000 bolts were screwed.

2,400 studs were screwed.

900 lbs. nuts were tapped.

35 engines and tenders were painted.

34,000 lbs. brass casting were machined.

345 sets metallic piston rod packing were made.

333 sets metallic valve stem packing were made.

66,000 lbs. iron forgings were made.

Coal cranes, Nos. 6, 8, 9 and 10, received general repairs.

A large number of cars received light repairs during the year.

There was also a large amount of work done for the maintenance and traffic departments in the locomotive and car shops during the year.

## No. 1.—INTERCOLONIAL RAILWAY.

CAPITAL ACCOUNT, year ended March 31, 1910.

1909.	Dr.	\$ cts.	\$ cts.	1909.	Cr.	\$ cts.
Mar. 31.	To cost of Intercolonial Railway to date.....	10,272 26	90,994,664 06	Mar. 31.	By Dominion of Canada.....	90,994,664 06
	Strengthen bridges.....	49,994 90				
	Put railway between Indian town and Blackville into condition for operation.....	173,953 83				
	Increase accommodation at Halifax.....	10,430 54				
	Rolling stock.....	156,945 33				
	Engine house, machine shops, &c., at Riviere du Loup.....	6,834 61				
	Enginehouse, &c., Chandiere Junction.....	1,988 49				
	Improvements at Campbellton.....	399,400 49				
	Locomotive and car shop with equipment and new freight yard at Moncton.....	68,977 65				
	Towards double tracking parts of line.....	17,019 51				
	Increase accommodation at Truro.....	2,472 16				
	Improvements at Newcastle.....	27,500 00				
	Extension to Dalhousie wharf.....	100,565 28				
	Increased accommodation and facilities along the line.....	3,998 88				
	Improvements at Point Tupper.....	20,256 36				
	Diversion of line at Sydney Mines to River George.....	5,228 44				
	wharf.....	46,799 43				
	New machinery for locomotive and car shops.....	42,482 26				
	Increase water supply.....	18,403 15				
	Improvements at Mulgrave.....	800 64				
	Increase accommodation at Pictou.....	25,474 27				
	Improvements at Loggreville.....	7,875 81				
	Improvements at Sackville.....	2,686 13				
	New turntables.....	43 14				
	Provide an overhead crossing at Roberts about 2 miles north of Londonderry station.....	3,754 26				
	Increased accommodation at Ste. Flavie.....	5,771 37				
	Improvements at North Sydney.....	6,644 09				
	Original construction.....	1,975 15				
	Cut off line at Moncton.....	3,540 32				
	Improvements at Ste. Rosalie.....	1,300 00				
	Diversion of road to eliminate crossing at rail level between St. Cyrille and Drummondville.....					

SESSIONAL PAPER No. 20

Provide a subway crossing at Eastville, about 1 mile south of Londonderry station.....	68 75		
LESS—To extension to Sydney Mines, 1908-9 .....	1,278,467 60		
Increased accommodation at Stellarton, 1908-9.....	58 15		
		1,278,409 45	
		92,273,073 51	
			By Dominion of Canada.....
			1,278,409 45
			92,273,073 51

E. and O. E.  
Moncton, N.B.

S. I. SHANNON,  
*Comptroller.*

1 GEORGE V., A. 1911

## No. 2.—INTERCOLONIAL RAILWAY.

REVENUE ACCOUNT, Year ended March 31, 1910.

Expenditure.	\$ cts.	Earnings.	\$ cts.
Maintenance of Way and Structure..	1,622,279 75	Passenger Earnings.....	2,765,884 66
Maintenance of Equipment . . . . .	1,851,792 68	Freight Earnings.....	6,048,884 18
Traffic Expenses.....	179,882 61	Mail and Express Earnings. ....	408,847 66
Transportation Expenses.....	4,784,667 76	Miscellaneous Earnings.....	44,618 49
General Expenses.....	206,447 53		
	8,645,070 33		
Balance.....	623,134 66		
	9,268,234 99		9,268,234 99

S. L. SHANNON,  
*Comptroller.*

E. & O. E.,  
MONCTON, N.B.

## No. 3.—INTERCOLONIAL RAILWAY.

MAINTENANCE of Way and Structures, Year ended March 31, 1910.

No.		\$ cts.
1.	Superintendence.....	49,342 18
"	2. Ballast.....	23,940 44
"	3. Ties.....	226,214 80
"	4. Rails.....	222,626 34
"	5. Other track material.....	128,667 88
"	6. Roadway and track.....	533,502 52
"	7. Removal of snow, sand and ice.....	91,124 39
"	9. Bridges, trestles and culverts.....	66,082 76
"	10. Over and under grade crossings.....	410 86
"	11. Grade crossings, fences, cattle guards and signs.....	37,516 41
"	12. Snow and sand fences, and snow sheds.....	9,802 55
"	13. Signals and interlocking plants.....	5,252 09
"	14. Telegraph and telephone lines.....	696 47
"	16. Buildings, fixtures and grounds.....	140,304 89
"	17. Docks and wharfs.....	21,141 98
"	18. Roadway tools and supplies.....	22,810 34
"	22. Injuries to persons.....	404 02
"	23. Stationery and printing.....	3,666 78
"	25. Other expenses.....	1,585 93
"	26. Maintaining joint tracks, yards and other facilities—Dr.....	44,161 18
		1,629,254 81
"	27. Maintaining joint tracks, yards and other facilities—Cr.....	6,975 06
		1,622,279 75

S. L. SHANNON,  
*Comptroller.*

E. & O. E.,  
MONCTON, N.B.

SESSIONAL PAPER No. 20

No. 4.—INTERCOLONIAL RAILWAY.

MAINTENANCE of Equipment, Year ended March 31, 1910.

	\$	cts.
No. 28. Superintendence.....	54,483	94
" 29. Steam Locomotives—Repairs.....	626,048	65
" 30. Steam Locomotives—Renewals.....	133,333	32
" 35. Passenger Train Cars—Repairs.....	271,828	78
" 36. Passenger Train Cars—Renewals.....	66,666	60
" 38. Freight Train Cars—Repairs.....	483,914	60
" 39. Freight Train Cars—Renewals.....	100,000	98
" 44. Floating Equipment—Repairs.....	4,171	50
" 47. Shop Machinery and Tools.....	33,297	73
" 49. Injuries to Persons.....	451	02
" 50. Stationery and Printing.....	10,183	99
" 51. Maintaining Joint Equipment at Terminals—Dr.....	3,819	87
" 52. Other Expenses.....	30,312	76
" 53. Work Equipment—Repairs.....	27,204	93
" 54. Work Equipment—Renewals.....	6,075	00
	1,851,792	68

S. L. SHANNON,

*Comptroller.*

E. & O. E.,

MONCTON, N.B.

No. 5.—INTERCOLONIAL RAILWAY.

TRAFFIC Expenses, Year ended March 31, 1910.

	\$	cts.
No. 57. Superintendence.....	53,801	72
" 58. Outside Agencies.....	61,587	67
" 59. Advertising.....	37,232	56
" 60. Stationery and Printing.....	24,810	53
" 61. Traffic Associations.....	2,392	10
" 62. Other Expenses.....	58	03
	179,882	61

S. L. SHANNON,

*Comptroller.*

E. & O. E.,

MONCTON, N.B.



1 GEORGE V., A. 1911

## No. 6.—INTERCOLONIAL RAILWAY.

TRANSPORTATION EXPENSES, year ended March 31, 1910.

	\$	cts.
No. 66 Superintendence.....	79,598	10
67 Despatching trains.....	142,103	79
68 Station employees.....	626,729	85
69 Weighing and Car Service Associations.....	1,622	69
70 Stock yards and grain elevators.....	2,319	44
72 Station supplies and expenses.....	86,785	21
73 Yardmasters and their clerks.....	33,544	40
74 Yard conductors and brakemen.....	121,899	35
75 Yard switch and signal tenders.....	12,854	37
76 Yard supplies and expenses.....	18,793	09
77 Yard enginemen.....	112,975	08
78 Enginehouse expenses—Yard.....	27,497	16
79 Fuel for yard locomotives.....	152,678	03
80 Water for yard locomotives.....	9,608	12
81 Lubricants for yard locomotives.....	3,767	49
82 Other supplies for yard locomotives.....	2,456	12
83 Operating joint yards and terminals—Dr.....	104,241	79
86 Road enginemen.....	482,068	52
87 Enginehouse expenses—Road.....	234,189	21
88 Fuel for road locomotives.....	1,490,049	28
89 Water for road locomotives.....	49,728	48
90 Lubricants for yard locomotives.....	24,063	61
91 Other supplies for road locomotives.....	13,465	61
94 Road trainmen.....	629,430	57
95 Train supplies and expenses.....	177,702	04
96 Interlockers, block and signals—Operation.....	13,250	71
97 Crossing flagmen and gatemen.....	12,717	31
98 Draw bridge operation.....	3,807	06
99 Clearing wrecks.....	16,312	51
100 Telegraph and telephone—Operation.....	10,547	33
101 Operating floating equipment.....	42,321	54
103 Stationery and printing.....	53,491	87
105 Other expenses.....	21,866	58
106 Loss and damage—Freight.....	29,606	30
107 " —Baggage.....	157	84
108 Damage to property.....	5,613	42
109 Damage to stock on right of way.....	2,290	04
110 Injuries to persons.....	7,514	36
111 Operating joint tracks—Dr.....	11,212	38
Cr.	4,870,874	65
No. 84 Operating joint yards and terminals—Cr.....	86,206	89
	4,784,667	76

E. and O. E.,  
MONCTON, N.B.S. L. SHANNON,  
*Comptroller.*

## No. 7.—INTERCOLONIAL RAILWAY.

GENERAL EXPENSES, year ended March 31, 1910.

	\$	cts.
No. 113 Salaries and expenses of general officers.....	19,696	93
114 Salaries and expenses of clerks and attendants.....	86,889	65
115 General office supplies and expenses.....	3,454	23
116 Law expenses.....	7,307	61
118 Relief department expenses.....	8,000	00
119 Pensions.....	63,313	85
120 Stationery and printing.....	12,214	21
121 Other expenses.....	5,571	65
	206,447	53

E. and O. E.,  
MONCTON, N.B.S. L. SHANNON,  
*Comptroller.*

SESSIONAL PAPER No. 20

No. 8.—INTERCOLONIAL RAILWAY OF CANADA.  
GENERAL STORES ACCOUNT, YEAR ENDED MARCH 31, 1910.

Dr.	\$ cts.	\$ cts.	Cr.	\$ cts.	\$ cts.
To Balance, March 31, 1909.....	.....	1,599,094 59	By Issues during year ended March 31, 1910.....	3,363,105 44	
Purchases during year ended March 31, 1910 ..	2,800,212 24		Sales material, fuel, &c.....	35,618 31	
Charges from other Departments.....	277,057 54		Sales old material.....	189,526 36	
Labour.....	151,745 77				3,588,250 11
Staff pay rolls.....	3,321 66	3,232,337 21	Balance—		
			Or linary stores, including fuel.....	928,804 27	
			Roadway and bridge material.....	314,377 42	
		4,831,431 80			1,243,181 69
					4,831,431 80

(Sgd)

S. L. SHANNON,

*Comptroller and Treasurer.*

(Sgd)

C. F. BURNS,

*Auditor of Disbursements, I.C.R.*

MONCTON, N.B.

No. 9.—INTERCOLONIAL RAILWAY—STATEMENTS OF THE COMPTROLLER.

GENERAL BALANCE, YEAR ENDED MARCH 31, 1910.

DR.	\$	cts.	\$	cts.	Cr.	\$	cts.
To Cash.....						1,534,146	92
General stores.....			0	02	By Dominion of Canada.....		
Station agents.....			1,243,181	69	Unclaimed freight.....		67
Receiver General—Provident Fund Account.....			136,204	02	Intercolonial and Prince Edward Island Rail-ways employees' Provident Fund.....		243,673
Auditor's Suspense Account.....			7,743	27			
Cash in Transit Account.....			5,815	52	Suspense.....		3,513
Commissary Stock.....			25,757	79	Equipment Renewal Account.....		376,359
Expenditures for Road and Equipment Sus-pense.....			6,085	69	Rail Renewal Account.....		150,000
					Freight in Transit Account.....		6,943
To Individuals and Companies Ledger—							
Acadia Coal Co.....			1,213	27	By Individuals and Companies Ledger—		
Atlantic Coast Lines.....			1	95	Amherst Malleable Iron Company.....		40
Armour Car Lines.....			0	54	Cape Breton Ry.....		17
H. & A. Allan.....			13	35	Chatham Ry.....		267
Atlantic and Lake Superior Ry.....			1,837	39	Chappell Bros.....		0
Atlantic, Birmingham and Atlantic Ry.....			0	26	J. & A. Culligan.....		226
Atchison, Topeka and Santa Fe Ry.....			3	17	Colonial Granite Co.....		125
Steamship 'Amelia'.....			0	70	Cornwall and York Cotton Mills Co.....		430
Austin Lumber Co.....			343	10	J. E. Couture.....		346
Boston and Maine Ry.....			21	87	Department of Justice.....		1,000
Baltimore and Ohio Ry.....			294	68	Dubs & Co.....		38
Boston and Albany Ry.....			2	20	Dominion Express Co.....		9
Buffalo, Rochester and Pittsburg Ry.....			17	73	Dominion Bridge Co.....		20
E. Bigny.....			30	16	G. Dumont.....		95
Boston Steamship Co.....			12	12	Douglas Bros.....		400
John Breakey.....			12	12	W. H. Duffy.....		288
Brown Machine Co.....			314	14	Elmsdale Co.....		1,190
Carquet Ry.....			14,083	69	T. E. Ferriald & Co.....		223
Canadian Express Co.....			4	71	Grand Lake Lumber Co.....		383
Canadian Pacific Ry.....			12,461	02	General Storekeeper.....		129
Canadian Pacific Ry. (N. B. Div.).....			11,709	11	Great North Western Telegraph Co.....		2
Charlottetown Steam Navigation Co.....			16	82	L. Goodspeed & Son.....		231
Central Vermont Ry.....			407	46	Albion Jordan.....		196
Cumberland Ry. & Coal Company.....			447	36	Harris Forge Co.....		391
Canada Iron Corporation.....			600	51	J. & D. A. Harquail.....		390
Canadian Northern Ry.....			130	17	Chas. & Davidson Hill.....		492
Cincinnati, Hamilton and Dayton Ry.....			43	46	J. A. Kirkpatrick.....		448
Cleveland, Cincinnati, Chicago & St. Louis Ry.....			39	68	J. Lord.....		310
Chicago, Milwaukee and St. Paul Ry.....			38	37	W. L. Loggie & Co.....		100
Chicago, St. Paul, Minneapolis and Omaha Ry.....			4	00			30
Chicago and North Western Ry.....			14	66			00

SESSIONAL PAPER No. 20

S. Cynard & Co.	1 85	Jos. Leocors	502 55
T. B. Calhoun	5 00	Nap. Mezier	98 50
G. S. Campbell & Co.	43 25	W. H. Miller	19 00
Chicago and Alton Ry.	41	J. T. Munro	55 00
Cincinnati, New Orleans and Texas Pacific Ry.	17 34	W. A. McKay & Co.	138 00
Chicago, Rock Island and Gulf Ry.	1 89	McKay Mining Co.	167 66
Chicago, Burlington and Quincy	5 26	Reid McMann	2 64
Central Ry. of New Jersey	1 18	McLean Milling Co.	776 08
Chesapeake and Ohio Ry.	8 86	Nova Scotia Steel & Coal Co.	465 93
Chicago and Eastern Illinois Ry.	4 92	New Brunswick Telephone Co.	27 62
Central Ontario Ry.	1 53	Nova Scotia Construction Co.	7 50
Chicago, Indiana and Louisville Ry.	40	J. R. Porter	186 00
Chicago, Cincinnati and Louisville Ry.	7 87	N. Piche & Fils	960 94
Chicago, Indiana and Southern Ry.	5 04	Alphonse Pimeau	208 45
Colchester Coal and Railway Co.	300 35	Primrose Bros.	445 17
Chicago, Rock Island and Pacific Ry.	35 36	David Porter	2 40
Chicago Great Western Ry.	4 36	Quebec Construction Co.	51 44
Corbett & Flossch.	1,354 53	Seszenwein Bros	2 73
Copper Crown Co.	45 13	James W. Smith	111 24
Thomas Cote	5 24	Shives Lumber Co.	6 00
		Enoch Sleeves	372 25
		B. L. Tucker	210 19
		Edward Ruel	106 50
		Vanderbeek & Sons	5 00
		S. E. Vaughan & Co.	891 00
		Alexander Watson	356 00
		M. Wood & Sons	150 00
		H. W. Wentzell	160 50
		By Individuals and Companies Ledger Suspense—	
		Canadian Iron Corporation	2,242 50
		General Storekeeper	186 14
		Fraserville Foundry	169 50
		H. J. Garson & Co.	6,311 75
		J. Hillis & Son	775 91
		Northern New Brunswick and Seaboard Airline Ry.	1 80
		New Brunswick and Prince Edward Island Ry.	440 18
		Portland Rolling Mills	1,486 60
		Prince Edward Island Ry.	18 76
		John Simon & Co.	421 02
		Shives Lumber Co.	1 19
		Nova Scotia Steel and Coal Co.	10 72
		By Traffic Ledger—	
		Allan Bros. & Co.	101 70
		Archison, Topeka and Santa Fe Ry.	486 85
		Baltimore and Ohio Ry.	60 04
		Boston and Maine Ry.	3,616 62
			13,987 26
			12,066 07

Carried forward

Carried forward

No. 9.—INTERCOLONIAL RAILWAY—Continued.  
GENERAL BALANCE, YEAR ENDED MARCH 31, 1910—Continued.

DR.		CR.	
\$	cts.	\$	cts.
Brought forward.....			
Doud Stock Car Co.....	9 91	Canadian Northern Ry.....	1,079 73
T. A. S. Dewolfe & Son.....	19 02	Charlottetown Steam Navigation Co.....	68 26
Emile Dubé.....	4 00	Chicago and Alton Ry.....	74 85
Daveluyville Station.....	12 80	Chicago, Burlington and Quincy Ry.....	642 22
Elgin and Havelock Ry.....	1,865 84	Chicago Great Western Ry.....	716 74
Eric Ry.....	125 31	Chicago North Western Ry.....	1,546 47
Eastern Township Co.....	16 63		
Evansville and Terre Haute Ry.....	1 44		
Empire Line.....	6 25		
Captain J. A. Farquhar.....	9 60		
Burness, Withy & Co.....	45 47		
Freight Claim Agent.....	3 68		
Fraserville Navigation Co.....	14 71		
Grand Trunk Ry.....	10,835 41		
Great Northern Ry. of Canada.....	12 91		
O. Garrett & Son.....	52 92		
Galena Signal Oil Company.....	616 00	Chicago, Milwaukee and St. Paul Ry.....	814 99
H. J. Carson & Co.....	13 84	Cleveland, Cincinnati, Chicago and St. Louis Ry.....	71 20
Graham & Co.....	58 43	Duluth, South Shore and Atlantic Ry.....	841 59
German-American Tank Line.....	10 47	Great Northern Ry. Line.....	1,303 88
Grand Trunk Ry. Suspense.....	98 75	Great Northern Ry. Navigation Co.....	16 52
Halifax and South Western Ry.....	111,096 07	Interprovincial Navigation Co.....	13 80
Halifax and St. Martins Ry.....	472 16	Inverness Ry. & Coal Co.....	224 67
Halifax Station Labour.....	1,500 00	Lehigh Valley Ry.....	1 58
J. Hillis & Sons.....	210 19	Leblanc and Megantic Ry.....	1 45
M. J. Haney.....	187 89	Michigan Central Ry.....	64 14
W. Hood & Son.....	132 00	Maine Central Ry.....	6,465 19
Humphrey's Glass Works.....	57 00	Minneapolis, St. Paul and S. S. Marie Ry.....	1,146 70
A. J. Hart.....	78 00	Northern Pacific Ry.....	683 90
Inverness Ry. & Coal Co.....	242 35	New England Navigation Co.....	19 14
Intercolonial Coal Mining Co.....	99 96	New York Central and Hudson River Ry.....	121 04
Illinois Central Ry.....	18 11	New York, New Haven and Hartford Ry.....	549 68
Imperial Oil Co.....	22 29	Pennsylvania Ry.....	11 29
Intercolonial and Great Northern Ry.....	11 05	Quebec Central Ry.....	250 13
Iowa Central Ry.....	1 16	Southern Pacific Ry.....	49 80
Kent Northern Ry.....	8,574 54	Tamiscoonata Ry.....	99 10
Kanawha and Michigan Ry.....	2 68	Teniskaming and Northern Ontario Ry.....	244 34
Kennedy & McDonald.....	27 96	Wabash Ry.....	735 14
Kotbimiere and Megantic Ry.....	3 28		
			22,162 75







NO. 9.—INTERCOLONIAL RAILWAY—Continued.  
 GENERAL BALANCE, YEAR ENDED MARCH 31, 1910—Continued.

Dr.	\$	cts.	\$	cts.	Crt.	\$	cts.
Brought forward.....					Brought forward.....		
To New York, Ontario & Western Ry.....		4 72					
National Labour Congress.....		446 40					
North Shore Ry Co.....		223 74					
New Canadian Co.....		283 96					
Northern New Brunswick and Seaboard Ry.....		2,234 01					
New Brunswick Cold Storage Co.....		105 00					
New Brunswick Pulp and Paper Co.....		\$1 34					
New Brunswick Dock and Terminal Co.....		70 00					
Oregon Railway and Navigation Co.....		2 55					
Ocean charges on freight at Halifax.....		3,423 63					
Post Office Department.....		32,030 15					
Prince Edward Island Ry.....		205 97					
Pictou Station labour.....		200 00					
Pullman Co.....		1 26					
Pennsylvania Ry.....		82 32					
Price Bros.....		1,336 02					
Pittsburg, Cincinnati, Chicago and St. Louis Ry.....		12 32					
Pennsylvania Co.....		73 69					
Pere Marquette Ry.....		75 65					
Pittsburg and Lake Erie Ry.....		11 15					
Philadelphia and Reading Ry.....		35 79					
Philadelphia, Baltimore and Washington Ry.....		6 83					
H. M. Price & Co.....		305 43					
Pickford & Black.....		169 87					
Pacific Fruit Express.....		13 51					
Felix Pichette.....		7 50					
Quebec Central Ry.....		30,866 00					
Quebec Southern Ry. (new account).....		397 78					
Quebec and Lake St. John Ry.....		49 42					
Quebec Southern Ry. (old account).....		25,748 14					
Rhodes, Curry & Co.....		2,907 23					
Rutland Ry.....		13 02					
Chas. D. Ruddock.....		110 00					
Ryan & MacDonnell.....		3,736 29					
William Rontledge.....		35 21					
Record Foundry Co.....		6 90					
Railway Automatic Car Co.....		61 40					
Reid Wrecking Co.....		35 00					
Swift Refrigerator Line.....		2 85					

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To Sherbrooke Tank Line.....	0 48	
Sydney Cement Co.....	526 53	
Salisbury and Harvey Ry.....	7,901 31	
Southern Ry.....	1 71	
St Lawrence & Adirondack Ry.....	19 41	
Seaboard Air Line.....	2 12	
St. Louis & San Francisco Ry.....	2 30	
St. Louis South Western Ry.....	3 59	
Silliker Car Co.....	20 36	
St. Monique Station.....	10 00	
Santa Fe Refrigerator Despatch.....	11 03	
J. B. Sangster.....	6 04	
J. Willard Smith.....	10 00	
Sussex Station.....	25 00	
Sydney & Glace Bay Ry.....	1 72	
Shaw & Mason.....	51 00	
N. C. Scott.....	29 61	
St. John Station Labour.....	1,000 00	
Santa Fe Prescott and Phoenix Ry.....	0 30	
Tennisonata Ry.....	118 60	
Texas & Pacific Ry.....	1 74	
Toronto, Hamilton & Buffalo Ry.....	30 40	
Trois Pistoles Pulp & Paper Co.....	73 82	
Transcontinental Ry. Commissioners.....	8,214 77	
William Thomson & Co.....	11 40	
D. Tremblay.....	123 29	
S. M. Tweedie.....	121 90	
Toronto Construction Co.....	1,015 44	
Vandalia Line.....	0 40	
Uncurrent & failed banknotes.....	14 00	
Union Refrigerator Transit Co.....	1 20	
Vicksburg, Shreveport and Pacific Ry.....	0 79	
Union Pacific Ry.....	2 43	
Union Line.....	1 70	
Wabash Ry.....	100 73	
Western Union Telegraph Co.....	65 36	
A. N. Whitman & Son.....	150 00	
E. A. Wallberg.....	4,839 63	
Wisconsin Central Ry.....	10 25	
Wheeling and Lake Erie Ry.....	0 30	
Western Refrigerator Despatch.....	0 93	
Washington County Ry.....	11 62	
York & Carleton Ry.....	230 56	432,965 04
Individuals and Companies Ledger Suspense:—		
Dominion Atlantic Ry.....	58 04	
Grand Trunk Ry.....	0 94	
Halifax and South Western Ry.....	81 01	

Carried forward..... Carried forward.....

## No. 9.—INTERCOLONIAL RAILWAY—Continued.

GENERAL BALANCE, YEAR ENDED MARCH 31, 1910—Continued

Dr.	\$	cts.	\$	cts.	Cr.	\$	cts.
Brought forward.....					Brought forward.....		
Montreal Locomotive and Machine Co.....		0 83					
McLean, Holt & Co. ....		728 50					
New Brunswick Docks and Terminals Co .....		1 79					
Temiscouata Ry.....		0 62					
International Ry.....		0 38					
Pullman Car Co. ....		0 78					
				867 92			
To Traffic Ledger :							
H. & A. Allan.....	1,469	21					
J. & A. Allan.....		4 95					
Canadian Pacific Ry.....	7,732	92					
Dominion Steamship Line.....		44 05					
Dominion Coal Co.....		79 65					
Grand Trunk Ry.....	18,676	01					
Lakeshore and Michigan Southern Ry.....		5 25					
New York, New Haven and Hartford Ry.....	2,181	20					
Reid-Newfoundland Ry.....	8,846	13					
Salvation Army.....	2,938	12					
				41,376 89			
Car Service Ledger :—							
Albany and Hudson Ry.....		4 25					
Buffalo and Susquehanna Ry.....		8 00					
Brockville, Westford and Northwestern Ry.....		3 25					
Chicago, Peoria and St. Louis Ry.....		0 50					
Chicago, Cincinnati and Louisville Ry.....	137	25					
Carolina Valley Ry.....		0 75					
Dublin and Savannah Ry.....		0 25					
Erie Ry.....		1 25					
Forth, Smith and Western Ry.....		1 00					
Genesee and Wyoming Ry.....		4 75					
Georgia and Northern Ry.....		5 00					
To Greenwich and Johnsonville Ry.....	53	25					
Irondale, Bancroft and Ottawa Ry.....		3 75					
Mississippi Central Ry.....		9 50					
Minneapolis and St. Louis Ry.....	50	25					
Mereer Valley Ry.....		1 50					
New York and Pennsylvania Ry.....		2 00					
New York, Philadelphia and Norfolk Ry.....		6 00					
New York, New Haven and Hartford Ry.....	1,478	65					

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Norwood and Lawrence Ry.....	204 75
Quebec and Lake St. John Ry.....	5 50
Quebec Ry., Light and Power Co.....	4 00
Rariton River Ry.....	3 00
Rapid River Ry.....	1 75
Randolph and Cumberland Ry.....	25
St. Louis, Watkins and Gulf Ry.....	2 50
Toledo Terminal Ry.....	222 30
Teniskaming and Northern Ontario Ry.....	29 25
White River Ry.....	49 50
2,293 95	
By Rents Ledger:—	
J. St. McLeod.....	6 00
Theo. Boucher.....	30 00
J. J. Irvine.....	32
E. D. McGrath.....	8 36
Reid Newfoundland Ry.....	466 59
W. A. Clarke.....	3 00
F. Pichette.....	105 00
Canadian Pacific Ry.....	329 14
Post Office Dept.....	43 75
Western Union Telegraph Co.....	14 40
Douglas Hannah.....	1 56
James Mulroney.....	1 05
Duncan McGee.....	2 00
E. Thompson.....	1 73
C. Villeux.....	20 00
N. Lamontagne.....	15 00
Misses Camire.....	12 00
Maurice Camire.....	11 00
Mrs. J. Atkinson.....	85 00
Mrs. L. Roberge.....	80 00
James Cloutier.....	34 00
Geo. Cloutier.....	34 00
A. Bégin.....	156 00
Jean Lamothe.....	36 00
Louis Boisvert.....	8 00
Emile St Laurent.....	173 00
Peter Bernier.....	10 00
David Rouleau.....	24 00
Dame C. W. Carrier.....	204 00
Olivier Gingras.....	51 00
Arthur Lamontagne.....	4 60
L. N. Letarte.....	0 06
J. D. Demings.....	2 00
E. J. Smith.....	1 00
J. A. R. Wier.....	7 00
Mrs. Agnes Welt.....	1 00
Thomas Sharpe.....	2 00

Carried Forward.....

Carried forward.....

No. 9.—INTERCOLONIAL RAILWAY—Continued.

GENERAL BALANCE, YEAR ENDED MARCH 31, 1910—Concluded.

DR.		CR.	
	\$ cts.		\$ cts.
Brought forward .....		Brought forward .....	
Mrs. D. McLean.....	4 00		
R. S. Vye.....	0 75		
A. B. Copp.....	3 00		
E. J. Smith.....	1 00		
J. McDonald.....	1 00		
John R. Stewart .....	0 25		
William Young.....	5 00		
Chas. Richards.....	3 00		
William Plummer.....	2 00		
D. S. Harper.....	1 00		
Patrick McCourt.....	1 00		
Adam Mahar.....	0 25		
Geo. Mann.....	0 25		
Benj. Smith.....	0 25		
Geo. Lovett.....	0 75		
Municipality of Amqui.....	9 00		
E. Hutchinson.....	10 00		
D. McEvoy.....	5 00		
B. Gladwin.....	5 00		
Atkinson & McLeod.....	2 00		
B. O. Steeves.....	2 00		
P. A. Grant.....	15 00		
M. McLean.....	15 00		
Geo. Lightle.....	1 00		
Geo. W. White.....	3 75		
A. McIsaac.....	5 00		
J. A. Kirkpatrick.....	1 00		
John C. Cass.....	30 00		
D. Gagne.....	1 00		
M. A. McLeod.....	5 00		
R. Allan.....	6 00		
Geo. Lovett.....	0 50		
Alex. McDonald.....	2 00		
W. F. Morgan.....	1 00		
H. F. McDougall.....	1 00		
Strathcona Coal Co.....	1 00		
Canadian Express Co.....	6 25		
Town of Shediac.....	1 00		
Dominion Express Co.....	6 25		

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James Skean.....	3 00
D. C. McKenzie & R. Graham.....	15 00
D. Patterson.....	4 00
M. A. McLeod.....	5 06
A. M. Rowan.....	250 00
W. R. Steeves.....	0 79
Central Telephone Co.....	19 00
Harris Abattour Co.....	5 00
City of Sydney.....	1 00
John Legrene.....	0 42
Le Credit Municipal Canadien.....	6 25
Canadian Express Co.....	2 00
Charles Love.....	1 00
James Barclay.....	5 00
Sanderson Mfg. Co.....	6 25
Canadian Express Co.....	10 00
Nova Scotia Telephone Co.....	24 00
Town of Kinouaski.....	5 00
Lieut. General Laurie.....	251 00
New Brunswick Cold Storage Co.....	5 00
Trueman Wheaton.....	5 00
John W. Logan.....	5 00
Imperial Oil Co.....	1 00
Robert Douglas.....	2 00
Antigonish and Sherbrook Telephone Co.....	1 00
E. Banville.....	1 00
A. A. O'Donnell.....	1 00
Dartmouth Ferry Commission.....	20 00
Dominion Express Co.....	1 00
Transcontinental Railway Commissioners.....	1 00
John H. Adams.....	1 00
Emile Paturel.....	1 00
Canadian Express Co.....	0 48
Geo. Cooper and J. P. Cunningham.....	12 50
B. N. S. Underhill.....	1 00
Furness, Withly & Co.....	16 67
Sackville Hay and Feed Co.....	7 50
McKay Mining Co.....	5 00
H. McC. Hart.....	30 00
Tlios. Belanger.....	1 00
Trustees of Y. M. C. A., Campbellton.....	10 00
Canadian Express Co.....	25 00
H. M. Kent.....	5 00
Samuel Melanson.....	5 00
Doucett Bros.....	1 00
City of Sydney.....	1 00
J. H. Stewart.....	2 50
Imperial Oil Co.....	90 00

3,016 57

Carried forward.....

Carried forward.....



No. 9.—INTERCOLONIAL RAILWAY—*Concluded.*  
 GENERAL BALANCE, YEAR ENDING MARCH 31, 1910.

Dr.	\$	cts.	\$	cts.	Cr.	\$	cts.
Brought forward.....					Brought forward.....		
Advances—							
H. M. Stevens.....		5	06				
A. W. Belyea.....		10	00				
E. H. McAlpine.....		290	00				
A. Gallipeau.....		100	00				
T. P. Owens.....		900	00				
				1,305			
				2,364,318			
				19			
				2,364,318			
				19			

E. & O. E.,  
 MONCTON, N.B.

S. L. SHANNON,  
*Comptroller.*

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY OF CANADA.

STATEMENT of Averages, year ending March 31, 1910.

Mileage of railway.....	1,447.13
Engine mileage.....	8,608.486
Total train mileage.....	6,682.353
Total car mileage.....	94,384.628
<hr/>	
Ratio of earnings to gross earnings—	Per cent.
Revenue from transportation.....	99.32
Revenue from operations other than transportation.....	.68
Gross earnings per mile of railway.....	Dollars 6,404.56
" engine mile.....	" 1.08
" train mile.....	" 1.39
" car mile.....	Cents 9.82
<hr/>	
Ratio of expenses to gross earnings—	Per cent.
Maintenance of way and structures.....	17.50
" equipment.....	19.98
Traffic expenses.....	1.94
Transportation expenses.....	51.62
General expenses.....	2.23
<hr/>	
Expenses per train mile—	Cents.
Maintenance of way and structures.....	24.28
" equipment.....	27.71
Traffic expenses.....	2.69
Transportation expenses.....	71.60
General expenses.....	3.09
<hr/>	
Expenses per mile of railway—	Dollars.
Maintenance of way and structures.....	1,121.03
" equipment.....	1,279.63
Traffic expenses.....	124.30
Transportation expenses.....	3,306.32
General expenses.....	142.66
<hr/>	
Locomotive and car repairs, per locomotive and car—	Dollars.
Locomotives.....	1,504.72
Passenger cars.....	604.87
Freight cars.....	33.16

(Sgd.) S. L. SHANNON,  
*Comptroller and Treasurer.*

C. F. BURNS,  
Auditor of Disbursements, I.C.R.

1 GEORGE V., A. 1911

## INTERCOLONIAL RAILWAY OF CANADA.

COMPARATIVE STATEMENT of principal Revenue Producing Freight carried over the Intercolonial Railway in 1908-09 and 1909-10.

DESCRIPTION.	Year ended 31st March, 1909.	Year ended 31st March, 1910.
	Tons.	Tons.
<i>Product of Agriculture :</i>		
Grain .....	103,896	155,484
Flour .....	146,692	160,817
Potatoes .....	26,842	31,232
Hay .....	36,021	72,229
Apples, fruit and vegetables .....	15,648	18,855
Other mill products .....	34,519	31,511
Cotton .....	3,885	3,723
<i>Products of Animals :</i>		
Hogs and horses .....	8,493	8,898
Sheep and cattle .....	10,044	9,768
Lambs .....	1,532	1,967
Dressed meats .....	17,342	18,439
Poultry and game .....	242	411
Fish .....	26,428	27,887
Oysters .....	537	1,053
Wool .....	1,196	1,642
Hides and leather .....	5,742	6,667
<i>Products of Mines :</i>		
Coal and coke .....	1,115,937	1,233,870
Ore .....	2,401	5,740
Sand, stone, &c. ....	159,300	184,673
Salt .....	7,058	8,898
Slate and granite .....	3,280	1,548
Phosphate .....	11,356	15,351
<i>Products of Forests :</i>		
Lumber .....	352,888	416,774
Bark .....	14,200	15,835
Cord wood .....	52,817	48,751
Pulp wood .....	167,129	185,385
Wood pulp .....	19,249	39,072
Shingles .....	76,480	78,930
Other forest products .....	196,284	259,002
<i>Manufactures :</i>		
Petroleum and oils .....	26,466	27,537
Sugar .....	46,300	62,571
Iron and steel rails .....	101,340	88,484
Iron, pig and bloom .....	98,844	138,468
Wire rods .....	56,024	91,389
Steel billets .....	115,590	89,416
Other castings and machinery .....	64,427	75,419
Bar and sheet metals .....	17,218	12,659
Brick, lime and cement .....	90,096	107,199
Agricultural implements .....	6,217	7,585
Furniture .....	5,293	5,825
Immigrant's effects .....	1,350	1,821
Miscellaneous .....	327,369	357,963
Grand total .....	3,573,972	4,110,748

(Sgd.) S. L. SHANNON,  
Comptroller and Treasurer.(Sgd.) W. H. ESTANO,  
Traffic Auditor.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY OF CANADA.

STATEMENT OF RECEIPTS 1908-9 and 1909-10.

Months.	Passenger Traffic.		Freight Traffic.		Mails and Sundries.		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1909—								
April .....	208,908	23	528,853	85	28,729	25	766,491	33
May .....	197,244	59	472,576	97	33,203	06	703,024	62
June .....	242,215	90	463,480	74	34,269	36	739,966	00
July .....	314,732	16	482,064	25	35,172	13	831,968	54
August .....	335,443	17	424,580	98	31,829	50	791,853	65
September .....	304,881	46	482,485	77	40,675	34	828,042	57
October .....	238,054	67	562,286	27	34,650	62	834,991	56
November .....	192,884	95	578,692	94	33,185	79	809,763	68
December .....	199,486	28	542,184	42	60,217	58	801,888	28
1910—								
January .....	169,614	98	450,978	28	33,530	24	654,123	50
February .....	141,588	50	466,167	89	30,129	70	637,886	09
March .....	220,829	77	594,531	82	52,873	58	868,235	17
1909-10 .....	2,765,884	66	6,048,884	18	453,466	15	9,268,234	99
1908-9 .....	2,628,218	57	5,502,550	58	396,300	31	8,527,069	46

(Sgd.) S. L. SHANNON,

(Sgd.) W. H. ESTANO,  
Traffic Auditor.

Comptroller and Treasurer.

INTERCOLONIAL RAILWAY OF CANADA.

PASSENGER STATEMENT 1908-9 and 1909-10.

Months.	Local.		Through.		Total.	
	Number.	Mileage.	Number.	Mileage.	Number.	Mileage.
1909—						
April .....	220,449	7,341,115	19,251	4,493,912	239,700	11,835,027
May .....	215,388	7,653,839	17,972	2,925,795	233,360	10,579,634
June .....	236,794	9,757,357	21,779	3,267,586	258,573	13,024,943
July .....	322,238	14,117,761	25,011	4,088,943	347,249	18,206,704
August .....	323,036	12,202,322	32,637	6,182,175	355,673	18,384,497
September .....	270,422	10,978,376	27,893	5,701,955	298,315	16,680,331
October .....	226,473	8,096,567	21,528	3,683,460	248,001	11,780,027
November .....	197,433	6,428,113	17,466	3,268,710	214,899	9,696,823
December .....	232,523	7,993,594	17,524	3,486,280	250,047	11,479,874
1910—						
January .....	211,233	5,886,877	16,401	3,297,370	227,634	9,184,227
February .....	175,135	5,122,515	11,006	2,676,647	186,141	7,799,162
March .....	242,423	7,559,925	20,309	5,927,635	262,732	13,487,560
1909-10 .....	2,873,547	103,138,341	248,777	49,000,468	3,122,324	152,138,809
1908-9 .....	2,656,217	96,462,819	251,020	43,213,293	2,907,237	139,676,112

(Sgd.) S. L. SHANNON,

(Sgd.) W. H. ESTANO,  
Traffic Auditor.

Comptroller and Treasurer.

## INTERCOLONIAL RAILWAY OF CANADA.

## FREIGHT STATEMENT 1908-9 and 1909-10.

Months.	Local.		Through.		Total.	
	Tons.	Mileage.	Tons.	Mileage.	Tons.	Mileage.
1909—						
April .....	236,873	53,975,253	90,450	43,892,383	327,323	97,867,636
May .....	239,633	37,200,818	66,053	30,867,706	305,686	68,068,524
June .....	246,753	40,736,345	63,050	30,762,591	309,803	71,498,936
July .....	280,402	46,540,842	62,830	29,904,627	343,232	76,445,469
August .....	214,405	35,339,615	59,315	29,405,056	273,720	64,744,671
September .....	243,051	40,027,779	67,301	35,293,235	310,352	75,321,014
October .....	272,107	49,099,724	85,243	45,233,632	357,350	94,333,356
November .....	268,595	45,239,989	107,894	59,171,190	376,489	104,411,179
December .....	234,713	45,100,837	113,976	65,560,902	348,689	110,661,739
1910—						
January .....	224,072	48,575,194	85,787	46,120,534	309,859	94,695,728
February .....	225,099	52,442,741	76,754	41,485,502	301,853	93,928,243
March .....	272,939	67,289,927	89,945	47,727,335	362,884	115,017,262
1909-10 .....	2,958,642	561,569,064	968,598	505,424,693	3,927,240	1,066,993,757
1908-09 .....	2,742,454	525,514,718	831,518	435,775,383	3,573,972	961,290,101

(Sgd.) S. L. SHANNON,  
*Comptroller and Treasurer.*

(Sgd.) W. H. ESTANO,  
*Traffic Auditor.*

## INTERCOLONIAL RAILWAY OF CANADA.

## DESCRIPTIVE STATEMENT of Freight transported during the year ended March 31, 1910.

	Number.	Tons.
Barrels flour .....	1,608,170	160,817
Bushels grain .....	7,074,042	155,484
Live stock .....	106,712	20,633
Sup. feet lumber .....	677,805,611	940,091
Coal and other fuel .....		1,282,621
Manufactured goods .....		1,026,307
All other articles .....		524,795
Total .....		4,110,748

(Sgd.) S. L. SHANNON,  
*Comptroller and Treasurer.*

(Sgd.) W. H. ESTANO,  
*Traffic Auditor.*

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY OF CANADA.

STATEMENT of Coal transported during fiscal year ended March 31, 1910.

From	FOR THE WEST.			For Local Stations.	Total.
	Via St. John.	Via St. Rosalie.	Via Montreal.		
	Tons.	Tons.	Tons.	Tons.	Tons.
Stellarton.....	166	42	60	393,280	393,548
Westville.....				30,421	30,421
New Glasgow.....	1,286		830	102,305	104,421
North Sydney.....				43,166	43,166
Sydney.....				7,413	7,413
Point Tupper.....				97,421	97,421
Maccan.....				239,813	239,813
Norton.....				31,302	31,302
Coal Branch.....				165	165
Harcourt.....				6,142	6,142
Springhill.....				51,692	51,692
	1,452	42	890	1,003,120	1,005,504

(Sgd.) S. L. SHANNON,  
*Comptroller and Treasurer.*

(Sgd.) W. H. ESTANO,  
*Traffic Auditor.*

INTERCOLONIAL RAILWAY OF CANADA.

STATEMENT showing quantity of the under-mentioned articles carried during fiscal year ended March 31, 1910.

Articles.	Via Montreal.	Via St. Rosalie.	Via St. John.	For Local Stations.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.
Raw sugar, west bound.....	2,000	309		12,203	14,512
Refined sugar, west bound.....	9,217	6,402	1,051	23,224	39,894
European freight, west bound.....	6,656	1,651	9	43,249	51,565
"    east bound.....	14,408	716	5,809	88,024	*108,957
Grain for shipment.....	Bush. 328,957				Bush. 328,957
Fresh fish.....	Tons. 3,965	Tons. 547	Tons. 2,616	Tons. 6,525	Tons. 13,653
Salt fish.....	3,759	697	806	9,606	14,868
Coal.....	890	42	1,452	1,003,120	1,005,504

\* Includes 64,728 tons deals.

(Sgd.) S. L. SHANNON,  
*Comptroller and Treasurer.*

(Sgd.) W. H. ESTANO,  
*Traffic Auditor.*



1 GEORGE V., A. 1911

STATEMENT of Ocean Borne Passenger business done at the Port of Halifax during  
the fiscal year ending March 31, 1910.

Name of Steamer.	NUMBER OF PASSENGERS.			
	1st	2nd	Steerage.	Total.
C. P. R. SS. Line—				
Empress of Ireland.....	70	27	38	135
Empress of Britain.....	118	68	63	249
North West Transport Line—				
Vulturno.....	1	55	1,615	1,671
Uranium.....	5	52	1,456	1,513
Raglan Castle.....		16	410	426
Napolitan Prince.....		24	699	723
Sicilian Prince.....		5	375	380
Campania.....		1	462	463
Allan Line—				
Corsican.....	71	720	1,885	2,676
Grampian.....	56	639	2,337	3,032
Virginian.....	141	800	2,168	3,109
Tunisian.....	153	930	3,082	4,165
Hesperian.....	94	534	1,791	2,419
Victorian.....	167	751	2,217	3,135
Carthaginian.....	61	184	826	1,071
Siberian.....	19	89	212	320
Mongolian.....	60	119	289	468
Pretorian.....		141	239	380
Corinthian.....		21	48	69
Numidian.....		125	295	420
Sardinian.....		17	54	71
Ionian.....	59	410	667	1,136
Pomeranian.....		16	17	33
Sicilian.....	3	14	205	222
Parisian.....		190	379	569
Dominion Line—				
Dominion.....		275	585	860
Canada.....		174	795	969
Southwark.....		17	88	105
Total.....	1,078	6,414	23,297	30,789

(Sgd.) E. TIFFIN,  
General Traffic Manager.

MONCTON, N.B.  
July 5, 1910.

SESSIONAL PAPER No. 20

STATEMENT of Ocean Borne Passenger business done at the Port of St. John during the fiscal year ending March 31, 1910.

Name of Steamer.	NUMBER OF PASSENGERS.		
	1st	Immigrants.	Total.
<i>WIM</i>			
C. P. R. Line—			
Lake Michigan .....		24	24
Lake Manitoba .....		15	15
Montezuma .....		30	30
Lake Erie .....		17	17
Montrose .....		4	4
Lake Champlain .....		1	1
Mount Temple .....		17	17
Empress of Britain .....		3	3
Empress of Ireland .....		4	4
Montreal .....		10	10
Canada Line—			
Prince Oscar .....		2	2
Donaldson Line—			
Athena .....	16	175	191
Cassandra .....	8	55	63
Salacia .....		5	5
Kastalia .....		3	3
Allan Line—			
Corsican .....	2	14	16
Tunisian .....		24	24
Victorian .....		15	15
Virginian .....		3	3
Grampian .....	1	6	7
Hesperian .....		46	46
Sardinian .....		27	27
Pomeranian .....		6	6
Total .....	27	506	533

(Sgd.) E. TIFFIN,  
General Traffic Manager.

MONCTON, N.B.,  
July 5, 1910.

1 GEORGE V., A. 1911

STATEMENT of Ocean Borne Passenger business done at the Port of Quebec during the year ending March 31, 1910.

Name of Steamer.	NUMBER OF PASSENGERS.		
	1st.	2nd.	Total.
Athenian.....	1	32	33
Corinthian.....	1	13	14
Corsican.....	9	35	44
Canada.....	4	10	14
Empress of Ireland.....	2	69	71
Sicilian.....	3	14	17
Ionian.....	3	30	33
Pomeranian.....	4	2	6
Montreal.....		25	25
Virginian.....	17	27	44
Dominion.....	8	3	11
Grampian.....	3	28	31
Cassandria.....	6	32	38
Mount Temple.....		20	20
Montrose.....		6	6
Empress of Britain.....	1	40	41
Prince Adolbert.....	1	18	19
Laurentic.....	3	18	21
Victorian.....	5	32	37
Tunisian.....	10	26	36
Lake Manitoba.....	1	10	11
Hesperian.....		31	31
Mount Royal.....	9	9	18
Parthenian.....		4	4
Prince Oscar.....		6	6
Lake Megantic.....		13	13
Lake Erie.....		3	3
Montezuma.....		21	21
Pretorian.....		40	40
Sardinian.....		5	5
White Star.....	1		1
Canadian.....		3	3
Montford.....		14	14
Lake Champlain.....		1	1
Lake Michigan.....		3	3
Donaldson.....		5	5
Megantic.....	3	7	10
Ottawa.....	8	5	13
Lakonia.....		1	1
	103	661	764

(Sgd.) E. TIFFIN,  
General Traffic Manager.MONCTON, N.B.,  
July 5, 1910.

SESSIONAL PAPER No. 20

STATEMENT of Ocean Borne Freight traffic via Halifax for the year ending March 31, 1910.

Line of Steamers.	Import.	Export.
	Tons.	Tons.
Allan Line.....	16,877	5,448
C. P. R.....	99	158
Elder Dempster.....	1,468	2,190
Furness.....	14,732	56,122
Manchester.....	973	5,845
N. W. Transport Co.....	911	.....
Plant Line.....	1,328	619
Pickford & Black.....	16,848	24,087
Red Cross Line.....	304	1,017
Donaldson.....	.....	1,030
Tramps—various steamers.....	11,087	24,405
	64,627	120,921

(Sgd.) E. TIFFIN,  
General Traffic Manager.

MONCTON, N.B.,  
July 5, 1910.

STATEMENT of Ocean Borne Freight traffic via St. John, for the year ending March 31, 1910.

Line of Steamers.	Import.	Export.
	Tons.	Tons.
Allan Line.....	2,850	5,270
Donaldson.....	5,522	2,846
Havana & Mexican Line.....	.....	1,273
Manchester Line.....	2,308	3,343
South African Line.....	.....	2,355½
C. P. R. Line.....	3,111	6,608
Head Line.....	.....	836
Furness Line.....	615	1,382
Elder Dempster Line.....	210	.....
Pickford & Black Line.....	296	.....
Teodore de Laringa (steamer).....	6,562	.....
	21,474	23,913½

(Sgd.) E. TIFFIN,  
General Traffic Manager.

MONCTON, N.B.,  
July 5, 1910.

1 GEORGE V., A. 1911

## INTERCOLONIAL

STATEMENT of Casualties for the

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1909.							
April 1	20	KS Special.	.....	H. Pelletier.	J. Dean.	361	Drummondville ...
" 1	21	K " "	Freight.	P. H. Sirois.	G. Goddard.	307	St. Appollinaire. ...
" 6	..	..	.....	.....	.....	..	1½ miles east Trois Saumons.
" 10	17.20	Mixed.	Freight.	F. A. Davidson.	Judson Wall.	341	¼ mile north Princess Lodge.
" 15	6.30	24	Way Frt.	J. L. Barnhill.	A. Robbins.	281	1 mile east Painsec Jct.
" 16	2.55	34	Express	A. Begin.	E. B. Price.	411	¾ mile west Causpascal.
" 18	23.50	Special.	Freight.	A. Delaney.	M. J. Taylor.	315	Adamsville. ....
" 22	11	K Lig't Engine	.....	W. A. Fitch.	A. McLean.	179	3 miles east Leitches Creek.
" 22	9.50	Pilot.	.....	Wm. Tees.	J. Martin.	91	St. Hyacinthe .....
" 23	12.20	Shunter	.....	C. Poirier.	C. A. Killam.	374	Ritchie's Siding. ....
" 24	7.40	37	Freight.	W. E. Fergusson.	W. E. Hunter.	211	Birch Ridge. ....
" 24	23	25 69	Suburban.	C. D. Phillips.	J. Stockall.	141	Fairview .....
" 28	..	Special.	.....	V. R. Blanchard.	F. Goddard.	359	3 miles west St. Appollinaire.
" 30	21.30	..	.....	.....	.....	..	Truro. ....
" 30	15	45	.....	.....	.....	..	Chaudiere Jct. ....
May 4	11.30	Shunter	.....	.....	G. Spear.	77	St. John Yard. ....
" 5	16.30	153	Express	J. Guay.	E. Onellett.	408	Chabot's Crossing .
" 19	20.30	Shunter	.....	.....	.....	..	Campbellton Yd ..
" 22	20.30	176	Fast Frt.	Jas. McDonald.	A. Stevens.	23	Stellarton. ....
" 26	8	40 25	Express	T. Guinan.	B. Cooke.	234	½ mile east Windsor Jct.
June 1	19.50	Sub.	.....	P. Tardif.	Oct. Halle.	90	Pt. Levis Yard ....
" 29	.....	.....	.....	.....	.....	..	Kenpt Road, Halifax.
July 7	14	55 64	Suburban.	L. G. Kennedy.	C. Coleman.	227	Burton's, Halifax. .
" 8	10	14	Sub.	Geo. C. Johnston.	Geo. Roberge.	173	Point Levis. ....
" 16	13.25	Special.	Passenger.	Jos. Baxter.	Jno. H. Campbell.	66	½ mile east of Trenton.
" 19	22	01 200	Express	J. Rioux.	W. J. Atkinson.	343	Between Villeroi & de Lotbinière.
" 30	22	06 75	Freight.	C. Couchy.	J. Collet and E. Huott.	308	1 mile west of Laurier.

SESSIONAL PAPER No. 20  
RAILWAY OF CANADA.

year ended March 31, 1910.

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict.
W. Lennieux.....	Brakeman.....	Hand caught between draw bar and dead wood block.	Hand injured.....	
J. A. Pickard.....	".....	While shunting.....	Right leg slightly bruised.	
D. Cloutier.....	Caretaker.....	Found on track.....	Fatal.....	Accidental.
Daniel McNevin....	Passenger.....	Fell off train.....	Head injured.....	
Jno. Camp.....	Neither.....	Found alongside of track by crew of 24 train.	Fatal.....	No blame attached to railway.
Chas. Audet.....	Mail Clerk.....	Eight cars of train left track.	Cut on face.....	
W. Morrison.....	Express Messenger..	Mail car rolled down bank....	Heavy blow across face.....	
J. Little.....	Brakeman.....	While shunting.....	Side injured.....	
W. A. Fitch.....	Acting as conductor.	Tender of engine left track and upset.	Ankle sprained....	
Sylva Catudal.....	Neither.....	Attempting to cross track between cars.	Left arm and foot crushed; died.	No blame attached to railway or employees.
N. Desrosiers.....	Brakeman.....	While shunting.....	Foot badly hurt.	
C. Leahy.....	".....	While unloading piece of machinery.	Finger crushed...	
Wm. Gorman.....	Passenger.....	Attempting to get off car before it stopped, tripped and fell.	Right hand scratched.	
Louis Jacques.....	Sectionman.....	Struck by train.....	Head injured.....	
A. Griffin.....	Frt. porter.....	While handling freight truck slipped and he fell backwards.	Foot badly injured.	
Alfred Couture.....	Car repairer.....	While coupling hose between cars.	Injured about stomach.	
A. Mowery.....	Shunter.....	Being caught while uncoupling cars.	Back injured.....	
Jos. Therien.....	Neither.....	Struck by train while walking on track.	Slightly injured...	
Chas. Cormier.....	Brakeman.....	While shunting.....	Ankle sprained....	
A. M. Fraser.....	Fireman.....	While getting off engine fell and was caught by oil box and dragged some distance.	Badly injured....	
Sydney Shaffleburg.	Sectionman.....	While standing on track was struck by train.	Fatal.....	Accidental.
Jos Anctil.....	Brakeman (not on duty.)	While attempting to get on foot board of tender fell and wheels of tender passed over his body.	".....	"
Wm. Ingram.....	Neither.....	Fell while playing on wall at new round house.	".....	"
Murphy boy, 8 or 9 yrs. old.	".....	Run over by train.....	Badly cut about head, right leg almost severed above ankle.	
A. Simard.....	".....	Struck by train while walking on track.	Back hip and left leg injured.	
Fred Donlan, Miss Sadie Murray, Mrs. Gordon.	Passengers.....	Car left track.....	Fracture of skull. Arm bruised. Shoulder slightly bruised.	
Jos. Ginoie.....	Fireman.....	While shaking grates shaker gear broke injuring hand.	Finger of left hand injured.	
Peter Ryan, Jno. Doran, Pat. Cronin, Wm. Fairbrother.	Neither.....	Were stealing ride in box car when a wheel of car containing billets broke derailing car.	Badly injured.....	



1 GEORGE V., A. 1911

INTERCOLONIAL

STATEMENT of Casualties for the

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1909.							
Aug. 7	24.20	301	Express	A. E. Logan	Wm. Matthews	109	Loggieville
" 10	18.10	Spcl.		J. B. LeBel	A. Cheuard	212	Riv. du Loup Yard.
" 12	12 K	5	Freight	J. S. Nickerson	R. Linden	290	Sussex
" 14	10.07	83	Express	J. Coffey	R. Bulwer	155 $\frac{3}{4}$	mile east Buc-touche Crossing.
" 19	12.45	Pilot	Freight	A. St. Pierre	N. Houston	35	miles west St. Leonard Jct.
" 20	1.50	Spcl.		W. Brownrigg	J. Shaw	366	Truro
" 27	20.15						"
" 28	17.49	34	Express	O. Desjardins	E. Parsons	407	St. Alexandre
" 30	17.55	200	"	Geo. Nixon	J. Donald	338	Thomson
Sept. 7							1 mile west Sackville
" 7	5.10	Freight	Special	A. Laliberte	D. Cote	392	St. Lambert
" 13	22.30	Excur. Pass.		Jno. McLeod	Jno. McEachern	395	Auherst
" 20							Near St. Joseph sta.
" 21	21.50	Special		H. Pelletier	H. Gingras	307	Ste. Rosalie
" 23	17.40	Special		J. F. Kelly	A. Probert	21	Hopewell
Oct. 6	2.38	Special Exp.	Freight Pass	J. H. Thomson	R. J. Whalen	88	300 yards West Nashes Creek Stn.
" 6	2.38	"	"	A. McLellan	John Morton	333	"
" 6	2.38	"	"	"	"	333	"
" 6	2.38	"	"	"	"	333	"
" 6	2.38	"	"	"	"	333	"
" 6	2.38	"	"	"	"	333	"
" 6	2.38	"	"	"	"	333	"
" 6	2.38	"	"	"	"	333	"
" 6	2.38	"	"	"	"	333	"
" 6	16.40	Special		A. Gauvreau	E. Roy		Drummondville
" 8	21.20	Shunter			F. McBeath	52	Moncton Yd.
" 12		26	Express	W. McClafferty	W. J. Hunter	341	2 miles North Truro
" 15	1.00	Special		F. A. Fowlie	J. Gozley	275	Windsor Jct.
" 20	6.20	33	Express	E. Cauiere	A. Matthews	411	Skin Cnt Snow Shed
" 21	13.00	Shunter		Nap. Levesque	Geo. Lutes	369	Cedar Hall
" 30	23.00						Pt. du Chene
Nov. 1	22.30	Shunter			W. McDonald	349	Sydney Yd.

SESSIONAL PAPER No. 20  
RAILWAY OF CANADA.

year ended March 31, 1910—Continued.

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict.
Jno. Sims . . . . .	Baggagemaster . . . . .	His jumper caught on bolt while coupling cars.	Badly injured . . . . .	
Sam Boucher . . . . .	Brakeman . . . . .	Struck by engine . . . . .	Slightly injured . . . . .	
Roy L. Welling . . . . .	" . . . . .	While unloading freight truck fell on his foot.	Foot slightly injured.	
Alex. H. Steeves . . . . .	Neither . . . . .	Walking on track struck by train.	Died in the hospital, Moncton.	
Antoine Martin . . . . .	" . . . . .	Walking on track struck by train.	Died from injuries received.	Accidental.
Chas. True . . . . .	Employee of Norris & Rowe's Circus.	He was sleeping in car which went off track.	Shoulder dislocated.	
G. L. Miller . . . . .	Frt. porter . . . . .	Struck his head against car door while unloading mails.	Cut above and below eye.	
Jos. Dufour . . . . .	Neither . . . . .	Attempting to board train while under influence of liquor.	One leg cut off . . . . .	
Mrs. E. Mattison . . . . .	" . . . . .	While standing on crossing struck by train.	Fatal . . . . .	"
Abel Carter . . . . .	Neither . . . . .	Found dead on track, supposed to have been struck by some train during night.	Fatal . . . . .	Accidental.
Rosario Legare . . . . .	Brakeman . . . . .	Foot caught between rail and car coupling cars.	Right foot badly crushed.	
George Ayer . . . . .	Passenger . . . . .	Fell or jumped from train . . . . .	Head and Face injured.	
Victor Chatignay . . . . .	Fireman . . . . .	Found dead alongside of track	Fatal . . . . .	No blame attached
O. Sirois . . . . .	Brakeman . . . . .	Foot caught between guard rail and switch while getting off train.	Injured . . . . .	Ry. or Emp
Arthur Murray . . . . .	" . . . . .	While coupling cars . . . . .	Thumb badly smashed.	
R. J. Whalen . . . . .	Engineman . . . . .	Thompson's special collided with No. 33 Express train.	Fatal . . . . .	Fault of Con. Thompson and Driver Whalen.
J. Morton . . . . .	" . . . . .	" " . . . . .	" . . . . .	
W. S. Morrison . . . . .	Exp. Messenger . . . . .	" " . . . . .	" . . . . .	
Wm. Cook . . . . .	Fireman . . . . .	" " . . . . .	Badly injured . . . . .	
A. J. Jessulate . . . . .	Brakeman . . . . .	" " . . . . .	Right leg badly injured.	
J. A. Murray . . . . .	" . . . . .	" " . . . . .	Shoulder dislocated.	
D. O'Sullivan . . . . .	Mail Clerk . . . . .	" " . . . . .	Left arm broken . . . . .	
W. P. Starratt . . . . .	" . . . . .	" " . . . . .	Slightly injured . . . . .	
Thos. Keith . . . . .	" . . . . .	" " . . . . .	" . . . . .	
J. H. Thompson . . . . .	Conductor . . . . .	" " . . . . .	" . . . . .	
Wilfrid Blais . . . . .	Neither . . . . .	While walking on track struck by train.	" . . . . .	
A. A. Embree . . . . .	Brakeman . . . . .	Attempting to shove coupler with his foot.	Foot badly jammed.	
Jas. A. McCuish . . . . .	Passenger . . . . .	Jumped through window 2nd class car.	Slightly injured . . . . .	
Henry Gratta . . . . .	Em. on Steam shovel	Found body on track cut in two	Fatal . . . . .	Accidental.
M. D. Mullins . . . . .	Waiter . . . . .	No. 33 run into No. 75 Mullins knocked down by jar.	Rib broken . . . . .	
Aug. Gagnon . . . . .	Brakeman . . . . .	Foot caught in hole of flat car.	Foot slightly injured.	
Wm. McGrath . . . . .	Cleaner . . . . .	Caught foot in turntable while turning engine.	Foot smashed . . . . .	
Jno. McPhee . . . . .	Brakeman . . . . .	Squeezed between platform and car.	Bruised about body.	

1 GEORGE V., A. 1911

## INTERCOLONIAL

## STATEMENT of Casualties for the

Date.	Time of Day.	No. of Train	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1909.							
Nov. 4	19.00	84	Express	J. Coffey	R. Bulwer		Halls Creek Bridge near Moncton.
" 4	.....	Special	.....	O'Brien	R. D. McDonald	229	Woodburn
" 6	5.15	133	Express	J. B. Crockett	Geo. Storey	99	Pt. du Chene
" 10	5.25	33	"	A. Begin	W. Duncan	406	$\frac{1}{4}$ mile East Parades Siding.
" 12	18.35	Shunter	.....	.....	H. Maisey	350	Campbellton
" 20	.....	.....	.....	.....	.....	.....	Nicolet
Dec. 1	10.25	145	Express	J. Dowden	R. Jameson	2	Guy St., Montreal.
" 5	16.30	Special	Freight	S. G. Nickerson	W. Ingram	103	Cannan
" 13	22.45	26	Express	A. E. Brown	J. Ross		Short distance west of North St. stn.
" 17	16.20	23	Freight	I. L. Barnhill	L. King	277	Amherest
" 17	24.00	Shunter	.....	J. Jackson	P. McLimes	405	D. W. T. Halifax
" 18	16.50	37	Freight	W. F. Fergusson	F. Henry	395	Beaver Brook near St. Francois stn.
" 26	10.20	Special	.....	H. LeBel	Geo. Cote	320	St. Anne
1910.							
Jan. 4	12.20	42	Freight	A. Gamache	D. C. Gallan	351	Cedar Hall
" 7	16.00	41	"	.....	R. Baird	264	Ste. Flavie Yard
" 10	17.30	Shunter	.....	.....	R. H. Fillimore	287	Stellarton Yard
" 17	.....	.....	.....	.....	.....	.....	.....
" 19	6.40	.....	.....	.....	A. Probert	199	Near Lourdes
" 22	4.50	148	Express	A. Freshetto	Geo. Cloutier	74	St. Lambert
" 27	10.00	.....	.....	.....	.....	.....	Truro
" 29	15.05	23	Freight	J. W. Coles	W. Gross	279	Amherst
Feb. 8	20 25	151	Express	A. Legace	G. Findlay	102	$2\frac{1}{2}$ miles west St. Eugene.
" 19	19.30	Special	.....	J. Cremer	J. Martin	7	Chatham
" 21	14K	Shunter	.....	.....	Ed. Kean	403	Ste. Flavie Yard
" 28	1.40	Special	Freight	H. A. Baker	D. McLeod	309	Hill Siding near Folleigh.
Mar. 5	16.35	Shunter	.....	.....	G. Roberge	197	Levis Yard

SESSIONAL PAPER No. 20  
RAILWAY OF CANADA.

year ended March 31, 1910—Continued.

Name of Person Injured.	Whether Passenger or Employees.	Particulars of Accident.	Extent of Injury.	Verdict.
Ed. Donaghau	Neither	Struck by train while walking on track.	Died in Moncton Hospital.	No Inquest.
A. B. Gray	Trackmaster	Fell from car of ties.	Four ribs broken.	
Geo. Mills	Brakeman	Caught between switch stand and cars while shunting.	Right arm and side badly injured.	
Miss N. Kinnear	Passenger	Train left track.	Ear slightly injured.	
C. B. Jones	Porter	"	Head slightly injured.	
Henry Gunter	Neither	Struck by train while crossing track.	Fatal	"
Fillion	Fireman	Slipped on ice and fell off turn-table.	Two ribs forced out of place.	
Amedee Cherrier	G.T.R. Sectionman.	While standing on platform of car train collided with car on main line.	Badly injured.	
S. G. Nickerson	Conductor	When train parted car stopped quickly throwing him against end of car.	Badly injured.	
Mrs. K. Carroll	Passenger	Found on track	One leg below knee and foot cut off died in Hospital Halifax.	"
Lula Barrett	Neither	Crossing track beneath cars.	Fatal	Accidental.
W. Fabie	Brakeman	While coupling cars.	Badly injured.	
W. F. Fergusson	Conductor	Hand caught in door.	One finger smashed	
Elz. Villeaux	Neither	Found dead on track.	Fatal	Accidental.
H. M. Canfield	Passenger	No. 33 train collided with Special.	Slightly injured.	
Miss A. Poirier	"	"	"	
Jos. Williams	"	"	"	
Mrs. J. Shute	"	"	"	
David Tokes	"	"	"	
Chas. Soloman	"	"	"	
I. Bircovitch	News Agent	"	"	
E. Patson	Second Cook	"	"	
D. C. Gallan	Engineer	While cleaning fire.	First finger of left hand badly smashed.	
A. Rioux	Yardman	While coupling cars.	Fatally injured, died next morning.	Accidental.
John W. McIntosh	Brakeman	While standing on foot board of Engine 287 which collided with Engine 85.	Fatal	"
Aug. Pouliot	Engineman	Struck by shunting engine.	Slightly injured.	
Jos. Campbell	Sectionman	Walking on track.	Badly injured.	
Jos. Frechette	Brakeman	While shunting slipped and fell.	Three fingers of left hand smashed.	
Geo. Laird	Car Inspector	While uncoupling air brakes head caught between cars.	Badly injured.	
J. A. Stronach	Brakeman	Fell from ladder of box car.	Arm broken	
M. Lachapelle	Neither	While driving on track struck by train.	Slightly injured.	
W. Whalen	Brakeman	While coupling cars.	Thumb jammed.	
Dumas Cloveau	Sectionman	Struck by engine while walking track.	Slightly injured.	
D. McLeod	Engineman	Engine and six cars went over bank.	Fatal	Breaking of tire of right hand driving wheel.
John McIsaac	Fireman	"	"	
J. O. Davidson	Brakeman	"	"	
A. Martin	Yardman	While coupling cars.	Badly injured.	



SESSIONAL PAPER No. 20  
RAILWAY OF CANADA.

year ended March 31, 1910—Continued.

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Trains.
A. Dumont.....	Yardman.....	While shunting .....	Second finger of right hand jammed.	
W. Burdon.....	Brakeman .....	Fell from train wheels passing over right hand.	Hand badly crushed.	
Robert Geedart....	" .....	Engine parted from train and Geedart trying to couple same got caught between couplers at hips.	Seriously injured, died later in Moncton Hospital.	Accidental.
O. Dion.....	" .....	While unloading freight..	Thumb crushed...	



## WINDSOR BRANCH RAILWAY.

## OFFICE OF THE ENGINEER OF MAINTENANCE.

To the Canadian Government Railways Managing Board,  
Moncton, N.B.

GENTLEMEN,—I beg leave to submit the following annual report for the maintenance of the Windsor Branch for the year ending March 31, 1910.

## TRACK.

During the year 43,320 feet of 4-inch and 4½-inch rails were taken out of the track and the same quantity of 4½-inch rails relaid.

## TIES.

Ten thousand five hundred and forty-four ordinary ties and 1 set of switch ties were renewed during the year.

## BALLASTING.

During the year 140 cubic yards of ashes were put under the track.

## SWITCHES AND SEMAPHORES.

Necessary repairs were made to all switches and semaphores.

## FENCING.

During the year 2,000 rods of wire fence was built by contract.  
Necessary repairs were made to existing fences throughout the branch.

## WHARFS AND TRESTLES.

*Repairs.*

Necessary repairs were made to wharfs and trestles throughout the line.

## BRIDGES AND CULVERTS.

*Repairs.*

Beaver Bank, bridge; Ellershouse, bridge; Ellershouse, culvert; Fletcher's, bridge; Pidgeon's, bridge; Three-Mile Plains, bridge.

## BUILDINGS AND PLATFORMS.

*Repairs.*

Beaver Bank, station; Beaver Bank, platform; Ellershouse, station; Hartville, platform; Mount Uniacke, station; Mount Uniacke, freight shed; Newport, station; South Uniacke, platform; Windsor, station; Windsor, platform; Windsor, engine house; Windsor, tool house; Windsor, freight shed.

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GENERAL.

Necessary repairs were made to cattle-guards, road crossings and gates throughout the line, where required.

Glazing was done and glass put in where required.

Outhouses and approaches to public road crossings were whitewashed.

Semaphores, switches and signals were painted when required.

Necessary repairs were made to trollies, hand cars, wheel-barrows, &c., throughout the line, when required.

The track on the Windsor Branch, with the bridges and structures, have been kept in good repair and I think were never in better condition.

I am, yours faithfully,

(Sgd.) T. C. BURPEE,

MONCTON, N.B.,

March 31, 1910.

WINDSOR BRANCH RAILWAY.

REVENUE ACCOUNT year ended March 31, 1910.

Expenditure.	\$ cts.	Earnings.	\$ cts.
Maintenance of way and structures. ....	23,549 90	Passenger earnings. . . . .	15,696 16
Balance. ....	37,104 08	Freight earnings. ....	43,805 98
		Mail earnings. ....	1,151 84
	60,653 98		60,653 98

E. & O. E.,  
MONCTON, N.B.

(Sgd.) S. L. SHANNON,  
*Comptroller.*

1 GEORGE V., A. 1911

## WINDSOR BRANCH RAILWAY.

MAINTENANCE of Way and Structures, year ended March 31, 1910.

	\$	cts.
Superintendence.....	2,094	79
Ballast.....	66	50
Ties.....	3,859	02
Rails.....	2,748	42
Other track material.....	1,500	17
Roadway and track.....	9,395	12
Removal of snow, sand and ice.....	427	14
Bridges, trestles and culverts.....	643	97
Grade crossings, fences, cattle guards and signs.....	1,899	10
Signals and interlocking plants.....	7	88
Buildings, fixtures and grounds.....	594	95
Docks and wharfs.....	12	75
Roadway tools and supplies.....	135	31
Stationery and printing.....	40	27
Other expenses.....	124	51
	23,549	90

E. & O. E.,  
MONCTON, N.B.

(Sgd.) S. L. SHANNON,  
*Comptroller.*

## WINDSOR BRANCH RAILWAY.

GENERAL BALANCE, year ended March 31, 1910.

Dr.	\$	cts.	Cr.	\$	cts.
To Stores Department.....	4,311	35	By Dominion account.....	4,311	35

E. & O. E.,  
MONCTON, N.B.

(Sgd.) S. L. SHANNON,  
*Comptroller.*

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## WINDSOR BRANCH RAILWAY.

## STATEMENT of Monthly Receipts—One-third Earnings.

Month.	Passenger Earnings		Freight Earnings.		Mail Earnings.		Totals.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1909.								
April.....	960	47	3,244	39	95	68	4,300	54
May.....	932	36	2,674	21	95	68	3,702	25
June.....	1,392	07	2,228	76	95	68	3,716	51
July.....	1,777	56	2,263	53	95	68	4,136	77
August.....	1,992	13	1,624	46	96	91	3,713	50
September.....	2,605	57	4,579	91	98	13	7,283	61
October.....	1,581	29	5,546	10	96	90	7,224	29
November.....	981	01	6,104	65	96	91	7,182	57
December.....	1,161	21	3,989	98	96	91	5,248	10
1910.								
January.....	663	44	4,473	17	94	46	5,231	07
February.....	701	40	3,388	79	94	45	4,181	64
March.....	947	65	3,691	63	94	45	4,733	13
	\$15,696 16		\$43,805 98		1,151 84		\$60,653 98	

E. &amp; O. E.,

MONCTON, N.B.

(Sgd.)

S. L. SHANNON,

Comptroller.

## PRINCE EDWARD ISLAND RAILWAY.

## SUPERINTENDENT'S OFFICE,

CHARLOTTETOWN, P.E.I., May 31, 1910.

SIR,—I have the honour to submit the following report of the working of the Prince Edward Island Railway, for the fiscal year ended March 31, 1910.

I also inclose the report of the mechanical superintendent, and the following statements prepared by the accountant and auditor, and the mechanical accountant and storekeeper:—

- No. 1. Capital.
2. Revenue.
3. Maintenance of way and structures.
4. Maintenance of equipment.
5. Traffic expenses.
6. Transportation expenses.
7. General expenses.
8. General stores.
9. General balance.
10. Statement of averages.  
Statement of receipts.  
Passenger statement.  
Freight statement.  
Descriptive statement of freight transported.

1 GEORGE V., A. 1911

- A. Statement showing the number of locomotives and the various classes of cars.  
 B. Statement showing the mileage made, and the coal, oil and waste consumed by locomotives.

The mileage of the railway in operation during the year was the same as last year, 267.5 miles.

## CAPITAL ACCOUNT.

The expenditure to March 31, 1909, was . . . . .	\$8,258,967 94
The additions during the year were as follows:—	
To increase accommodation at Charlottetown . . .	\$156,531 57
Branch line, Harmony to Elmira . . . . .	49,829 25
Montague Branch . . . . .	36 15
	<u>206,396 97</u>
Making the total on March 31, 1910 . . . . .	<u><u>\$8,465,364 91</u></u>

The above expenditures under the head of capital account, for the current year, will be fully explained by the chief engineer.

## REVENUE ACCOUNT.

There has been a very substantial increase in revenue during the year. The crops were exceptionally good, and prices ranged high, and the province has experienced a continuance of prosperity.

The gross earnings and working expenses for the year compare as follows:—

Gross earnings . . . . .	\$ 319,074 74
Working expenses . . . . .	427,283 73
Difference . . . . .	<u><u>\$ 108,208 99</u></u>

The gross earnings compare with the previous year, as follows:—

In 1908-9 . . . . .	\$ 311,319 63
1909-10 . . . . .	319,074 74
Increase . . . . .	<u><u>\$ 7,755 11</u></u>

The earnings from passenger traffic compare, as follows:—

In 1908-9 . . . . .	\$ 136,534 04
1909-10 . . . . .	140,076 83
Increase . . . . .	<u><u>\$ 3,542 79</u></u>

The earnings from freight traffic compare, as follows:—

In 1908-9 . . . . .	\$ 149,150 61
1909-10 . . . . .	153,373 11
Increase . . . . .	<u><u>\$ 4,222 50</u></u>

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The earnings from mails and sundries compare as follows:—

In 1908-9. . . . .	\$ 25,634 98
1909-10. . . . .	25,624 80
	<hr/>
Decrease. . . . .	10 18
	<hr/> <hr/>

The numbers of passengers carried compare as follows:—

	Number.
In 1908-9. . . . .	332,758
1909-10. . . . .	351,038
	<hr/>
Increase. . . . .	18,280
	<hr/> <hr/>

The weight of freight compares as follows:—

	Tons.
In 1908-9. . . . .	106,090
1909-10. . . . .	105,741
	<hr/>
Decrease. . . . .	349
	<hr/> <hr/>

WORKING EXPENSES.

The working expenses compare with the previous year, as follows:—

In 1908-9. . . . .	400,330 41
1909-10. . . . .	427,283 73
	<hr/>
Increase. . . . .	\$ 16,953 32
	<hr/> <hr/>

The averages compare with the previous year, as follows:—

*Per Mile Run by Locomotive.*

In 1908-9. . . . .	\$ 88 46
1909-10. . . . .	96 05

*Per Mile Run by Trains.*

In 1908-9. . . . .	119 51
1909-10. . . . .	132 07

*Expenditure per Mile of Railway.*

In 1908-9. . . . .	1,499 36
1909-10. . . . .	1,600 31

TRACK.

Twenty-seven thousand five hundred and eighty-one track ties, 18 sets switch ties, and 26 head-blocks and frames were renewed.

Four Burpee switch-stands were placed in Charlottetown yard, and 3 on main line.

Fifty pound steel rails were laid as follows to replace iron rails:—2,115 feet in Tignish yard, 1,176 feet on Alberton wharf track, 3,360 feet in Georgetown yard, and 1,672 feet in Souris yard. In Charlottetown yard 4,900 feet track was laid with 56-lb.



1 GEORGE V., A. 1911

steel rails to replace iron rails, and on the main line of the Vernon River loop 2,750 feet 50-lb. rails were laid to replace 56-lb. steel rails, which were in bad order. On the main line between Royalty Junction and Kensington 1,100 tons of 58-lb. steel rails, with bolts and fastenings, were laid, replacing 50-lb. steel rails. Twelve new steel frogs were used on the road to replace worn out and lighter ones, which were taken out.

A new track scale with concrete foundation was placed in Charlottetown yard, and a second-hand track scale with timber foundation in Georgetown yard.

A new Ellis bumping post was placed on end of track on Souris wharf, and two on end of tracks on Charlottetown wharf.

Twelve hand cars were repaired. Seven new track levels and 4 lifting boards were made.

## SIDINGS.

At Tignish a new siding, 396 feet in length, was laid with 50-lb. steel rails, for a plough and flanger.

At St. Louis 950 feet of 50-lb. steel rails were laid on siding to replace iron rails, and siding was extended 100 feet.

At Alberton 1,000 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At O'Leary 1,032 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Portage 1,540 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Ellerslide 508 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Northam 800 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Richmond 750 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Kensington 2,928 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Kelvin 384 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Emerald 400 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Kinkora 800 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Albany 750 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Bradalbane 1,790 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Elliott's 1,251 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Hunter River 1,250 feet of 50-lb. steel rails were laid on siding to replace iron rails. The through siding was extended 180 feet, and Full's siding 70 feet, and both relaid with 50-lb. steel rails.

At North Wiltshire 600 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Milton 500 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Winsloe 300 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At York 1,600 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Bedford 1,296 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Mt. Stewart 1,455 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Morell 1,200 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Marie the siding was extended 400 feet. In replacing iron rails taken out, and extending siding, 1,152 feet of 50-lb. steel rails were used.

At St. Peter's 642 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Selkirk 800 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Bear River 984 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Peake's 450 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At St. Teresa 500 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Kitchen's Siding 264 feet of 50-lb. steel rails were used in extending it.

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## FENCING.

Thirty-one thousand one hundred and seventy feet wire fence were rebuilt with new cedar posts and Page wire. Seven thousand two hundred and eighty-eight feet new stationary snow fence was built. Two thousand one hundred and seventy-five feet stationary snow fence and 575 feet barbed wire fence were rebuilt. Three hundred and ninety-four panels of portable snow fence were built by road carpenters, and placed where most needed. A large quantity of temporary snow fence was erected with brush and wire.

Fifty farm gates were renewed.

All fences requiring repairs were attended to.

## BALLASTING.

Seven hundred and eighty-three cars of ballast were distributed where most needed. Three hundred and fifty-seven cars of clay were used to grade station grounds and widen embankments. Forty-two cars ashes were distributed in wet and soft places in the track.

## BRIDGES.

At West Devon, Ellerslide and St. Nicholas bridges received new coverings of hard pine ties.

At Mt. Stewart iron work of bridge was painted.

At Morell repairs were made to rest pier of swing span of the bridge.

At Marie stonework of bridge was pointed and ironwork painted.

At Midgell stonework of bridge was pointed and iron and woodwork painted.

At Pine Brook stonework of bridge was pointed.

## CULVERTS.

At Bloomfield a new timber culvert was built to change the water course at this place.

At O'Leary a concrete pipe culvert, 40 feet long, 18 inches in diameter, was put in to replace a wooden one.

At Coleman a concrete pipe culvert, 20 feet long, 15 inches in diameter, was put in to replace a wooden one.

At Northam a concrete pipe culvert, 35 feet long, 18 inches in diameter, was put in to replace a wooden one.

At Richmond a concrete pipe culvert, 40 feet long, 18 inches in diameter, was put in to replace a wooden one.

At Summerside a concrete pipe culvert, 28 feet long, 18 inches in diameter, was put in to replace a wooden one.

At Mt. Stewart a concrete pipe culvert, 16 feet long, 15 inches in diameter, and an iron culvert, 36 feet long, 12 inches in diameter, was put in to replace wooden culverts.

At St. Peter's an iron pipe culvert, 48 feet long, 12 inches in diameter, and a concrete pipe culvert, 25 feet long, 18 inches in diameter, were put in to replace wooden culverts.

At Georgetown a concrete pipe culvert, 18 feet long 30 inches in diameter, was put in to replace a wooden culvert, and two concrete culverts, 30 feet long, 18 inches in diameter, were constructed to replace two wooden culverts.

At St. Teresa two concrete pipe culverts, 17½ feet long, 18 inches in diameter, were put in to replace two wooden ones.

Twenty-eight wooden culverts were rebuilt with hemlock and other timber, and stone culverts repaired where necessary.

Eighty-five cattle-guards were renewed with hemlock ties, hard pine and hemlock timber.

#### WHARFS AND BREASTWORKS.

At Summerside the following material was used in repairing wharf: 50,000 feet hemlock timber, 3,000 feet hemlock plank and 300 drift bolts. In repairing breast-work, 30,000 feet hemlock timber and 200 drift bolts were used.

At Souris, in building a slip, 2,000 feet hemlock plank and 100 drift bolts were used.

At Georgetown the following material was used in building a slip for the *Earl Grey*: 5,000 feet hemlock timber, 2,000 feet spruce plank, 2,000 feet hemlock plank and 300 drift bolts.

At Marie, 50 feet of breastwork was built with old ties and timber.

#### BUILDINGS AND PLATFORMS.

*Tignish*.—Engine-house, freight-house and flues in agent's dwelling were repaired. Four coal boxes were rebuilt.

*DeBlois*.—Station was repaired.

*St. Louis*.—Station was repaired and a new ticket office built. A new cattle pen was erected.

*Alberton*.—Agent's dwelling was raised and a new foundation placed under it, and repairs made to the interior, which was also papered and painted. Roof of dwelling was shingled.

*Howlan*.—A new station platform was made.

*O'Leary*.—Station platform and section tool-house were rebuilt. Agent's dwelling was papered and painted inside.

*West Devon*.—The door and windows of station were repaired.

*Portage*.—The station windows were repaired.

*McNeill's*.—The station windows were repaired.

*Ellerslie*.—Section tool-house was rebuilt.

*St. Nicholas*.—Station doors and windows were repaired.

*Piusville*.—Windows of station were repaired.

*Summerside*.—Station was repaired and baggage-room received a new gravel roof. Freight-house on wharf was raised and repaired.

*Freetown*.—Three new storm windows were made for station.

*Emerald*.—The station platform was renewed.

*Cape Traverse*.—Station platform was repaired. Kitchen of agent's dwelling and one room were sheathed.

*Bradalbane*.—Station roof was repaired with gravel and pitch. Agent's dwelling was papered and painted inside.

*Clyde*.—Exterior of station was painted.

*Hunter River*.—Station platform was repaired. Station received a new gutter and was repaired.

*North Wiltshire*.—Station platform and doors and windows of station were repaired.

*Colville*.—Station received new doors and windows.

*Milton*.—New doors and windows were provided for station.

*Royalty Junction*.—Two small houses were converted into one building for agent's dwelling, which necessitated considerable labour, as one building was moved and a new foundation placed under both. Dwelling was also papered, and both the interior and exterior painted.

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*Bedford.*—Four new storm windows were provided for station, and necessary repairs made to station. A new floor was laid in the office.

*York.*—Station windows and doors were repaired.

*Mt. Stewart.*—The interior of agent's dwelling was papered and painted. Station platform was repaired.

*Lot 40.*—The station was painted outside.

*Morell.*—Station and platform were repaired. The interior of agent's dwelling was painted and papered.

*Union.*—Station platform was renewed.

*St. Peter's.*—A new section tool-house was built, and station platform repaired.

*Selkirk.*—Section-house roof was shingled.

*Bear River.*—Agent's dwelling was painted and the ceilings whitened. Station platform was renewed.

*Souris.*—Station received repairs and a new crown moulding, and the exterior was painted. A new gravel roof was placed on baggage-room. Station roof was shingled. A new well-house was provided for the agent. Agent's dwelling was papered and painted inside. A new set of scales was placed in freight-house.

*Peakes.*—A new door was provided for freight-house, and repairs made to doors and windows of station.

*48 Road.*—Station roof was shingled.

*Cardigan.*—Station was repaired.

*Georgetown.*—Engine-house was repaired, and the roof shingled. Warehouse on wharf was raised and placed on a new foundation.

*Murray Harbour.*—Doors and windows of engine-house were repaired. All other buildings requiring repairs were attended to.

STORES.

The value of stores purchased was.. . . . .	\$150,719 57
The value of stores used was.. . . . .	181,020 08
The value of material sold was.. . . . .	2,623 82
The value of stores on hand at the end of the year was:—	
Miscellaneous.. . . . .	\$ 31,948 74
Fuel.. . . . .	12,155 77
Roadway and bridge material.. . . . .	15,201 67
	<hr/>
	\$59,306 18

GENERAL.

The rolling stock, roadbed and buildings have all received generous attention, and are in a state of efficiency.

I inclose a return of casualties which occurred during the year.

I have the honour to be, sir,

Your obedient servant,

(Sgd.) G. A. SHARP,

*Superintendent.*

D. POTTINGER, Esq., I.S.O.,

Assistant Chairman, Govt. Railways Managing Board,  
Moncton, N.B.



SESSIONAL PAPER No. 20

No. 2.—PRINCE EDWARD ISLAND RAILWAY.

REVENUE ACCOUNT—TWELVE MONTHS ENDED MARCH 31, 1910.

EXPENDITURE.	\$	cts.	EARNING.	\$	cts.
Maintenance of way and structures . . .	121,046	70	Passenger earnings . . . . .	140,076	83
Maintenance of equipment. . . . .	79,258	26	Freight earnings . . . . .	153,373	11
Traffic expenses . . . . .	968	97	Mails and express earnings . . . . .	23,935	58
Transportation expenses . . . . .	211,004	76	Miscellaneous earnings . . . . .	1,689	22
General expenses . . . . .	15,005	01			
	427,283	73		319,074	74
			Balance. . . . .	108,208	99
	427,283	73		427,283	73

E. & O. E.,  
CHARLOTTETOWN, P.E.I.

(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*

No. 3.—PRINCE EDWARD ISLAND RAILWAY.

MAINTENANCE OF WAY AND STRUCTURES—TWELVE MONTHS ENDED MARCH 31, 1910.

No.	Description	\$	cts.
1.	Superintendence . . . . .	2,768	70
2.	Ballast . . . . .	1,598	58
3.	Ties . . . . .	10,232	32
4.	Rails . . . . .	11,008	03
5.	Other track material . . . . .	5,890	44
6.	Roadway and track . . . . .	60,149	62
7.	Removal of snow, sand and ice . . . . .	11,930	76
9.	Bridges, trestles and culverts . . . . .	1,564	53
11.	Grade crossings, fences, cattle guards and signs . . . . .	4,851	21
12.	Snow and sand fences and snow sheds . . . . .	411	48
13.	Signals and interlocking plants . . . . .	14	15
14.	Telegraph and telephone lines . . . . .	2	96
16.	Buildings, fixtures and grounds . . . . .	6,916	88
17.	Docks and wharfs . . . . .	2,109	48
18.	Roadway, tools and supplies . . . . .	1,401	77
23.	Stationery and printing . . . . .	187	84
25.	Other expenses . . . . .	8	00
		121,046	70

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CHARLOTTETOWN, P.E.I.

(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*



1 GEORGE V., A. 1911

## No. 4.—PRINCE EDWARD ISLAND RAILWAY.

MAINTENANCE OF EQUIPMENT—TWELVE MONTHS ENDED MARCH 31, 1910.

	\$	cts.
No. 28. Superintendence.....	6,798	15
29. Steam locomotives—repairs.....	27,005	00
35. Passenger train cars—repairs.....	14,485	79
36. Passenger train cars—renewals.....	4,398	84
38. Freight train cars—repairs.....	11,471	06
39. Freight train cars—renewals.....	4,130	85
47. Shop machinery and tools.....	3,124	19
50. Stationery and printing.....	272	09
52. Other expenses.....	6,860	66
56. Work equipment—repairs.....	711	63
	79,258	26

E. & O. E.,  
CHARLOTTETOWN, P.E.I.

(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*

## No. 5.—PRINCE EDWARD ISLAND RAILWAY.

TRAFFIC EXPENSES—TWELVE MONTHS ENDED MARCH 31, 1910.

	\$	cts.
No. 57. Superintendence.....	17	00
59. Advertising.....	894	09
60. Stationery and printing.....	57	88
	968	97

E. & O. E.,  
CHARLOTTETOWN, P.E.I.

(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*

SESSIONAL PAPER No. 20

No. 6.—PRINCE EDWARD ISLAND RAILWAY.

TRANSPORTATION EXPENSES—TWELVE MONTHS ENDED MARCH 31, 1910.

	\$	cts.
No. 66. Superintendence.....	6,344	07
67. Despatching trains.....	2,595	51
68. Station employees.....	45,038	14
72. Station supplies and expenses.....	6,849	12
73. Yardmasters and their clerks.....	2,000	83
74. Yard conductors and brakemen.....	1,935	25
76. Yard supplies and expenses.....	26	78
77. Yard enginemen.....	4,226	05
78. Enginehouse expenses—yard.....	1,905	77
79. Fuel for yard locomotives.....	3,674	49
80. Water for yard locomotives.....	80	00
81. Lubricants for yard locomotives.....	128	52
82. Other supplies for yard locomotives.....	98	85
86. Road enginemen.....	23,425	86
87. Enginehouse expenses—road.....	10,837	48
88. Fuel for road locomotives.....	46,682	45
89. Water for road locomotives.....	2,064	38
90. Lubricants for road locomotives.....	898	58
91. Other supplies for road locomotives.....	962	71
94. Road trainmen.....	31,955	39
95. Train supplies and expenses.....	7,071	15
98. Drawbridge operation.....	670	28
99. Clearing wrecks.....	46	60
100. Telegraph and telephone—operation.....	7,013	08
101. Operation floating equipment.....	222	40
103. Stationery and printing.....	5,787	17
105. Other expenses.....	4	54
106. Loss and damage—freight.....	278	13
108. Damage to property.....	56	68
109. Damage to stock on right of way.....	24	50
	211,004	76

E. & O. E.,  
CHARLOTTETOWN, P.E.I.

(Sgd.)

W. T. HUGGAN,  
*Accountant and Auditor.*

No. 7.—PRINCE EDWARD ISLAND RAILWAY.

GENERAL EXPENSES—TWELVE MONTHS ENDED MARCH 31, 1910.

	\$	cts.
No. 113. Salaries and expenses of general officers.....	1,659	66
114. Salaries and expenses of clerks and attendants.....	5,619	07
115. General office supplies and expenses.....	294	24
116. Law expenses.....	73	35
118. Relief department expenses.....	6,142	67
119. Pensions.....	5	54
120. Stationery and printing.....	1,148	87
121. Other expenses.....	72	72
	15,005	04

E. & O. E.,  
CHARLOTTETOWN, P.E.I.

(Sgd.)

W. T. HUGGAN,  
*Accountant and Auditor.*

1 GEORGE V., A. 1911

## No. 8.—PRINCE EDWARD ISLAND RAILWAY.

## GENERAL STORES ACCOUNT—12 MONTHS ENDED MARCH 31, 1910.

1909.	DR.	\$ cts.	\$ cts.	\$ cts.
March 31.	To balance brought forward . . . . .			77,442 27
1910.				
March 31..	To Purchases during the year . . . . .		150,719 57	
	Charges from other departments . . . . .		5,128 01	
	Labour, &c. . . . .		4,919 73	
	Pay rolls . . . . .		4,740 50	
				165,507 81
	CR.			242,950 08
March 31..	By issues during the year . . . . .			183,643 90
	Balance ..	{ Ordinary stores, including stationery....	31,948 74	} 59,306 18
		{ Fuel.....	12,155 77	
		{ Roadway and bridge material.....	15,201 67	

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W. T. HUGGAN,  
*Accountant and Auditor.*

## No 9.—PRINCE EDWARD ISLAND RAILWAY.

## GENERAL BALANCE—12 MONTHS ENDED MARCH 31, 1910.

DR.	\$ cts.	CR.	\$ cts.
General stores . . . . .	59,306 18	Dominion account . . . . .	72,401 20
Post Office Department . . . . .	7,263 64	Rhodes, Curry & Co. . . . .	390 00
Station agents . . . . .	2,112 01	John Simon . . . . .	200 00
Cash . . . . .	2,074 63	Unclaimed wages . . . . .	198 65
Road and equipment—Suspense . . . . .	1,812 93		
Department of Marine and Fisheries . . . . .	296 16		
Canadian Express Company . . . . .	120 26		
Intercolonial Railway . . . . .	67 28		
Rents account . . . . .	48 87		
Suspense account . . . . .	47 28		
Judge Weatherbie . . . . .	30 00		
Charlottetown Steam Navigation Co. . . . .	8 76		
Militia Department . . . . .	0 95		
Local government of P. E. I. . . . .	0 75		
Toronto, Hamilton and Buffalo Ry . . . . .	0 15		
	73,189 85		73,189 85

E. & O. E.,  
CHARLOTTETOWN, P. E. I.

(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*

SESSIONAL PAPER No. 20

## No. 10.—PRINCE EDWARD ISLAND RAILWAY.

STATEMENT OF AVERAGES—YEAR ENDED MARCH 31, 1910.

Mileage of railway.....		267
Engine mileage.....		444,837
Total train mileage.....		322,522
Total car mileage.....		2,051,034
Ratio of earnings to gross earning.—		
Passenger.....	Per cent.	43·90
Freight.....	"	48·07
Mails and express.....	"	8·03
Gross earnings per mile of railway.....	Dollars.	1,195·03
"    engine mile.....	Cents.	71·73
"    train mile.....	"	98·63
"    car mile.....	"	15·56
Ratio of expenses to gross earnings—		
Maintenance of way and structures.....	Per cent.	37·94
Maintenance of equipment.....	"	24·84
Traffic expenses.....	"	0·30
Transportation expenses.....	"	66·13
General expenses.....	"	4·70
Expenses per train mile—		
Maintenance of way and structures.....	Cents.	37·41
Maintenance of equipment.....	"	24·50
Traffic expenses.....	"	0·30
Transportation expenses.....	"	65·22
General expenses.....	"	4·64
Expenses per mile of railway—		
Maintenance of way and structures.....	Dollars.	453·36
Maintenance of equipment.....	"	296·84
Traffic expenses.....	"	3·63
Transportation expenses.....	"	790·28
General expenses.....	"	56·20
Locomotive and car repairs, per locomotive and car—		
Locomotives.....	Dollars	884·03
Passenger cars.....	"	309·58
Freight cars.....	"	30·83

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*Accountant and Auditor.*

1 GEORGE V., A. 1911

## PRINCE EDWARD ISLAND RAILWAY.

## STATEMENT OF RECEIPTS.

Months.	Passenger Traffic.	Freight Traffic.	Mails and Sundries.	Total.
	\$ cts.	\$ cts.	\$ cts	\$ cts.
1909—				
April.....	9,566 64	12,881 58	2,140 96	24,589 18
May.....	8,545 99	18,444 70	1,842 39	28,833 08
June.....	10,014 70	15,026 55	1,772 14	26,813 39
July.....	19,131 91	12,714 55	2,906 69	34,753 15
August.....	18,499 20	10,691 42	2,044 78	31,235 40
September.....	17,399 46	12,191 13	1,990 44	31,581 03
October.....	11,616 31	15,286 95	1,871 50	28,774 76
November.....	11,030 94	18,647 30	1,916 65	31,594 89
December.....	9,979 55	12,081 57	1,989 40	24,050 52
1910—				
January.....	7,445 08	6,796 55	2,014 83	16,256 46
February.....	7,185 95	7,804 22	3,006 93	17,997 10
March.....	9,661 10	10,806 59	2,128 09	22,595 78
1909-10.....	140,076 83	153,373 11	25,624 80	319,074 74
1908-09.....	136,534 04	149,150 61	25,634 98	311,319 63

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(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*

## PRINCE EDWARD ISLAND RAILWAY.

## PASSENGER STATEMENT.

Months.	Local.		Through.		Total.	
	Number.	Mileage.	Number.	Mileage.	Number.	Mileage.
1909—						
April.....	28,193	519,133	189	8,813	28,382	527,946
May.....	23,665	443,035	633	29,378	24,298	472,413
June.....	22,307	465,324	1,197	65,503	23,504	530,827
July.....	43,106	1,017,302	2,711	124,733	45,817	1,142,035
August.....	35,472	790,051	5,044	221,495	40,516	1,011,546
September.....	33,489	873,302	4,113	194,651	37,602	1,067,953
October.....	24,851	506,980	2,381	117,896	27,232	624,876
November.....	28,352	525,617	1,589	75,111	29,941	600,728
December.....	27,675	535,172	1,099	50,392	28,774	585,564
1910—						
January.....	19,146	397,686	280	13,587	19,426	411,273
February.....	18,711	409,117	96	4,772	18,807	413,889
March.....	26,649	564,032	90	4,281	26,739	568,313
1909-10.....	331,616	7,046,751	19,422	910,612	351,038	7,957,363
1908-09.....	314,401	6,679,808	18,357	896,259	332,758	7,576,067

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(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*

SESSIONAL PAPER No. 20

## PRINCE EDWARD ISLAND RAILWAY.

## FREIGHT STATEMENT.

Months.	1909-10.		1908-09.	
	Tons	Mileage.	Tons.	Mileage.
April.....	7,989	267,012	5,365	203,425
May.....	13,147	433,732	10,422	360,583
June.....	10,756	386,067	10,755	428,751
July.....	8,385	276,330	7,892	317,451
August.....	6,766	253,094	7,783	265,283
September.....	7,711	271,779	8,443	303,592
October.....	10,433	363,784	12,244	398,716
November.....	13,277	433,042	12,904	452,504
December.....	7,682	253,313	8,432	283,614
January.....	3,956	162,758	6,097	234,501
February.....	6,634	210,302	6,723	240,474
March.....	9,005	252,645	9,030	310,124
	105,741	3,573,858	106,090	3,799,008

E. & O. E.,  
CHARLOTTETOWN, P.E.I.

(Sgd.)

W. T. HUGGAN,  
*Accountant and Auditor.*



1 GEORGE V., A. 1911

## PRINCE EDWARD ISLAND RAILWAY.

DESCRIPTIVE STATEMENT OF FREIGHT TRANSPORTED—TWELVE MONTHS ENDED MARCH  
31, 1910.

Products of.	Commodity.	Tons.
Agriculture . . . . .	Grain . . . . .	12,918
	Flour . . . . .	4,374
	Other mill products . . . . .	1,468
	Hay . . . . .	2,912
	Tobacco . . . . .	166
	Cotton . . . . .	43
	Fruit and vegetables . . . . .	7,886
Animals . . . . .	Live stock . . . . .	3,562
	Dressed meats . . . . .	2,307
	Other packing house products . . . . .	2,676
	Poultry, game and fish . . . . .	3,030
	Wool . . . . .	48
	Hides and leather . . . . .	421
Mines . . . . .	Anthracite coal . . . . .	313
	Bituminous coal . . . . .	7,523
	Stone, sand, and other like articles . . . . .	2,959
Forest . . . . .	Lumber . . . . .	13,358
Manufactures . . . . .	Petroleum and other oils . . . . .	811
	Sugar . . . . .	907
	Naval stores . . . . .	48
	Iron, pig and bloom . . . . .	439
	Iron and steel rails . . . . .	598
	Other castings and machinery . . . . .	564
	Bar and sheet metal . . . . .	145
	Cement, brick and lime . . . . .	1,334
	Agricultural implements . . . . .	711
	Wagons, carriages, tools, &c. . . . .	287
	Wines, liquors and beers . . . . .	238
	Household goods and furniture . . . . .	481
Miscellaneous . . . . .	Other commodities, not mentioned above . . . . .	33,164
	Total weight . . . . .	105,741

E. & O. E.,  
CHARLOTTETOWN, P.E.I.(Sgd.) W. T. HUGGAN,  
*Accountant and Auditor.*

SESSIONAL PAPER No. 20

## PRINCE EDWARD ISLAND RAILWAY.

OFFICE OF THE CHIEF ENGINEER,

MONCTON, N.B., June 29, 1910.

SIR,—I have the honour to submit the following report on capital account expenditure for the fiscal year ending March 31, 1910:—

## TO INCREASE ACCOMMODATION AT CHARLOTTETOWN.

A 20-stall brick and concrete engine-house was provided. The turn-table that was used in the old engine-house was temporarily installed in the new engine-house.

A new 55-foot steel turn-table was purchased; but on account of the closing of navigation it could not be transported to Charlottetown last fall. It will be delivered and erected in place at an early date.

The old engine-house was torn down.

A wood-shed was provided at the new engine-house.

A concrete and brick ash pit was built.

A coal shed was provided at the power-house.

A lumber and hardware storehouse was built.

Part of the old machine shop was torn down, and the remaining part converted into a brass and copper shop.

A shed for storing sand was built, and a sand drying apparatus installed.

A railway wharf and freight shed on it were completed.

A coal shed was built on the railway wharf.

A new 80-ton track scale was provided and placed opposite the new freight shed, on a concrete foundation.

Additional yard accommodation was provided by the removal of old and obsolete buildings, and laying 4,900 feet of new tracks.

The following new machinery was provided and installed on concrete foundations in the new shops:—

- 1 72-inch wheel lathe.
- 1 72-inch tire turning and boring mill.
- 1 48-inch x 12-foot iron planer.
- 1 300-ton wheel press.
- 1 24-inch engine lathe.
- 1 36-inch engine lathe.
- 1 18-inch engine lathe.
- 1 16-inch engine lathe.
- 1 16-inch slotting machine.
- 1 Brown & Sharpe milling machine.
- 1 Brown & Sharpe reamer and grinder.
- 2 centering machines.
- 1 Acme bolt tapper.
- 1 Acme 3-headed bolt cutter.
- 1 surface grinder.
- 1 emery stone sand.
- 1 hand press for driving boxes.
- 1 set punch and shears.
- 1 set 6-inch rolls.

1 GEORGE V., A. 1911

- 1 set 12-inch boiler plate rolls.
- 1 tube rumbler.
- 1 tube welder and furnaee.
- 1 1,200-lb. steam hammer.
- 1 Beaudry hammer.
- 1 Spring furnaee.
- 1 strap furnaee.
- 2 band saws.
- 1 rip saw.
- 1 cutting off saw with motor drive.
- 1 variety wood worker.
- 1 Daniel planer.
- 2 50 h.p. motors.
- 1 pipe bending maechine.
- 1 small hollow chisel mortiser.
- 1 75 h.p. engine and generator.
- 2 feed pumps.
- 1 super heater.
- 3 250 h.p. Canada Foundry boilers.

Steam heating was installed in the paint, upholstering and copper shops.  
The new shops were wired for eleetrie lighting.

*Branch Line, Harmony to Elmira.*

A contraet was let for the grading, masonry, &c., for a branch line from Harmony to Elmira, a distance of 9.9 miles. About 75 per cent of the clearing was completed. The eonerete culverts were built and some grading done. The right of way was settled for with the exception of a few lots, which will be dealt with during fiseal year 1910-11.

Plans and specifications were prepared and tenders asked for the following build-ings in connection with this branch line:—

*Elmira.*—Two-stall wooden engine house, booking station and platform, eoal shed, freight shed and platform.

*Baltic Road.*—Way station and platform.

*Harmony.*—Way station and platform.

*New Harmony Road.*—Shelter and platform.

*Munn's Road.*—Shelter and platform.

*To be located.*—Two tool houses.

*Montague Branch.*

An award of the Exchequer Court of \$36.15 was paid by the Department of Rail-ways and Canals for land taken for the right of way. There was no capital appropria-tion provided for this, but being an Exchequer Court award, the amount is charge-able against any moneys voted by parliament.

I have the honour to be, sir,

Your obedient servant,

(Sgd.) WM. B. MACKENZIE,

*Chief Engineer.*

D. POTTINGER, Esq., I.S.O.,

Asst. Chairman, Govt. Rys. Managing Board,  
Moncton, N.B.

## PRINCE EDWARD ISLAND RAILWAY.

OFFICE OF THE MECHANICAL SUPERINTENDENT,

CHARLOTTETOWN, P.E.I., April 15, 1910.

SIR,—I beg to submit for your information the following statement of the operation of the mechanical department for the year ended March 31, 1910.

The following is a summary of the principal work performed:—

## LOCOMOTIVES.

Ten locomotives received heavy repairs. Seven received new side and main rod brasses, all the motion and running gear thoroughly repaired, stay-bolts in boilers thoroughly examined, and six hundred new stay-bolts put in boilers.

Ten locomotives received specific repairs.

Four locomotives received new pistons and piston rods. Four new engine pilots and four new cross-heads were made, and twenty-eight lined with tin and planed, two new whistles, two new pop valves, four new boiler checks, four hundred and eleven sets metallic packing, four new sets valve stems, six new driving boxes, twelve sets engine truck boxes, six sets dead eyes for side rods, twenty sets new rod brasses, two piston rod cups, eight piston rod slushers, twenty-eight driving box brasses, one grease press for pressing grease for driving boxes, twenty-eight grease cups, twenty-seven cylinder cocks, four air cocks, one relief valve, twelve locomotive smokestacks, thirty smokejacks for round houses on road, and twelve driving springs were made.

Four pop valves, six tender tanks, two hundred and sixty-three driving springs and fourteen cabs were repaired, and four were largely rebuilt. Two engine frames were broken and repaired. Twelve sets valve stems, thirty-one sets driving wheels, twenty sets engine truck wheels, one hundred and sixty-three pairs of steel tired wheels, and one hundred and twelve new axles were turned. Two hundred and twenty-nine wheels were bored out and pressed on axles, eight hundred tubes pieced and put in locomotives and five hundred and fifteen truck straps bored. Eighty-eight thousand and two hundred and six pounds of iron, and 2,553 pounds of steel were forged; 5,139 pounds of nuts were tapped, and a great deal of running repairs done.

## CAR DEPARTMENT.

One first-class car was rebuilt and ten flat cars were rebuilt and charged to renewals.

The following received heavy repairs:—

Ten first-class cars and one was upholstered, two second-class cars, three second-class and baggage, one second-class and smoking, three postal and baggage, five postal and smoking, five baggage, one coach, sixty-eight box cars, one coal car, five hand cars, one sheep car, eight snow ploughs and six flangers.

The following received light repairs:—

Fourteen first-class cars, fourteen second-class cars, two second-class and baggage, two baggage, one official car, twenty-four box cars, one postal and smoking, five old cars, one van, eight flat cars, four stock cars and eight snow ploughs.

Four cars were seated for excursions, two first-class cars and six box cars had cotton duck roofs put on, and five box cars had new trucks. Two hundred and eight sets car oil boxes were fitted up.

1 GEORGE V., A. 1911

## BRASS FOUNDRY.

The following was the output of this foundry:—

Thirteen thousand, one hundred and forty-eight pounds of brass castings, ninety-six pounds of bronze castings and eighteen pounds of solder for Charlottetown station.

## COPPER SHOP.

Twenty-seven headlights, one headlight case, two discharge pipes, three oil pipes, one sand pipe, one elevator and feed pipe, two slides for reversing levers, two sprinklers, one elevator pipe, and lagging were repaired.

Thirteen wire joints for steam chests, three piston rods, one valve stem rod, five wire joints for valve stem and piston packing, two perforated hard grease strainers, two water glass protections, and one overflow pipe were made.

Three truck brasses, one rod brass, seven driving boxes, six truck boxes and four crossheads were babbitted. Four crossheads and one main rod brass were tinned. We have also done numerous repairs to feed pipes too numerous to mention.

## PAINT SHOP.

Ten locomotives were painted, one varnished, and five cleaned and touched up.

Four first-class cars were painted, and six cleaned and varnished; six second-class cars were painted; and five cleaned and varnished; five baggage and postal cars were painted and eight cleaned and varnished, and one had roof painted. Seventy-two box cars, one hundred and twenty-eight box car roofs, eleven flat cars, two snow ploughs, three flangers, seven hand cars, and ten car roofs were painted. One hundred and twenty-two box cars were lettered, and fifty had capacity changed. Ten freight trucks, and thirty switch targets were painted, forty-eight sashes were painted and glazed, fourteen sign boards lettered, and two desks filled and varnished.

A great deal of work has been done by our shop painters for the road department on stations, agents' dwellings, switch frames, &c.

## ROAD AND TRAFFIC DEPARTMENT.

Sixteen loading platforms, eighteen freight trucks, six cattle stages, two hand cars, twenty-three sectionmen's hand cars, two ash cars, one grindstone stand, twenty-four switch targets, twelve signal targets, forty-two sign boards, three boards to fasten outside lamps to, seven wheelbarrows, three chairs, four step boxes, ten coal boxes, one tool box, four ice boxes, five boxes for freight house, four letter boxes for offices, eight outside sashes, five door sills, six camp stools, one office stool, four ladders, one stand and box for grease compressor, two screens, one cash drawer, two desks, four work benches, one cupboard, seven water closets, one case, one desk and two boxes for time clock, one ash table for rest room, one pulley, one rail bender, twenty-two sets connecting rods, twelve sets headers, fifty-six knees for bridges on road, one hundred and twelve clasps for bridge, four lorries, two track jacks, eleven sets switch gear complete, twenty-six sets switch rods, four sets switch rods and headers, and two switches were made.

Three hand cars were repaired, and three rebuilt; eight freight trucks, one baggage truck, one trunk truck, nine coal boxes, eight track jacks, five frogs, and ten switch rods were repaired.

Twenty-four squares of shingling were laid, and one shop and one coal house fitted up. Four hand-car cranks made and fitted on lorries.

We were put to a great inconvenience on account of the round-house being torn down, but it is now replaced by a new and up to date twenty stall round-house which

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gives us all the facilities we require. Our rolling stock has been kept in a high state of efficiency; and we have all the machinery installed in our shops, which, I consider, are modern and up to date in every respect.

I have the honour to be, sir,

Your obedient servant,

W. L. POOLE.

*Mechanical Superintendent.*

G. A. SHARP, Esq.,

Superintendent, P.E.I. Railway.



PRINCE EDWARD ISLAND RAILWAY.  
STATEMENT showing the number of Locomotives and the various classes of Cars and other Rolling Stock on March 31, 1910.

	Locomotives.	CLASSIFICATION OF CARS.													Flangers.	Snow Ploughs.	Total.
		1st Class.	2nd Class.	Combined 2nd and Baggage.	Postal and Smoking.	Combined Postal and Baggage.	Baggage.	Pay Car.	Vans.	Box Freight.	Refrigerator Cars.	Stock.	Coal.	Platform.			
On hand, serviceable, March 31, 1909	31	23	12	5	4	3	4	1	3	313	3	21	22	138	552	9	18
Condemned, April 1, 1909				2		1	2		1					9	15	1	1
Total equipment, April 1, 1909	31	23	12	7	4	4	6	1	4	313	3	21	22	147	567	10	19
Condemned, April 1, 1909		1	3	2		1	2		1					9	15	1	1
Condemned during the year		1	3	2		1	2		1					2	6		
Total condemned		1	3	2		1	2		1					11	21	1	1
Less rebuilt during the year														10	11		
To be rebuilt			3	2		1	2		1					1	10	1	1
Add serviceable and repairing	31	23	9	5	4	3	4	1	3	313	3	21	22	146	557	9	18
Total equipment, March 31, 1910	31	23	12	7	4	4	6	1	4	313	3	21	22	147	567	10	19

Signed, S. F. HODGSON,

Mechanical Accountant.

PRINCE EDWARD ISLAND RAILWAY.

STATEMENT of Mileage and Coal, Oil and Waste Consumed by Locomotives for the year ended March 31, 1910.

	Locomotive Mileage.	CONSUMPTION.				AVERAGE CONSUMPTION PER 100 MILES.			
		Tons of Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of Waste.	Pounds of Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of Waste.
1909.									
April.....	34,032	846	444	1,024	534	1.34	3.01	5,558	1.57
May.....	40,866	1,011	420	1,160	672	1.02	2.83	5,541	1.64
June.....	40,411	942	476	1,192	656	1.17	2.95	5,221	1.62
July.....	46,366	1,099	620	1,420	642	1.34	3.06	5,369	1.38
August.....	42,173	995	564	1,260	637	1.33	2.99	5,285	1.51
September.....	41,363	1,068	500	1,112	642	1.21	2.69	5,785	1.55
October.....	37,354	1,005	444	982	576	1.18	2.48	5,994	1.53
November.....	40,977	1,177	508	940	620	1.24	2.29	6,434	1.31
December.....	39,403	1,144	600	1,136	663	1.52	2.88	6,563	1.68
January.....	36,559	987	580	1,224	631	1.58	3.34	6,047	1.72
February.....	30,533	856	400	848	522	1.31	2.77	6,279	1.71
March.....	31,960	853	278	740	502	0.87	2.31	5,978	1.57
Totals.....	462,187	11,977	5,834	12,988	7,297	1.26	2.81	5,804	1.58

Signed, S. F. HODGSON,

*Mechanical Accountant.*

## PRINCE EDWARD ISLAND RAILWAY.

DETAILS of Accidents for the Period ending March 31, 1910.

Date.	Name, Address and Occupation of Persons.	Place of Accident.	Cause.	Nature and Extent of Injury.
1909.				
April 7.	Charles Bradley, Grand View, section foreman.	Grand View	Slipped into cuttl- guard.	Spained ankle.
" 19.	William Hechenidge, Charlottetown, section labourer.	Charlottetown	Slipped while lining track	Back sprained.
" 24.	James Mullins, Charlottetown, labourer.	"	Unloading car wheels.	Spained ankle.
May 4.	Hector McLeod, Charlottetown, fitter's helper.	"	Struck by bar iron	Toe bruised.
" 6.	Bert Newsome, Charlottetown, machinist.	"	Casting fell on foot.	"
" 17.	Alphens Arsenault, Summerside, coal handler.	Summerside	Coal tub fell on foot.	Foot bruised.
" 21.	James H. Partridge, Mt. Stewart, section foreman.	Mt. Stewart	Struck with lever of track jack	Rib fractured.
June 17.	Jas. Herrell, Charlottetown, improver.	Charlottetown	Foot caught between engine and turntable.	Foot injured.
" 26.	John O'Neill, Charlottetown, labourer	"	Lump of coal fell on leg.	Leg injured.
July 7.	Hector McDonald, Charlottetown, carpenter.	"	Board fell on head.	Head injured.
" 30.	David Gammum, Charlottetown, labourer.	"	Slipped and hurt knee.	Knee injured.
Aug. 1.	Martin Mahar, Charlottetown, blacksmith's helper	"	Made a miss blow while striking.	Dislocated kidney.
" 5.	John Currie, blacksmith, Charlottetown.	"	Moving wheel	Hand sprained.
" 12.	John Harrell, Charlottetown, labourer.	"	Moving heavy casting	Spained muscles of side.
" 19.	Peter Flynn, Charlottetown, car cleaner	"	Slipped off car steps	Ribs fractured.
" 21.	H. J. Love, Charlottetown, locomotive driver	Montague	Replacing engine on track	Arm injured.
" 25.	James Revell, Charlottetown, locomotive fireman	Summerside	Fixing brake shoes	Hand cut.
Sept. 6.	Harry Nelson, Charlottetown, labourer	Milton	Rail fell on leg.	Leg fractured.
" 22.	Joseph O'Reilly, Charlottetown, brakeman	Murray Harbour	Stumbled over hand car	Rib fractured.
Oct. 14.	Joseph J. Graham, Bradabona, carpenter.	O'Leary	Struck with plank	Testicle injured.
Nov. 1.	Urban M. Gaudet, Tignish, section foreman.	Tignish	Unloading rails	Spained back.
" 1.	John Howatt, Cape Traverse, section labourer.	Kimkora.	Loading rails	Thumbs crushed.
" 11.	John McIherson, Charlottetown, fitter.	Charlottetown	Wedge fell on foot.	Foot injured.
" 23.	Charles Bradley, Cardigan, section labourer	Cardigan	Lifting hand car	Hip strained.
" 27.	Samuel E. Graham, O'Leary, section labourer	O'Leary	Laying rails	Finger broken.
Dec. 24.	Joseph O'Reilly, Charlottetown, brakeman	Uggs	Slipped while closing car door	Spained foot.
" 30.	Frank Gillis, Cape Traverse, cleaner	Cape Traverse	Slipped off steps of engine.	Legs injured.
1910.				
Jan. 6.	Fenton Higgins, Charlottetown, fireman.	Charlottetown	Shalter bar of engine slipped and cut thumb.	Thumb cut.
" 29.	William Gillis, Summerside, section foreman.	Summerside	Fell while repairing scaphoire	Spained ankle.
Feb. 4.	Owen McQuaid, Charlottetown, fireman.	Charlottetown	Finger hurt in stoker.	Finger injured.
" 14.	James Keough, Charlottetown, apprentice.	"	At work in shop.	Spained neck.

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PRINCE EDWARD ISLAND RAILWAY.

ACCIDENTS during period ended March 31, 1910.

Cause of Accident.	PASSENGERS.		EMPLOYEES.		OTHERS.		TOTAL	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Fell from cars or engine . . . . .				2				2
2. Jumping on or off trains while in motion . . . . .								
3. At work on or near the track making up trains . . . . .								
4. Putting arms or heads out windows . . . . .								
5. Coupling cars . . . . .								
6. Collisions, or by trains thrown from track . . . . .								
7. Struck by engines or cars on highway crossings . . . . .								
8. Walking, standing, lying, sitting, or being on track . . . . .				8				8
9. Explosions . . . . .								
10. Striking bridges . . . . .								
11. Other causes . . . . .				21				21
Total . . . . .				31				31

CHARLOTTETOWN, P.E.I.,

May 31, 1910.

INTERCOLONIAL AND PRINCE EDWARD ISLAND RAILWAYS  
EMPLOYEES' PROVIDENT FUND.

THIRD ANNUAL REPORT.

MONCTON, N.B., May 21, 1910.

To the Honourable GEORGE P. GRAHAM,  
Minister of Railways and Canals, Ottawa.

By instructions of the Provident Fund Board, we beg to submit for your information, the following report of the operations of the Provident Fund, for the fiscal year ended March 31, 1910.

The personnel of the Provident Fund Board for that year, was as follows:—

- D. POTTINGER, Assistant Chairman, Government Railways Managing Board,  
Chairman, Moncton.
- W. A. DUBÉ, Superintendent, I.C.R., Levis. } Appointed
- T. C. BURPEE, Engineer of Maintenance, I.C.R., Moncton. } by the Minister.
- JAMES W. NAIRN, Engineman, I.C.R., Truro. } Elected by the
- W. MILLEDGE THOMPSON, Conductor, I.C.R., Moncton. } Employees.

Four regular meetings, and one special meeting were held by the board during the year.

The following is a statement of the receipts and expenditures during the year ended March 31, 1910:—



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The Act provides that two members of the Provident Fund Board, shall be elected annually, and it was therefore necessary in January, 1910, to arrange for the election of these two members, to serve during the year ending March 31, 1911.

Notices calling for the nomination of candidates, was accordingly posted, as required by the rule, and the election was held in February, 1910.

The two members elected were:—

W. MILLEDGE THOMPSON, Conductor, I.C.R., Moncton.  
WILLARD P. HUTCHINSON, Train Despatcher, I.C.R., Truro.

The personnel of the board as at present constituted, is as follows:—

D. POTTINGER, Assistant Chairman, Government Railways Managing Board,  
Chairman, Moncton.

W. A. DUBÉ, Superintendent, I.C.R., Lévis.	} by the Minister. Elected by the employees.
T. C. BURPEE, Engineer of Maintenance, I.C.R., Moncton.	
W. MILLEDGE THOMPSON, Conductor, I.C.R., Moncton.	
WILLIARD P. HUTCHINSON, Train Despatcher, I.C.R., Truro.	

D. POTTINGER,  
*Assistant Chairman,*  
*Government Railways Managing Board, Chairman.*

W. C. PAVER,  
*Secretary.*





PART IV

REPORT OF THE GOVERNMENT CHIEF ENGINEER  
OF THE WESTERN DIVISION OF THE  
NATIONAL TRANSCONTINENTAL  
RAILWAY

MR. COLLINGWOOD SCHREIBER, C.M.G.



*Office of the General Consulting Engineer to the Government and Chief Engineer of  
the Western Division of the National Transcontinental Railway.*

OTTAWA, Canada, May 2, 1910.

The Honourable GEORGE P. GRAHAM,  
Minister of Railways and Canals,  
Ottawa, Ontario.

SIR,—I have the honour to submit my annual report on the condition of the western division of the National Transcontinental Railway for the fiscal year ended March 31, 1910, covering also the period between that and the present date.

The total length of this division is about 1,751 miles, divided into two sections, viz.:—The 'Prairie Section' which extends from the west bank of the Assiniboine river, in the city of Winnipeg, to the east bank of Wolf creek, a distance of 915 miles, and the 'Mountain Section,' extending from the east bank of Wolf creek to the western end of the city of Prince Rupert, the Pacific coast terminus, a distance of about 836 miles.

PRAIRIE SECTION.

The entire section is graded and the structures are built. The main line track is laid and sidings have been constructed at 138 stations, aggregating 140½ miles in length.

Four hundred and seventy-four miles of main line are fully ballasted; 350 miles have a first lift of ballast of about five inches in depth, and there remain 35 miles of skeleton track between Eutwhistle and Wolf creek. The embankments on this 35 miles are largely composed of muskeg, so soft that the track had to be laid on the winter season when the ground was frozen solid. The work of covering these soft muskeg embankments with several feet of sand is now in progress; this will not only do good service in holding the embankments in shape when the frost is coming out of the ground, but also in preventing the muskeg from taking fire.

The fencing of the line is well advanced, there having been 732 miles of double fence erected.

A telegraph line has been built over the entire 'Prairie Section' of 915 miles, of which 793 miles is a four-wire line and 122 miles a two-wire line.

Eleven interlocking plants have been established at rail level crossing of other railways.

Water services have been introduced at 49 stations. Some of these have, however, proved unsatisfactory, both as regards the quality and quantity of water, and will probably have to be abandoned and other means of procuring water resorted to.

Six round houses have been built, viz.:—At Rivers, 18 stalls; Melville, 12 stalls; Watrous, 12 stalls; Biggar, 12 stalls; Waiuwright, 12 stalls; Edmonton, 18 stalls; and two small engine houses have also been erected—one of two stalls at Portage la Prairie and one of two stalls at South Saskatoon.

Machine shops have been built at Rivers, Melville and Edmonton, three divisional stations.

The round house at Rivers was damaged by fire on the 8th of December, 1909, and the blacksmith shop at the same place was destroyed by fire on the 14th November, 1909.

Five divisional station houses, 26 way station houses, 54 section houses, 66 tool houses, 79 bunk houses, 5 coaling plants, 80 permanent and 22 temporary loading platforms, 18 stock yards and 115 grain elevators have been erected.

The grain elevators were built at the stations along the line by private enterprise.

The station house at Rivers was damaged by fire on December 8, 1909, and the way station houses at Uno and Bradwell were destroyed by fire on August 16, 1909, and February 14, 1910, respectively.

The portion of the road between Winnipeg and Edmonton—795 miles—has been regularly operated for public traffic since September 13, 1909, under authority of the Board of Railway Commissioners. On the 120 miles west of Edmonton, though there is no regular operation, there has been attached to the construction trains since February 1, 1910, a combination passenger and freight car for the convenience of those concerned; this course being adopted in view of representation made in the matter in order to meet the demands for this accommodation pending the completion of the section. The main object of running the trains over this 120 miles was to carry to the front the large quantities of plant and supplies required for distribution along the works on the 'Mountain Section,' preparatory to commencing construction operations upon the opening of the working season, and the object has been satisfactorily attained.

#### MOUNTAIN SECTION.

Location plans and profiles have been approved by the government and the Board of Railway Commissioners from Wolf creek westward for a distance of 289 miles, and from Prince Rupert easterly for 409 miles, leaving a gap of 138 miles, the location plans and profiles of which have not yet been submitted by the Grand Trunk Pacific Railway Company for approval.

Of the 289 miles from Wolf creek westerly, only 179 miles have, as yet, been put under contract, for this Messrs. Foley, Welch and Stewart are the contractors.

As the contracts were only awarded late last autumn very little work has been done beyond the first mile west of Wolf creek. The work on this mile is very heavy, there being two large steel bridges to be erected and a cutting of over 130,000 cubic yards to be taken out. The first structure will be 622 feet in length and 130 feet high, crossing Wolf creek. The second structure is to span the McLeod river; it will be 1,052 feet long and 125 feet high. The concrete piers, pedestals and abutments of these two bridges are completed in readiness to receive the superstructure. The large cutting containing over 130,000 cubic yards, lying between these two bridges is sufficiently advanced towards completion to admit of the track being laid through it. The false work over the Wolf creek is completed, and tracklaying will at once be carried forward to the McLeod river in order that the steel superstructure of this bridge may be transported by train.

The work of excavation in the 'big cutting' between Wolf creek and the McLeod river is being treated by me at the contract prices per cubic yard according to classification.

The erection of the superstructure of these two bridges will be carried on simultaneously, so as to have them completed at the earliest possible date in order that the tracklaying may be proceeded with during the ensuing summer season, so that the cost of transportation of supplies and plant for the sections of road not yet under contract may be greatly reduced, thus affecting favourably the tenders for the work.

The work executed westward from the McLeod river is inconsiderable, being chiefly composed of about 1,640 acres of clearing, the moving of about 240,000 cubic yards of excavation, the delivery and driving of piles for a number of pile bridges, as well as the delivery of a quantity of timber for same. However, the line is well provided with the requisites in the form of supplies and plant for energetic prosecution of

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the work, and I learn that the force is already being considerably increased, so that by the time the frost is out of the ground, which will probably be about the middle of May, it is expected a large body of labourers will be employed.

During the winter season over 3,600 car loads of plant and supplies reached Wolf creek, and were at once forwarded and distributed by teams along the line of work.

Of the 409 miles from Prince Rupert easterly, the location of which is approved, 240 miles only are under contract. Messrs. Foley, Welch and Stewart are the contractors.

Of the first 100 miles out of Prince Rupert easterly the grading and culvert structures are far advanced towards completion, and a few pile bridges have been built, leaving a number yet to be constructed. Of the six steel bridges to be built, beyond the delivery at Prince Rupert of one cargo of steelwork and the manufacture of the balance of the steel superstructures, which I understand are ready for shipment to Prince Rupert, very little has been done. The only steel bridge concrete sub-structure that has so far been commenced is that of the bridge over the Zanardi rapids, of which the two abutments and one pier are nearly completed for it and the building of the caissons for the remaining four piers is well advanced. However, the delay in the building of these permanent structures will not prevent the tracklaying being proceeded with. So soon as the steel superstructure of this Zanardi rapids bridge is erected, the temporary pile structures to be used as false work for the erection of the remaining steel superstructures being constructed of sufficient strength to carry the tracklaying trains will be finished.

About seven miles of track have been laid easterly from Prince Rupert, and sufficient rails and fastenings have been delivered to cover 200 miles, together with enough ties for 100 miles.

A wharf has been built at Prince Rupert and is in general use.

On the 140 miles east of the first 100 miles very little work has been accomplished during the past winter season. A few rock cuts have been opened and a tunnel is being driven; nothing much can, however, be done until the opening of navigation on the Skeena river, when, no doubt, the supplies and plant now lying at Prince Rupert will be rapidly brought up in the contractors' steamers.

The Skeena river, it appears, was last year frozen over a month earlier than in former seasons, thus preventing the contractors from supplying the works for this 140 miles with the necessary outfit.

No station or other buildings have up to the present date been erected on this 240 miles, excepting the warehouse on the wharf at Prince Rupert.

It is a matter of much gratification to bear testimony to the faithful and satisfactory manner in which the several government inspecting engineers have discharged their duties, and to find that the division engineers of the Grand Trunk Pacific Railway Company have always given a ready ear and fair consideration to any complaints or suggestions they may have made, either as to the location of the line or as to the works of construction. I may say that the chief engineer of the company has frequently expressed to me his view that as the inspecting engineers have such great opportunities of observation in their personal examination of the works, it would be an assistance to his staff to have their attention so drawn to any matter which appeared to need consideration.

I have the honour to be, sir,

Your obedient servant,

(Sgd.) COLLINGWOOD SCHREIBER,  
*Chief Engineer of the Western Division of  
the National Transcontinental Railway.*





PART V

PROGRESS REPORT

ON

HUDSON BAY RAILWAY SURVEYS

BY

MR. JOHN ARMSTRONG

*Chief Engineer of Survey*



OCTOBER 30, 1909.

Hon. GEORGE P. GRAHAM,  
Minister of Railways and Canals,  
Ottawa, Ont.

SIR,—I have the honour to report upon the Hudson Bay Railway project, as follows:—

Mr. John Armstrong, B.A., B.A.Sc., M. Can. Soc. C.E., was appointed Chief Engineer in the fall of 1908. He promptly organized four parties and carried on his work in a most satisfactory manner, and to him and his assistants credit is due for an efficient piece of work. Lines were run to Fort Churchill and Port Nelson from The Pas Mission, and contours were taken closely enough to enable a projected location to be made that reasonably assures accurate quantities; and detailed surveys were made of the harbour of Fort Churchill and Port Nelson—and an important river crossing.

The basis of Mr. Armstrong's estimate is given in full detail. He has estimated for 60 pound rails; I have increased his estimate to provide for 80 pound rails and fastenings; and as he has not estimated for round houses, shops, buildings, elevators and yard facilities at terminals, or harbour works, I have accordingly estimated for these items.

I find considerable difficulty in deciding upon what basis to provide accommodation for a railway that, in the nature of things, cannot be operated to its capacity for more than two months in the year—to a lessened extent for a possible three months, and for the remainder of the year still less. I have, however, provided facilities on a scale that will admit of the maximum capacity for a single track; passing tracks and telegraph stations every five miles, water stations every fifteen miles, and round house and shop accommodation sufficient to care for thirty-two (32) freight trains and one (1) express train per day of twenty-four (24) hours.

Mr. Armstrong has discussed the merits of the harbours at Churchill and Nelson; and as he has furnished plans with soundings, I have plotted the piers and terminals required.

From the information, there is no room for doubt that Nelson is much the better harbour. The line is also shorter by 67 miles, the country through which it runs is better, and the possibility of local business altogether with the Nelson route. There is also a probability that a fair proportion of the route is available for settlement; whereas on the Churchill route, there is no such probability beyond Split lake, where the lines separate.

It is of the utmost importance that a hydrographic survey should be made of the Hudson strait and bay, so that the position and cost of the necessary lighthouses may be ascertained. This work properly belongs to the Marine Department, and is important enough to demand the personal attention of its most capable officer; and while in progress, complete observations should be taken by reliable men stationed at Cape Chidley and Resolution island, at the mouth of Hudson strait, at Salisbury

island near the junction of the Fox channel, and at Mansfield island, as well as at the mouth of the Nelson itself. The course from Mansfield island to Nelson requires to be accurately chartered, and the exact positions of the lighthouses necessary at the mouth of the channel should be fixed. It would be well to also secure information as to the harbours on the Labrador coast, and the special feature of Davis strait. A good sea-going boat is required at Nelson for a year or two, to study the bay itself, its tides, currents, &c. Particular study should be made of the mouth of Ungava bay; and also, as to all harbours of refuge along the route and the best way to approach them, where safe anchorage may be had, &c. A lighthouse will be required at the most southerly end of Greenland.

The route will pass to the north of Ireland, and the distance from Liverpool to Port Nelson as measured on a mercator projection map, is 3,200 miles—against 3,007 from Montreal to Liverpool.

The crux of the matter is—what business can be handled by such a railway, and of what value it is likely to be to the country tributary to it? The general map of the Northwest, which accompanies the report, shows, by concentric circles, the areas tributary to Pas Mission (the starting point of our line) and Winnipeg. For all practical purposes the city of Winnipeg is as close to Fort William as The Pas is to Hudson bay at Port Nelson, hence they may be compared as radiating points.

A line drawn from Dauphin, Man., in a southwesterly direction passing through Weyburn, Sas., separates the tributary territory. Practically the whole of the province of Manitoba, and about 11,000 square miles of the southeasterly corner of Saskatchewan, is tributary to Winnipeg; the whole of the remaining area of Saskatchewan and Alberta belonging to The Pas. This immense district is equal in area to the states of North and South Dakota, Minnesota, Wisconsin, Nebraska and Iowa, where there is a population of about 10,000,000, and a railway mileage of about 50,000. I think that, square mile to square mile, the fertility of the northwest is at least equal to the states named.

Assuming that the line is to be worked for all that is possible to be done. The grades are 0.4 or 21 feet to the mile. All trains are fully loaded and composed of 40 ton pay load cars; and locomotives of the Mallet articulated compound type are to be used with a hauling power of at least 4,000 tons of pay load. Thirty-two (32) trains per day is about the capacity of a single track—better than this has been done, but it is enough.

Sixteen (16) trains loaded=64,000 tons per day—making allowance for accidents and delays—say for 30 working days we get 1,920,000 tons, or 64,000,000 bushels of wheat.

I assume that ships can be secured wherever there is sufficient business offered. It is apparent that at least nine per day would need to be loaded, or say 135 to 140, to do the business—allowing 2 trips to each ship. Any additional business taken to the bay would have to be stored until the following August—nine months.

Other sources of traffic possible to the line are: the exportation of cattle; the usual package freight to and from Europe; and the possibility of developing a reasonably large import coal trade. I believe it is practicable to lay down coal at Port Nelson from Nova Scotia at a cost not exceeding \$3.75 per ton. The rail haul say to Sas-

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katoon—as an average point of distribution—need not exceed \$4 per ton, making the cost of the coal \$7.75. At present, I believe, it costs quite \$9 in the same territory.

Equipment for thirty-two (32) trains per day of the character outlined will cost about \$9,000,000; and means the providing of 108 train crews, 150 telegraph operators, 54 gangs of section men, shopmen, round house men, superintendents, train and yard masters—the greater number of whom are not likely to be required once the rush of the season is over. It appears, therefore, to be a difficult proposition for independent operation, and would seem to require to be worked by one of the large corporations, so that the men and rolling stock could be utilized the whole year. There is in Canada only one locomotive of the type described, and by using the largest freight engines now operated on western roads the train load would be reduced one-half—and the capacity of the road in like measure.

It is apparent, however, that under any circumstances grain may be placed at the Hudson bay on board ship as cheaply as at Fort William, hence the saving possible is 5 cents per bushel, assuming that insurance and freight rates are equal at Montreal and Port Nelson. Captain Bernier is of the opinion that it is unsafe to be caught in the vicinity of the Fox channel with a steamship of ordinary construction any later than October 15.

Mr. Armstrong's report will be found attached hereto.

I have the honour to be, sir,

Yours faithfully,

M. J. BUTLER,

*Deputy Minister and Chief Engineer.*





Mr M. J. BUTLER,  
Deputy Minister and Chief Engineer,  
Department of Railways and Canals,  
Ottawa.

DEAR SIR,—I herewith beg to submit a general report on the results of the preliminary surveys in connection with the proposed railway to Hudson bay, and undertaken in accordance with your letter of instructions, dated July 10, 1908.

### ORGANIZATION.

Four parties were organized and started to work at various points between The Pas and Fort Churchill, dividing the territory to be covered into sections of approximately 120 miles each. Another small party, No. 5, was organized for the purpose of exploratory work whereby much general information was obtained, and the running of much unnecessary lines by the regular parties avoided.

During the progress of the work more information about the Nelson river was obtained, and seemed to justify an examination of that route, as well as the route to Churchill. On the completion of their exploratory work, Party No. 5 was re-organized and allotted to this work, and to a preliminary survey of the harbour at the mouth of the Nelson river. In order that no hitch might occur in the transportation and supply arrangements, Mr. E. H. Drury was established at Split lake as divisional engineer, supervising the work of Parties 3, 4 and 5.

Parties 1 and 2 were despatched from Winnipeg on August 30, to The Pas, going by rail to Prince Albert and thence by Hudson Bay Company's steamers down the Saskatchewan river to their destination. Party No. 1 commenced work on September 14, about 40 miles north of The Pas. Party No. 2, owing to the long and difficult route adopted, did not arrive on their work until November 7, the last of the five parties to commence work. Since then we have discovered a much easier and quicker route to the work, and could do the same work now in less than half the time and for half the expense.

Parties 3, 4 and 5 left Winnipeg on September 19, going by way of Lake Winnipeg and the Nelson river to their destination. Party No. 5 commenced work on October 5, No. 3 on October 24, and No. 4 on October 29.

Parties 1 and 2 completed their work and were disbanded on March 11 and 24, respectively. Party No. 3 and the Split Lake Division office was disbanded on April 6.

Parties No. 4 and 5 completed their work on the railway lines about April 1, and were thereafter engaged on the harbour surveys, No. 5 completing their work and disbanding on July 6, and No. 4 on August 13.

The health of the parties throughout the work was uniformly good; not a single serious accident or case of sickness being recorded on all the work.

### COST.

The total cost of the work, including all returns to date of September 30, with outstanding accounts yet to be settled, totals \$130,716.09. A few of the outstanding accounts are in process of adjustment, but the final result will not differ materially from this total.

Since commencing location, supplies and equipment to the extent of \$5,952.34 have been taken over for location work, leaving \$124,763.75 to charge against preliminary work, and distributed as follows: Survey of railway routes, \$101,123.75; survey of harbours, \$23,640. This cost is largely due to the extra expense of transportation through such a country, a considerable portion being due to the fact that the work on the Nelson route was not taken up until well on in February, thus obliging us to pay winter rates for the transport of provisions along this route. The experience of the Canadian Northern and Grand Trunk Pacific seems to indicate that it usually costs from \$300 to \$500 per mile to secure a final location in such country as this. During the progress of our work much information has been gained relative to transportation routes, which will enable us to greatly reduce the cost of supplies in future, and although the preliminary work has seemed costly I do not expect that the cost of the final location will be greater than that usually obtained in such countries.

During the time when all parties were at work there was an average of about 110 on the pay-rolls.

### METHODS USED.

The surveys were made in the usual way with transit level and chain. Contour topography was taken over the greater portion of the line, as well as all lakes, swamps and other points of interest in the vicinity of the line. In order to illustrate more fully the class of information obtained by the engineers in the field a plan and profile of a representative portion of the line are being forwarded to you. This will probably show more clearly than any description could do, the character of the information upon which the estimate of the cost of construction has been based. This plan is exactly as turned in by the engineer in the field.

In making up the estimate different methods of dealing with stream crossings were frequently adopted, this plan only being intended to illustrate the information obtained.

### NATURAL RESOURCES.

The timber along the proposed route to Churchill has been described in the preliminary report of February 15, 1909. The work on the Nelson route since then has, however, developed the probability that the timber which may be available by the opening of that route is of much greater value than usually supposed. The whole country is full of lakes and streams, and different parties passing through by different routes have found most of the lakes and streams bordered by areas of timber of commercial value. These areas vary in size from a few acres to some as large as forty or fifty square miles, and in the aggregate totaling several thousand square miles. We have no means of making an approximate estimate of the quantities, as large areas though tributary to the railway route lie far to one side or other of any probable location of the line, and consequently were not visited by the engineers. However, the information obtained is of such a nature as to warrant the recommendation that a thorough examination be made of the timber resources of this territory by competent timber cruisers.

### AGRICULTURAL LANDS AND MINERALS.

No further information can be added to that already given in the report of February 15. It will be remembered that the greater portion of this work was completed during the winter months when the ground was frozen and covered with snow, rendering it impossible to obtain much information on these subjects.

It may be remarked here, however, that although these lands may require more or less improvement in the way of clearing and drainage, the fact that they are situated

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within a few hours' run of an ocean port may give to these lands a value not hitherto thought of, and may cause a more rapid settlement than expected. At the inland Hudson bay posts all kinds of grain and vegetables have been grown successfully for years. A study of the records of the Meteorological Office indicates that the climate is quite favourable for farming operations as that of Prince Albert. Our own records extending only from November to March simply corroborate the general impression that it is very cold during the winter months, but furnish no information as to the conditions during the summer, or growing season.

Our definite knowledge of minerals is limited to limestone and marble. The limestone occurs in the southern portion of the line a short distance from The Pas, in unlimited quantities favourable for quarrying, and will probably prove the future source of supply for the greater part of the province of Saskatchewan and Manitoba.

Marble of a very high grade occurs on Marble island in Hudson bay, and is also found of a fair quality at Fort Churchill.

Iron ores, gold, silver, galena, mica and other minerals have been discovered by the Geological Survey at various localities on the bay, all of which are fully described in the reports of that department.

Various specimens of the precious metals have been shown to our engineers, but their origin was preserved in so much mystery that they could not be treated as evidence of the existence of the metal in that territory and might have been used with equal effect to demonstrate the richness of a deposit in Colorado or Johannesburg.

## FISH.

All the evidence obtainable points to the existence of various varieties of fish of good quality in Hudson bay in large quantities. This should be of great value to the west, as fresh fish can be laid down in twenty-four hours at all the main centres in Manitoba and Saskatchewan. This will largely be an express traffic, and according to recent investigations of the Railway Commission this seems to be a remunerative business, and should prove a source of great profit to the Hudson Bay railway.

## STREAMS AND WATERWAYS.

The principal waterways of the country traversed by the surveys were described in the report of February 15. Since then a general map has been prepared showing, in addition to the streams described, the extension of these waterways throughout the west, together with the railway system as it exists at present. The map shows the principal waterways which are susceptible of development for purposes of navigation, and shows the extent to which they may become feeders of the Hudson Bay railway. These waterways have all been recently navigated by vessels of considerable size. During the summer of 1908 the steamer *Alberta* made the trip from Edmonton to Winnipeg where she is now engaged in the excursion business. During the past summer a good sized steamer made a return trip on the South Saskatchewan between Medicine Hat and Saskatoon, and in the month of June a number of business men from Grand Forks, North Dakota, made a successful excursion trip from Grand Forks to Winnipeg and return via the Red river.

An approximate estimate of the discharge of the Nelson river gave results as follows:—No. 1, 156,869 cu. ft. per second; No. 2, 149,693 cu. ft. per second.

In the first measurement the velocity was obtained by means of floats, and in the second by means of a current meter borrowed from the Department of Public Works.

Below this, several large streams enter, and many small ones, so that the discharge at Port Nelson is probably not far from 200,000 cu. ft. per second. The dis-

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charge of the Churchill river has been roughly estimated as 40,000 cu. ft. per second at low water.

On the general map is also shown a proposed extension of the railway line southerly to connect with the existing railways.

One projection is shown along the Carrot river from The Pas to Saskatoon. At Saskatoon connection is made with lines leading to most of the principal centres of trade in the provinces of Saskatchewan and Alberta.

This line will also open up a very fertile country along the Carrot river and give an outlet for valuable timber areas along the northern slope of the Pasquia Hills. This line will be through open prairie country and a first-class road can be built for \$20,000 per mile.

Another suggested extension is from the southern terminus of the Canadian Northern Railway's Pas branch to Yorkton, giving communication with Regina and other centres in eastern Saskatchewan and western Manitoba. This line will also be prairie work and should not exceed \$20,000 per mile for a good road.

### THE CHURCHILL ROUTE.

The first section of approximately 120 miles is through a comparatively level or smooth country, affording easy grades and cheap construction. The territory is underlaid with limestone in horizontal or flat beds, rarely rising above the general level to any extent, and when it does so it is in a way as to be easily avoided by the railway line. Owing to this condition the rock cutting on this section will be practically nil.

The balance of the grading on this section will largely be in clay loam material, probably 70 per cent, the remainder being of sand, gravel and swamp or muskeg. It may be remarked here that what is called muskeg in this country is not a true muskeg, but would be more properly defined as swamp. Good bottom is usually obtained at a depth of three or four feet, and very seldom exceeds 7 or 8 feet.

The stream crossings will be light, with the exception of the Saskatchewan river crossing. Frog river, the connection between Moose lake and Cormorant lake, is a navigable stream for small boats, and as we cross it very low down it will probably be necessary to provide a swing span of some kind. As a fifty or sixty foot opening will do, the sum required will not be large.

Since taking up the location work it has been found possible to practically eliminate the hump shown at mile 25 on the condensed profile, and with good prospects of materially improving the hump at mile 55.

The second section of 120 miles is through granite country, and although the same general characteristics are preserved the granite ridges are more abrupt, and will force us to take some rock cuttings, although fortunately most of them will be small. All the streams and lakes throughout these two sections possess more or less valuable timber of which the accompanying photograph is an illustration.

From the 240th mile to the 360th mile we have the roughest country encountered, and considerable exploratory and extra preliminary work has failed to find any better route than that adopted. In this territory is included the rise between the basin of the Nelson river and that of the Churchill. The actual height of the summit between the two rivers is not very great, but both approaching and leaving this summit a heavily rolling or undulating country is encountered, and requires the development of a considerable length of line, and the introduction of much curvature to secure the grades adopted, at a reasonable cost. On the Nelson river side of this ridge a considerable amount of heavy work will be necessary, but on the Churchill slope although the yardage to be moved will be heavy it is not anticipated that much rock will be encountered.



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The fourth section, extending from the 36th mile to Fort Churchill, will require the moving of only a light yardage, but the northern 70 miles being over the tundra, or barren lands, may prove to be a more expensive piece of work than the profile would indicate. Mr. W. J. Clifford made a trip through this section in the month of June for the purpose of examining it after the snow had disappeared. He does not anticipate any serious difficulty or danger in constructing this section, the chief drawback being from the fact that although the material is such as would usually be classified as common excavation, so much frost will be encountered that probably a considerably greater price will have to be paid for its handling than for common excavation.

The timber over sections 3 and 4 is not of very much value. A few ties and some timber for temporary work may be obtained, but only in small quantities.

The bridging on the whole will average light, the only two bridges of great importance being the Saskatchewan crossing and the Deer river crossing about mile 350.

As intimated in the notes on the estimates, a considerable number of small pile structures have been designed for the purpose of furnishing ample waterway until a sufficient observation of the stream will better enable us to specify a suitable permanent structure.

The curvature as estimated from the projected location averages  $9^{\circ} 55'$  per mile.

The grades adopted, viz.:  $-.4$  northbound and  $-.6$  southbound, have been obtained without great effort and although some development was required on section 3, the ease with which they were obtained on the remaining sections seems to justify their use all through for the sake of uniform grades on all engine divisions.

## THE NELSON ROUTE.

The route selected towards Port Nelson follows the Churchill route for some 150 miles or thereabouts, the description of which has been given. Unlike the Churchill route, the Nelson route does not resolve itself into natural divisions each presenting different characteristics peculiar to itself, but throughout maintains a generally uniform appearance, so that the description given for the first division of the Churchill route may be applied in a general way to the whole of the Nelson route. It is not expected that the rock work will amount to very much, the major portion of the grading being in clay loam with smaller percentages of sand, gravel and swamp. The tundra is not encountered on this route, the whole line being through timber not appreciably different from that described on the first 200 miles of the Churchill route. It may be mentioned here that sand and gravel has been found sufficiently often to justify our belief that ballast may be had without unduly long hauls, except on the northern 70 or 80 miles of the Churchill route. It may be found there, but as yet we have not noted it. The curvature has been estimated to average about  $5^{\circ} 30'$  per mile over this route.

A grade of  $-.4$  both ways may be had on this route.

The adoption of  $-.6$  against southbound traffic would not help alignment nor save grading.

There are three important bridges on the Nelson route, viz.: the Saskatchewan, the crossing of the Nelson at Manitou rapids, and the second or lower crossing of the Nelson. The Manitou crossing of the Nelson is a particularly favourable crossing, the river here being confined in one channel of less than 350 feet in width, the banks being of merely perpendicular granite rock and so situated as to make it possible to choose almost any desired elevation between fifty and one hundred feet above the water. Water here is of course very deep, and has a current of from six to eight miles per hour, making it necessary to cross with either a single span or an arch. The lower crossing will be much longer, probably 3,000 feet, from grade to grade, with a waterway of 1,500 feet with the grade line approximately 80 feet above the water. The



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balance of the bridging will be light, trestles being sufficient in all cases with the exception of Frog river.

### HARBOUR WORK.

The plans and reports of the terminal work having already been sent you, it will only be necessary to treat briefly of the object with which this work was undertaken.

It has been endeavoured to treat the subject not as a problem by itself, relating only to the sheltering of ships, but to treat it as one feature only of the problem of the Hudson bay route as a whole. To this end it was necessary to consider and obtain all possible information relating to roadsteads, entrance channels, harbourage, docks, facilities for providing railway terminals and other works necessary for the transshipment of goods, length of season open to navigation, ice condition, and possible future inland communication by improvements to existing waterways, and to the feasibility of approach by the proposed railway. It was realized that the importance of the port and the Hudson bay route as a whole depended in no small degree on the efficiency of the rail communication inland.

In accordance with the above, surveys were made of the harbours at the mouths of both the Churchill and Nelson rivers, the results of which have been sent forward to you.

The results at Nelson seem to justify the recommendation that a further appropriation for an accurate survey of that port be made before it is rejected as a terminus for the Hudson Bay railway.

(Sgd.) JOHN ARMSTRONG,

*Chief Engineer, Hudson Bay Ry. Surveys*

### THE ESTIMATE.

#### CLEARING.

The estimate is based on right of way 150 feet wide with the necessary allowances added for sidings and terminals. A few miles of heavy clearing will be encountered, but the average over the whole line will be comparatively light. The first 200 miles will be through spruce and jack pine with a small proportion of poplar and tamarack. The northern 100 miles of the Churchill route will have practically no clearing. The northern 200 miles of the Nelson route will be through spruce with a small proportion of jack pine and tamarack and will probably have from 12 to 15 acres per mile to clear. A large portion of the clearing on both routes could probably be done for \$25 or \$30 per acre, but owing to the heavier clearing encountered at intervals an average price of \$40 per acre has been decided upon. This should be ample to cover whatever close cutting is required as well.

#### GRUBBING.

This item is somewhat difficult to estimate without an actual location profile. One and a half acres per mile has been used for 400 miles of both lines, using the price \$100 per acre which seems to be the price bid by contractors almost universally. The work will class as light, a large portion of it being such as can be done with heavy grading or breaking ploughs.

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## GRADING.

This being the chief item in the estimate, considerable care has been taken with it. The quantities submitted are taken from the projected profiles, and the greater portion of these being very close to the preliminary lines, should be as accurate as is possible without cross sections. Engineers in the field were instructed to take out these quantities liberally, and the estimates submitted by them are probably at least 10 per cent in excess of what the profile actually shows.

In addition to this, 25 per cent has been added to all quantities by this office, to cover drainage, settlement, &c., so that the quantities here reported are approximately 35 per cent in excess of what the profile actually shows. This should provide for all possible contingencies, especially as one of the main causes of swelling of estimates, viz.: road and farm crossings is not met with here. In addition, 1,100,000 cubic yards are added to Churchill route and 900,000 cubic yards added to Nelson route for sidings and terminals. At the present time not one single road or farm crossing exists between The Pas and Hudson bay. The prices adopted, \$1.80 for solid rock, 65 cents for loose rock and 30 cents for earth, approximate closely to the prices obtained on the Transcontinental railway in what may be termed similar country, viz.: districts C. D. and E. The price, 30 cents for earth, is perhaps somewhat lower than Transcontinental Railway prices, but I am confident that the contractor who bids over 30 cents on this work will have no chance to get the contract. The portion from The Pas to Hudson Bay Junction of the Canadian Northern railway, a much worse proposition than any we have encountered, was done at a profit, for 25 cents during the high wage period of 1906 and 1907.

These prices quoted are of course the average. In making up the estimate the prices used on the northern portion were, for solid rock \$2, loose rock 75 cents and common excavation and borrow 50 cents. The summation of the quantities and cost on the different sections resulted in the above quoted averages of prices which have been used in this estimate. On sections 1 and 2 the engineers did not estimate any loose rock. For this reason the 25 per cent added to their common excavation has been classified as loose rock. The classification made has been based on the Transcontinental Railway specification. The accessibility of the work will not be so difficult as supposed. The first section has rail communication to The Pas with a fairly good steamboat connection already established to Moose lake, 50 miles along the route. The construction of wagon or sleigh roads from this point on will be easy. The second section, with communication from Winnipeg via Lake Winnipeg and the Nelson river, can be made quite adequate for the comparatively small sum of fifteen or twenty thousand dollars. In case the Churchill route is selected this will be more expensive. The third section may be supplied from Churchill or Nelson if so desired. In the case of Nelson good water connection being possible for 60 or 70 miles inland. In case the Churchill route is selected probably steam shovels will be required on a section of about 35 miles near Split lake. These water routes suggested are not recommended for the transport of such plant as this, but will be useful for all lighter supplies and materials. On the Nelson route no steam shovel work is anticipated, except blasting—the plant for which will follow along behind the track.

## TIMBER.

On the Churchill route a sufficient amount of timber for ties, piles, and temporary work may be had convenient to the line on the southern portion as far as the 240th mile, but beyond this point none can be had. For this reason piling has been quoted as 50 cents per foot on the Churchill route, as against 40 cents on the Nelson route, where timber may be had all the way to the bay. The quantities estimated for piling do not look very large, but it is to be remembered that all our stream crossings are very

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low, thus cutting down the length of the piles and also reducing the length of bridgiug or number of bents required. With the exception of the Saskatchewan river crossing and the crossing of the Deer river on the Churchill route all waterways have been estimated for, as temporary wooden structures.

On the Nelson route the Saskatchewan crossing and the two crossings of the Nelson are to be steel and coucrete, all others wood. Our expedition is practically the first which has obtained definite and specific iuformation of the country through which it is proposed to run, but inasmuch as practically all the work was done in the winter months with everything frozen solid and under three or four feet of snow it is perhaps too much to expect that a proper estimate of water openings could be made. For this reason temporary wooden structures of such a nature as will suffice for a period of from 7 to 10 years has been estimated for.

During this period close observation of the waterways will enable us to specify with more certainty the style and size of opening required. With this closer knowledge of what is required, and with the increased facilities for handling cement and other materials for permanent structures, the final cost will probably be less than if an attempt were made to construct them now.

Cedar timber for culverts may be had f.o.b. cars in Winnipeg for \$18 and \$20 per thousand, and with freight added is worth \$22 to \$25 at The Pas. The price of \$40 thus leaving from \$15 to \$18 for framing and contingencies, and it is probably high enough to cover the cost of what little excavation may be needed. If timber native to the country can be used, such as spruce and tamarack, a considerable saving may be effected. My own experience has been that such timber is quite good for seven years, and I know of some spruce culverts built twelve years ago and still good.

The timber for trusses and stringers being imported from British Columbia will be more expensive, but will be approximately the same for both lines.

#### IRON.

An average of 5 cents per pound has been adopted, based on Winnipeg prices, plus freight to The Pas.

#### TRACK MATERIAL.

Steel rails of 60 pounds per yard are proposed. Much of the material of which the roadbed will be composed is of a peaty nature and some settlement may be expected.

Under such circumstances it is probable that a better track can be maintained with the 60 pound rail than with the 80 pound rail. Prices are based on Fort William prices plus freight to The Pas, wheelage charges, &c., and an allowance of about \$3 per ton for contingencies.

#### TIES.

Estimated at 3,000 per mile for all tracks. Being obtainable at all points on the Nelson route 40 cents each has been adopted, but none being obtainable beyond Split lake on the Churchill route, 50 cents has been used for that estimate.

#### SWITCHES.

In the estimate for switches is included split switch points, spring frogs, switch stands, lamps, and an allowauce of \$15 to cover the difference between common ties and switch ties at each switch.

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## TRACK LAYING.

The prices on the Transcontinental railway vary from \$400 per mile to \$600 for laying the 80 pound rail there used, so that \$500 per mile should be ample price for laying the lighter 60 pound rail proposed for this line.

## BALLASTING.

Indications are that we will not find it necessary to exceed a maximum haul of 25 miles except in the northern 100 miles of the Churchill route, where a 50 mile haul may be encountered. However, as ballast may be found closer, \$1,000 has been estimated for both routes and includes side tracks and terminals as well as main tracks.

## WATER TANKS.

This question has been fully looked into, and it is found, from the Great Northern Railway experience, that \$5,000 should build a tank of 50,000 gallons capacity, of the most approved pattern and as nearly frost proof as has yet been devised; including machinery and heating apparatus inside the tank. As water is very plentiful in our country the intake and piping will not be expensive.

In addition to the above items discussed here there is left for you to estimate upon, station houses and terminal structures; shops, docks and elevators.

In the estimate a side track of 5,000 feet was assumed every eight miles, with a station house, water tank, and accommodation for two section crews at every alternate one. This leaves each section crew the somewhat lengthy section of 8 miles and also situated at one end of the section. It has, however, the advantage of always having the section crew where the superintendent or road-master can always communicate quickly by telegraph or telephone.

Passenger traffic, express traffic and small package freight for a number of years at any rate cannot be very large, so that the accommodation in the station may be cut to a minimum. Out-going local freight will consist largely of timber which requires no shelter, and incoming local freight will be mostly for lumber camps, the most bulky articles of which, such as hay, oats, flour, pork, &c., if necessary can be better accommodated in a separate warehouse of much cheaper construction. Thus the accommodation of our stations will be principally limited to the requirements of the railway agent. A few years after the opening of the railway the principal centres of development will have become apparent, and more suitable station and freight sheds erected as required.

## TERMINALS.

The Churchill route, 477 miles approximately, is too long for three engine divisions in this hard winter climate. The Nelson route, 410 miles, can probably be handled by three train divisions, as owing to the better grades the 135 mile Nelson division will not be a harder task for the engine than the 120 mile in Churchill division. On the Nelson route this will mean four sets of buildings, and on the Churchill route five sets.



CHURCHILL ROUTE.

	Unit.	Quantity.	Rate.	Amount.
			\$ cts.	\$ cts.
Clearing .....	Acre .....	7,000	40 00	280,000 00
Grubbing .....	Acre .....	600	100 00	60,000 00
Grading .....	C. yd. ....	9,740,000	0 50	4,870,000 00
Piling .....	L. ft. ....	180,000	0 50	90,000 00
Timber in culverts .....	B. M. ....	3,250,000	40 00	130,000 00
Timber in bridges and trestles .....	B. M. ....	4,000,000	55 00	220,000 00
Iron in bridges and culverts .....	Lb. ....	2,600,000	0 05	130,000 00
Steel rails .....	Ton. ....	54,000	40 00	2,160,000 00
		18,000		720,000 00
Angle bars .....	Ton. ....	2,680	50 00	134,000 00
		900		45,000 00
Bolts and nuts .....	Ton. ....	454	80 00	36,320 00
Spikes .....	Ton. ....	2,040	65 00	132,600 00
Ties .....	Each .....	1,700,000	0 50	850,000 00
Track-laying .....	Mile. ....	567	500 00	283,500 00
Switches (complete) .....	Set .....	300	250 00	75,000 00
Water tanks .....	Each .....	30	5,000 00	150,000 00
Steel bridges, steel .....	Lb. ....	3,700,000	0 05	185,000 00
"    concrete .....	C. yd. ....	6,000	15 00	90,000 00
Ballasting .....	Mile. ....	567	1,000 00	567,000 00
Telegraph line .....	Mile. ....	477	300 00	143,100 00
Total .....				10,586,520 00
Increase due to 80 lb. rail .....				765,000 00
				11,351,520 00

Station buildings, telegraph stations, section houses, round houses, locomotive and car repair shops, power plant, tools, warehouse at port, coal unloading plant ..... \$1,700,000 00  
 Two 4,000,000 bush. cap. fire proof elevators ..... 4,000,000 00  
 Yard facility at terminals ..... 320,000 00  
 Engineering, law costs and contingencies, 10% ..... 1,737,152 00

Harbour work, piers, dredging, exclusive of lighthouse and buoys ..... \$6,675,000 00

\$19,108,672 00

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## NELSON ROUTE.

	Rate.	Quantity.	Amount.
	% cts.		\$
Clearing.....	Acres. 40 00	7,000	280,000
Grubbing.....	" 100 00	600	60,000
Grading.....	Cu. ft. 0 40	7,500,000	3,000,000
Piling.....	L. ft. 0 40	200,000	80,000
Timber in culverts.....	M. ft., B. M. 40 00	2,800,000	112,000
Timber in bridges and trestles.....	" 55 00	3,200,000	176,000
Iron in bridges and culverts.....	Lb. 0 05	2,100,000	105,000
Steel rails.....	Ton. 40 00	45,500	1,820,000
Angle bars.....	" 50 00	15,000 2,280 800	608,000 114,000 40,000
Bolts and nuts.....	" 80 00	390	31,200
Spikes.....	" 65 00	1,740	113,100
Ties.....	Each. 0 40	1,450,000	580,000
Switches.....	Set. 250 00	240	60,000
Track-laying.....	Mile. 500 00	483	241,500
Water tanks.....	Each. 5,000 00	25	125,000
Telegraph lines.....	Mile. 300 00	410	123,000
Bridges, steel.....	Lb. 0 05	9,400,000	650,000
" concrete.....	Cu. yds. 15 00	12,000	180,000
Ballasting.....	Mile. 1,000 00	483	483,000
Total.....			8,333,800
Increase due to 80 lb. rails.....			648,000
			8,981,800

Station, buildings, telegraph cabins, section houses, round houses, repair shops locomotive and car, tools, power plant, warehouse at port, coaling plant.....	\$ 1,647,600
Two 4,000,000 bush. fire proof elevators.....	4,000,000
Yard facility at terminals.....	320,000
Law costs and contingencies. Engineering, 10 per cent.....	1,476,940
	7,444,540

Harbour work, piers and dredging, exclusive of lighthouse and buoys.....	\$ 5,065,000
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\$61,426,340

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## FORT CHURCHILL.

## THE CHART.

Two charts, or maps, are being furnished with this report. One on a scale of 4,000 feet to 1 inch for purposes of comparison with Port Nelson, and a large one on a scale of 1,000 feet to 1 inch, as a working map. On this larger map are shown also 10 feet contours and other notes in more detail than was possible on the smaller scale. The soundings are reduced to low water level.

## GENERAL DESCRIPTION.

Fort Churchill is at the mouth of the Churchill river where the river passes through a large tidal flat or lagoon mostly dry at low tide except near the outlet to the sea. The lagoon is surrounded by hills consisting of rock at the sea outlet and of sand and gravel further up the river. The only available situation for docks at present is out near Cape Merry, with the railway terminals from two to three miles up stream, and the townsite from three to five miles up stream. Another townsite is available on the west side, but it would be somewhat difficult to get railway and dock sites.

There is no possibility of improving the Churchill river so as to give inland communication by water owing to its shallowness over its many wide and frequent rapids. The neighbourhood of Fort Churchill is practically destitute of all forest growth for miles in all directions, the vegetation being restricted to mosses and patches of coarse grasses along the edges of the water areas.

The main fresh water supply is obtained from the numerous small lakes in the neighbourhood, and is of excellent quality. The tidal flats are thickly strewn with boulders, some so large as to be visible above high water.

## TIDES AND CURRENTS.

The main current in the harbour is along the indicated channel of the Churchill river, being approximately down the centre of the lagoon, but striking more against the eastern side towards the harbour mouth. With the ebb tide the current attains a velocity of from six to eight miles per hour, creating a somewhat difficult entrance for low-powered ships. The local pilots prefer to bring in their ships with the incoming tides.

It is quite useless for anything but a steam vessel to attempt the entrance at any other time. The current with the incoming tide is much less, probably not exceeding 4 miles per hour. The highest tide observed was 13½ feet, and the lowest 8 feet, both probably being subject to modification with a longer series of observations. The water is always more or less salt near the entrance. At low tide fresh water may be obtained in the Churchill channel opposite the Hudson Bay Company's post, but when the tide is in this cannot be done.

## ICE CONDITIONS.

The harbour usually freezes over about November 15. The open sea also freezes over during the winter four or five miles out from Churchill. The usual date for the opening of the harbour is about June 19. This last spring the harbour opened on June 7, or about 10 days earlier than usual. The ice lay off the coast and harbour this year, preventing the return of the survey party until July 13, when a start was made for York.

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Five days more were lost by the ice pack off Cape Churchill extending about thirty miles out to sea, the boat crew declining to venture outside of this. The boat in use was only a small sailing coast boat not well adapted to ice work. Probably no serious difficulty would have been experienced by a steamer making Churchill within a few days of the opening up of the harbour on June 7. At intervals between June 7 and July 13, ice would be drifted back into the harbour by north winds. This ice floating up and down the harbour on the strong currents existing there constitutes a serious inconvenience and danger to ships at anchor and to docks and other works which may be constructed along the shore. The harbour has been reported on occasions to have been blocked by ice as late as August owing to long continued north winds. This liability of the harbour to being filled with loose heavy ice drifting up and down with the strong currents will need to be seriously considered in choosing the type of docks to be built here. As shown on the chart, the direction of the current tends to throw the drifting ice against the east shore, the only available place for docks at the present time. The ice, however, does not jam here very much but is swept on out by the strong current. Jams more frequently occur on the west side between the police barracks and Cockrill's Point.

## ANCHORAGE.

At the present time very little shelter can be had at low tide by any ship drawing over 18 or 20 feet of water. Space to accommodate two or three ships of this size might be had, but anything larger would have to anchor almost in front of the entrance, which, being about three-quarters of a mile, allows the full force of the seas to be felt. The seas enter the harbour with sufficient force to cause a heavy swell to be felt throughout the harbour; in fact it is reported that at times it is impossible for the smaller boats to cross the harbour for two or three days at a time. The bottom consisting of mud, affords a fairly good holding ground for anchors.

## MATERIAL.

The material forming the harbour bottom is mud, thickly strewn with boulders of all sizes, and is probably a deposit from the Churchill river.

Excavating for ships berths close inshore to avoid the heavy drift ice will probably encounter solid rock, as the solid rock in several places runs to the water edge.

## MATERIALS FOR CONSTRUCTION.

Stone for construction purposes is very plentiful. Marble if you like to use it. All timber will have to be brought in either by rail or by ship.

## DEFENCE.

Fort Churchill being practically upon the open sea can only be defended by strong forts and batteries placed in the immediate neighbourhood of the port itself.

## PORT NELSON.

## THE CHART.

The chart or map accompanying this report has been drawn to a scale of 4,000 feet to 1 inch, as being best adapted for the purpose of giving a comprehensive view of the general situation at Port Nelson. Lines are shown on the chart inclosing the portion which was found open all last season; other lines showing the portion where the ice did not attain a greater thickness than 10 inches. The shore line is plotted in

from a traverse of the shores. Wherever the ice was of sufficient strength the sounding was done through holes, the method of locating being indicated on the chart. The soundings in the open water portion were taken from a boat hired from the Hudson Bay Company at York Factory, and were taken in May and June after the ice had gone out. This portion of the work was accomplished under great difficulties, as only five small buoys could be obtained to mark ten miles of river.

The boat, which was the best obtainable, was the usual coast boat of very shallow draft and clumsy rig, but endowed with special qualities in the matter of drifting.

Owing to this propensity and to the fact that the small buoys were not visible from one to the other, some difficulty was experienced in keeping the proper course. However, after ten days or two weeks hard work a sufficient amount of information was obtained to enable us to state with certainty that a good channel exists in which a ship drawing 26 feet might safely enter at all stages of the tide. Mr. R. D. Fry, the engineer in charge of the party, believes this chart to be a conservative representation of the actual conditions at Port Nelson, and that more extended surveys with the proper equipment will probably show a more favourable situation.

In order to get the best results it will be necessary to have a good strong boat equipped with power, preferably a good sea-going tug which could be fitted to burn either coal or wood, with a dozen large sized buoys and fifty or sixty smaller ones to mark the channel and points to be sounded.

#### GENERAL DESCRIPTION.

Port Nelson is at the mouth of the Nelson river, while York Factory is situated at the mouth of the Hayes river, about fifteen or eighteen miles from Port Nelson.

The site at the mouth of the Hayes was chosen by the Hudson Bay Company on account of the better communication with a greater number of inland posts, and also being a much smaller stream was not so difficult to navigate.

A great deal of tracking had to be done on both rivers, and the Hayes being much smaller, offered less trouble in crossing and recrossing to take advantage of paths to tow from. The Nelson river is known locally as the North river, and Port Nelson is named by the British Admiralty as York Roads. Hudson bay vessels crossing to York Factory with supplies anchor about 15 or 20 miles from the post in York Roads. The site of York Factory was not chosen on account of its accessibility from the sea, but entirely on account of the easier communication with inland posts. The Nelson river proper may be said to end at Flamboro Head, which is the approximate limit to which the tide reaches. The estuary is a wide tidal flat with the main channel running approximately down the centre, finally discharging into an open sea abreast of Beacon Point, some 25 miles from Flamboro Head. At Flamboro Head the banks rise sheer from the water edge to a height of 100 to 125 feet. From this point they gradually diminish in height on both sides of the river, until at Sam's creek on the north, and Beacon Point on the south, they are about ten feet above the water. The north shore is of clay with a sufficient fall for drainage and covered with a fair growth of spruce.

A good site for terminals and town may be had in the vicinity of the point marked on the chart. Above this point the banks become higher and much more abrupt.

The south shore is also of clay with a good slope for drainage, but at the present time is covered with a very heavy growth of moss, rendering it very wet. An abundant supply of fresh water may be had either from the Nelson river itself or from various smaller streams and lakes in its vicinity.

#### TIDES AND CURRENTS.

The main current when the tide is ebbing is along the main channel, the current over the flats running approximately parallel to it. As the water lowers the currents

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over the flats converge more and more upon the main current, till at low tide they are approximately at right angles to and approaching it. On the ebb tide, the current flows at the rate of about  $3\frac{1}{2}$  miles per hour, being strongest at the mouth abreast of Beacon Point. Under favourable conditions the current here might rise as high as 4 miles per hour. So great is the discharge of the Nelson river that a perceptible current may be noticed several miles out to sea. With the incoming tide a current of about  $2\frac{1}{2}$  miles is obtained.

During the observations, extending from March 20 to June 10, the lowest tide observed was 6.9 feet and the highest 10.9. A longer series of observations will probably establish greater extremes.

The Admiralty charts give ordinary spring tides as ranging from 10 to 14 feet. It is probable, however, that any rise greater than 12 feet may be classed as an occurrence out of the ordinary, and due probably to some particular combination of wind and tide. The tides were found to be very variable, due no doubt to the comparative shallowness of the water. This will require a long series of observations before accurate tide tables can be prepared. This condition is not peculiar to Port Nelson, but applies generally to the tides in Hudson bay.

Salt water is never found above Beacon point except when a very strong easterly gale is blowing with the incoming tide, when a slightly brackish taste may be detected two or three miles above Beacon Point. When the tide is ebbing fresh water is obtained far out to sea. Salt water is never obtained within many miles of the point selected for the terminals.

## ICE CONDITIONS.

About the 20th December the river is usually frozen over at Seal Island or Flamboro Head. From this time on the ice gradually creeps down the estuary and out from the shore line until the first half of the month of April. About this date the weather moderated to such an extent that the thawing through the day counterbalanced the freezing at night and the ice began to recede towards Flamboro Head, the estuary being usually again clear of ice by May 15. The ice is broken up into large floes by the rising tide, and is borne off out to sea by the ebb tide. Owing to the appreciable current of the Nelson river being felt so far out to sea very little of this ice ever drifts back again. Between May 15 and June 1, the upper Nelson ice breaks up and passes down the centre of the estuary in the main channel, usually occupying from 24 to 36 hours on passing out to sea. During last winter no ice jams occurred inside of a line drawn from Beacon point to Sam's creek and a careful scrutiny of the shore line after the snow and ice had disappeared failed to find any trace of its ever doing so. The photos accompanying this report give a fair representation of the usual ice conditions at Nelson. Last winter was a shade colder than average.

The winter of 1878, an exceptionally mild winter, the channel remained open for 40 miles above Flamboro Head.

During the freeze up in the fall, a considerable quantity of slush ice comes down from the upper Nelson.

Last winter at Seal island and along the shore the ice attained a thickness of between  $4\frac{1}{2}$  and 5 feet. The average thickness at York Factory, where a record has been kept up for many years, seems to be about 4 feet 8 inches.

During the winter more or less ice floats up and down the open channel with the tides, but being very scattered no jams ever occur.

## ANCHORAGE.

The anchorage being some nine or ten miles in from the mouth of the channel no serious sea is ever experienced which may cause trouble to anything larger than



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canoes or row boats. The condition of the seas at Port Nelson will probably be found to resemble those experienced at Quebec on the St. Lawrence. The bottom is of sufficient stiffness to furnish a secure holding ground for anchors.

## MATERIAL.

The material in the flats consists of blue clay with an occasional pocket of coarse sand and gravel with boulders scattered thinly around. In the channel the material is a very stiff blue clay, affording excellent holding ground for anchors. Probably all of the material can be handled by dredges at a very low cost and may be used for reclamation works around the docks. The bottom of the channel is swept clean and bare by the current of the Nelson, and is of so stiff a nature that the small anchor used by the Survey, probably weighing about 200 lbs. would frequently drag for some distance before taking hold. The material on the flats is not so hard on top, but becomes harder as depth is obtained.

## MATERIAL FOR CONSTRUCTION.

Stone for the construction of breakwaters and other works may be cheaply obtained. About 75,000 or 100,00 cubic yards may be picked up along the tidal flats in the shape of scattered boulders. Up the Nelson river, about 40 miles above Flam-oro Head is a splendid quarry where any required quantity can be had, and landed cheaply at the works by means of the Nelson river.

Piles in large quantities will be obtainable from various streams entering Nelson river and Hudson bay.

Cement and other material, being brought in by water, should be comparatively cheap.

## DEFENCE.

The defence of Nelson from hostile fleets will be comparatively easy, the long comparatively narrow channel approach being easily rendered impregnable by means of sea mines, and rendered otherwise dangerous by the removal or changing of buoys and other channel marks. Battleships which carry the extreme long range guns are of such a draft as to render it somewhat dangerous to manoeuvre in less than 45 feet of water thus preventing their closer approach than 15 or 18 miles, a distance considerably greater than the effective range of even the heaviest guns. The lighter ships which might approach closer carry correspondingly lighter guns. The establishment of strong batteries and forts at Sam's creek would seem to be all that is necessary to render Port Nelson absolutely unassailable.

It might be mentioned here in passing the greatly increased difficulty a hostile fleet would have on blockading the Atlantic coast of Canada were the Hudson bay route opened. The fact that ships may enter and leave Port Nelson all the year round is a fact worth remembering when the possibilities of war are considered.

WINNIPEG, September 8, 1909.

(Sgd.) JOHN ARMSTRONG,

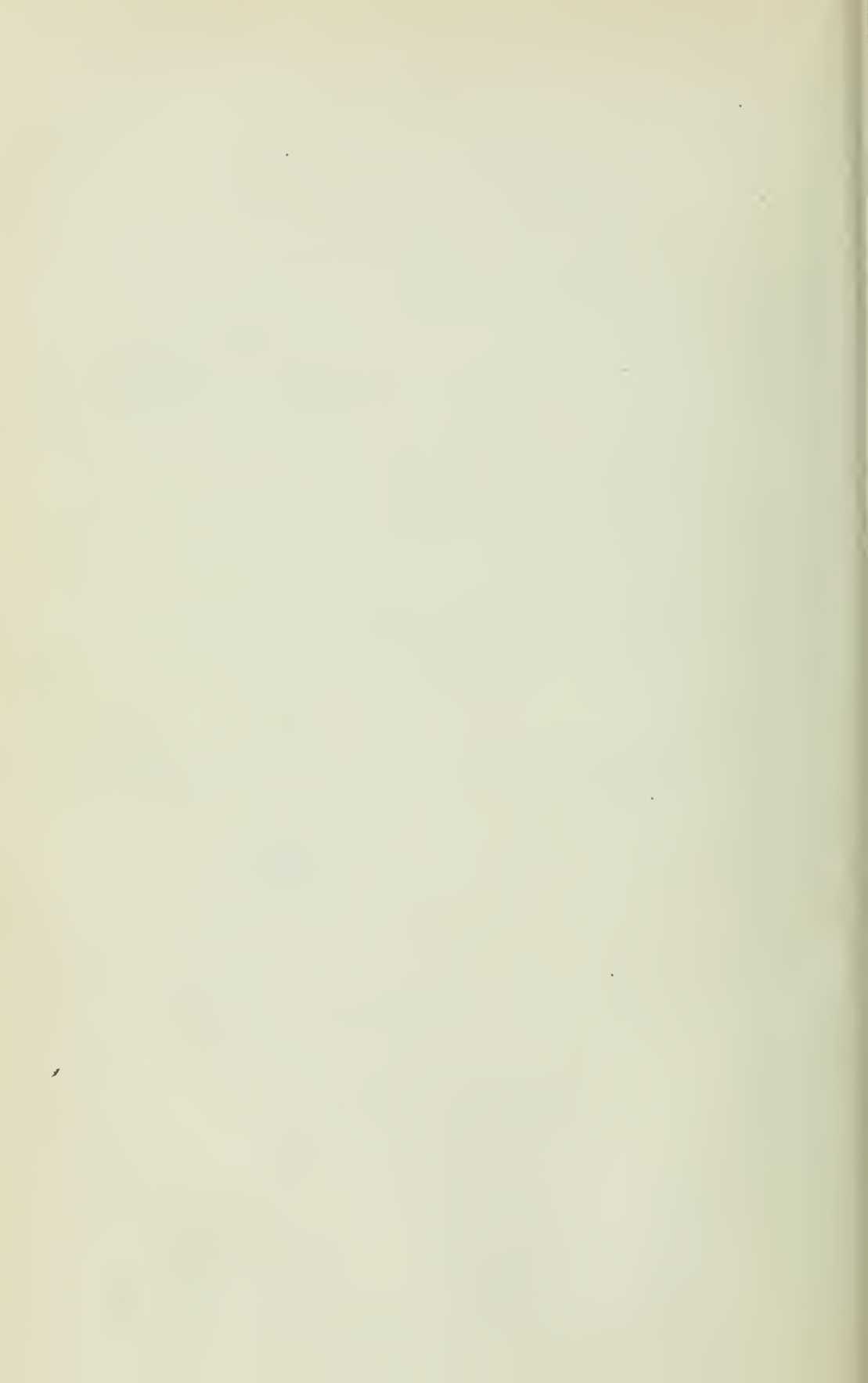
*Chief Engineer Hudson Bay Railway Surveys.*

PART VI

QUEBEC BRIDGE RECONSTRUCTION

REPORT OF CHAIRMAN OF BOARD OF ENGINEERS





## DEPARTMENT OF RAILWAYS AND CANALS,

## BOARD OF ENGINEERS, QUEBEC BRIDGE,

MONTREAL, Saturday, June 11, 1910.

SIR,—I beg to report progress of work on the reconstruction of the Quebec bridge for the year ending March 31, 1910, as follows:—

*Borings.*—An extensive series of borings was made during the summer of 1909 to determine the material in the vicinity of the north and south main piers, and the location of the bed rock. Some nineteen borings were made in all. The result of these borings established the fact that on the north side a new pier could be sunk outside of the present main pier and down to bed rock. On the south side the borings indicated that the foundations upon which the present south pier rested was sufficient to support the enlarged south pier and the loads to be superimposed thereon.

*Tests.*—It was arranged with Professor A. N. Talbot of the University of Illinois, to make a series of tests of nickel steel riveted joints. These tests were carried out with great accuracy, but the result did not show that there was any material advantage in using nickel steel rivets in preference to carbon steel rivets.

*Masonry.*—The contract for the construction of the piers and abutments of the new Quebec bridge was awarded in December, 1909, to the firm of M. P. & J. T. Davis, of Quebec. Work on this contract has proceeded steadily. Preparatory work of considerable magnitude has been performed at the site of the bridge on the north side of the river, such as building trestles, railway tracks, freight elevator, &c., which will be used for the handling of material and supplies. No work has yet been started on the south side. At Pointe a Pizeau the contractor is constructing the caisson for the new north main pier. This work is proceeding rapidly and the caisson will probably be ready for floating in place about July 1, 1910.

*Removal of Debris.*—The contract for the removal of the debris was awarded in December, 1909, to the firm of Charles Koenig & Company, of Quebec. The contractor is making fair progress in the removal of this wreckage and up to the end of March had removed some 1,890 tons, or 21 per cent of the entire work. It is expected to have the wreckage in the vicinity of the main pier removed by August 1, 1910, in order to allow the contractor for masonry to start work at this point.

*Compression Tests.*—A contract has been awarded to the Phœnix Bridge Company of Phœnixville, Pa., for the manufacture and testing of a series of model chords and posts such as will be used in the design of the board now being prepared. Models of eight separate members will be made in duplicate, making sixteen tests in all. The first of these model chords will be ready for testing about May 1, 1910.

*Tension Tests.*—A contract has been awarded to the Phœnix Bridge Company, of Phœnixville, Pa., for the manufacture and testing of fifty nickel steel full size eye-bars, similar to those used in the design of the Quebec bridge now being prepared by the board. The Phœnix Bridge Company will be ready to start the testing of these members about June 1, 1910.

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*Plans.*—The plans of the cantilever design being prepared by the board are progressing rapidly and will be entirely completed and ready for calling for tenders by June 1, 1910. The specifications are also under way and will be ready at that date.

*Alternative Plans.*—Advertisements were inserted in the newspapers in November, 1909, advising contractors that they would be permitted to submit plans of their own in addition to tendering on the plans prepared by the board. I believe it is the intention of several of the bridge companies to take advantage of the privilege granted by the department.

All of which is respectfully submitted.

(Sgd.)

H. E. VAUTELET,

*Chairman and Chief Engineer.*

## PART VII

REPORTS OF CANAL SUPERINTENDING ENGINEERS AND  
OTHERS FOR THE YEAR 1909-10

1. L. S. Pariseau, Acting Superintending Engineer, Quebec Canals.
2. W. A. Stewart, Superintendent, Ontario-St. Lawrence Canals.
3. C. D. Sargent, Resident Engineer, Ontario-St. Lawrence Canals.
4. L. N. Rheaume, Engineer-in-charge, Ontario-St. Lawrence Canals.
5. J. L. Weller, Superintending Engineer, Welland Canal.
6. J. W. LeB. Ross, Superintending Engineer, Sault Ste. Marie Canal.
7. F. B. Fripp, Engineer-in-charge, Sault Ste. Marie Canal.
8. A. T. Phillips, Superintending Engineer, Rideau Canal.
9. J. H. McClellan, Superintendent, Trent Canal.
10. A. J. Grant, Superintending Engineer, Trent Canal.
11. J. H. Devereaux, Lock Master, St. Peter's Canal.



DEPARTMENT OF RAILWAYS AND CANALS,  
OFFICE OF THE CHIEF ENGINEER,  
OTTAWA, July 1, 1910.

A. W. CAMPBELL, Esq.,  
Deputy Minister, Ottawa.

SIR,—I have the honour to transmit herewith the annual reports of the Superintending engineers and superintendents of the several canal works of the Dominion for the fiscal year ending March 31, 1910.

In view of the fact that my appointment as chief engineer of the department was made subsequently to that date, I have considered it best to dispense with commenting in the matter, leaving these reports to speak for themselves.

I have the honour to be, sir,

Your obedient servant,

W. A. BOWDEN,  
*Chief Engineer.*





## QUEBEC CANALS.

SUPERINTENDING ENGINEER'S OFFICE,

MONTREAL, June 21, 1910.

W. A. BOWDEN, Esq.,  
Chief Engineer, Railways and Canals.  
Ottawa.

SIR.—I have the honour to submit herewith the annual report on the works under the charge of the superintending engineer of the Quebec canals, for the fiscal year ended March 31, 1910.

This division comprises the Lachine, the Soulanges and the Beauharnois canals on the St. Lawrence route; the Ste. Anne, the Carillon and Grenville canals on the Ottawa river, and the St. Ours and the Chambly canals on the Richelieu river.

Of these, the Lachine canal is by far the most important on account of its immediate connection with the harbour of Montreal.

I have much pleasure in stating that there was no interruption to navigation on the canals of this division and that the different staffs have performed their respective duties in a very satisfactory manner.

The repairs and renewals on these canals have been done, under the direction of the overseers and superintendents, whereas the works chargeable to capital and income, on the Lachine canal, have been executed under the immediate supervision of Mr. H. R. Lordly, C.E. Works of this kind on the Soulanges, Beauharnois, Ste. Anne, Carillon, Grenville, St. Ours and Chambly canals, have been supervised by the undersigned.

## CANAL STORES.

These stores have been well kept and the book-keeping inaugurated by Mr. P. B. Benoit, a few years ago, for keeping track of the materials and tools purchased for the use of the canals, is now better understood by the officials having charge of these stores.

The comptroller's report is to the effect that only a few errors have been made this year and that all materials and tools have been fairly well accounted for.

## SURVEYS.

The survey of the Soulanges canal has been continued from St. Dominique to St. Antoine bridge, a distance of six miles. This survey is made in order to get an accurate plan showing all the properties, ditches, roads, culverts, highways and farm bridges, &c., situated on each side of the canal and comprised in the strip of land between the Grand Trunk Railway track and the River St. Lawrence. Levels have also been taken for the purpose of getting the necessary data to deal with complaints of flooding said to have been caused by the construction of the canal.

Soundings have been taken in the Pointe des Cascades bay to find a better channel leading to the protection dock in which are kept the spare lock gates of the Soulanges canal.

## DREDGING.

The dredging fleet of the Quebec canals came out of the dry dock, on May 4, 1909, and after one month's work cleaning the bottom of the Lachine canal at Cote St. Paul, Rockfield and at Black Bridge, it was taken to the Soulanges canal, to deepen and straighten the channel between the lower entrance of the canal and the gate protection dock.

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About 8,000 yards of material were taken out of the channel and deposited on the shores of the Cascades bay, in order to protect them against the erosive action of the waves.

From Soulanges, the fleet went to Grenville and worked at cleaning around the locks during the whole month of July.

In August and September the dredge was kept busy at deepening and widening the lower and upper entrances of the St. Ours lock. It then came back to Montreal and continued cleaning the canal prism above lock No. 2 and the side basins off the north side of basin No. 2, until the end of the season.

#### REPAIRS TO DREDGING FLEET.

Two of the vessels have met with serious mishaps during the year. Tug *Frank Perew* broke her propeller wheel while working at Grenville, and the steam derrick broke her boom and her A frame in an attempt to raise an old sunken barge out of the Lachine canal upper entrance. Nearly three thousand (\$3,000) dollars were expended in repairing the damages caused by these accidents.

During the winter the machinery of the steam derrick has been considerably improved and is now fitted to work a clam shell. The old wooden frame on which the machinery rested was replaced by a solid cast iron one and new friction clutches were installed at the place of the positive 'embrayages.'

In addition to the above, the other vessels of the dredging fleet were overhauled and put in a fairly good condition to resume work during the present season.

#### LACHINE CANAL.

Length,  $8\frac{1}{2}$  miles; total rise, 45 feet; 5 locks, 270 feet x 45 feet with 14 feet on sills; 5 old locks 200 feet x 45 feet with 9 feet of water on sills, still available to navigation.

The water was drawn off the canal for general repairs and improvements on April 1 and re-admitted on May 2, a day later than usual.

During this month, the bottom of the locks, weirs and reaches, was cleared of all refuses, stones dropped from scows, water soaked logs, &c., all sluices, gates, valves, protection racks, &c., were overhauled and made right for the navigable season and all stone masonry, as far as was possible, was pointed with cement.

Throughout the whole year the canal grounds, buildings and other structures, roads, sidewalks, fences, culverts, wharfs, booms, ditches and the little River St. Pierre, were kept in a fairly good state of cleanliness and repair, and the telephone and lighting systems were maintained in efficient working order.

The new electric system for operating the lock gates was completed on every lock, old and new, early in the season and has given full satisfaction.

A considerable amount of repair work was done all along the canal, and amongst the chief items are the following:—

#### REPAIRS AND RENEWALS.

*Locks.*—Many broken and missing coping stones were replaced by concrete moulded in place and, in some cases, faced with heavy steel plates.

The portions of the side walls situated above the upper gate recesses at locks Nos. 3, 4 and 5 were raised about three feet with concrete faced with steel plates for additional safety of the large steel freighters entering these locks on their downward trips.

The old wooden anchor blocks for suspending the gates on old locks Nos. 3, 4 and 5, were replaced by heavy cast iron ones set in concrete and permanently secured to the lock masonry by means of large anchor bolts.

In order to provide a suitable foundation for the machinery to operate the lock gate, concrete blocks were built behind the lock walls and opposite the four gate

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recesses of each of the ten locks. These blocks were made sufficiently large to resist the pulling strain exercised by the machinery and were set below the frost line.

*Lock gates.*—The platforms and mullions of the gates for the old and new locks, as far as possible, were renewed and the gates themselves scraped and repainted.

*Spare gates.*—Two pairs of lock gates were built during the year for old locks Nos. 3 and 5 and one pair for new lock No. 3. These were made so as to meet the requirements of the new electric machinery and those already on hand were altered to the same purpose.

*Bridges.*—The eight swing bridges over the canal were kept in good order, some of them replanked with 2-inch oak and partly painted over. The top floors of the nine stationary bridges were renewed and the bridges painted over.

The bridge constructed last year with scrap channels and beams proceeding from the demolition of the old Wellington street bridge, was put in place over the old supply weir at Lachine, by the canal repair men. This work necessitated the levelling of the piers of the old bridge, also the construction of concrete sidewalks on both sides and at each end of the bridge.

*Wharfs.*—The wharf opposite the Canada Sugar Refinery, on the south side of the canal, was substantially repaired and extended up stream 75 feet.

*Mooring posts.*—50 cast iron mooring posts and 100 nigger heads were permanently set in concrete at different points along the canal.

*Slope walls.*—The work of facing with concrete the slope walls of the canal, in the long reach, above Cote St. Paul locks, was finished during the year and there remains only the revetment wall on the south side and some repairs to the vertical walls to complete the work in said reach.

The season's operations have stopped a serious leak through the canal bank at Cote St. Paul.

These works are being done under contract by Messrs. Haney, Quinlan & Robertson.

*Widening and wharf accommodation at St. Henri and Cote St. Paul.*—This work consisting of widening the canal below lock 4 for a distance of 3,300 feet on the north side, and 1,800 feet on the south side, was started by the contractors, the Canadian General Development Company, Limited, at the beginning of the year and pushed very vigorously. All the north wall is finished and only a small portion of the south wall remains to be done. However, it will take all of the coming season to finish the dredging and make the total area of the basin available for navigation.

## INCOME.

*Rebuilding wall north side Basin No. 2.*—This work, which also includes the re-flooring with concrete and scoria blocks of the sheds on Colborne street, was satisfactorily completed by the contractors, Messrs. Quinlan & Robertson.

The wharfs in the immediate vicinity of these sheds were also permanently paved, the walls all rebuilt in concrete and the entire basin is now in first-class condition.

## SOULANGES CANAL.

Length, 14 miles; 5 locks, 270 x 45 feet, with 15 feet of water on sills, total rise 84 feet.

## REPAIRS AND RENEWALS.

*Shops.*—The carpenters' shop was provided with a piercing and mortising machine and the blacksmiths' shop with a large size champion forge, mechanical blower, electric motors, &c. The provision of tools for the machine shops was much added to.

*Locks.*—In order to prevent, as far as possible, the coping stones of the locks and wing walls from being chipped or broken by the heavy steel freighters coming into contact with them, the face of these stones was bevelled six inches and their top arris rounded to a three-inch radius. This work has proven very effective and since its completion, not a stone has been damaged, although collisions of freighters with lock walls have been as numerous as before.

*Lock Gates.*—The platforms of the lock gates have been renewed and the gates themselves scraped and repainted.

*Bridges.*—New floorings of tamarack planks, three inches in thickness were laid on the St. Dominique and Coteau Landing highway bridges and twelve of the farm bridges were recovered with pine planks.

*Buildings.*—The storing sheds, the clerk's lodging and the shops have been provided with spouts and gutters, in order to prevent their foundations from being deteriorated by rain water. The overseer's lodging and outbuildings have been roofed with galvanized iron and repainted. The collector's house at Coteau Landing was considerably repaired.

*Fences and Sidewalks.*—Besides keeping these structures in good repair a new fence was erected to divide off the grounds around the overseer's lodging from a public passage between the highway road and the foot bridge across the tail race of weir No. 3 and a concrete sidewalk, about two hundred feet in length, has been laid from the overseer's house to the above-mentioned foot bridge.

*Ditches and roads.*—The most important ditches were thoroughly cleaned and the road along the canal kept in a fairly good order.

*Slopes.*—The slopes of the canal which had been deteriorated by the wash of passing vessels, have been reformed and faced with flat quarry stones, the quantity of stones used for this purpose amounting to several hundred cubic yards. The top portion of the inner slope of the south bank, on at least 1,400 feet on each side of the electric power house, was reformed and sodded over.

*Canal lands.*—The canal banks were cleaned out of bad weeds twice during the summer and the lock grounds were kept clean throughout the season.

*Electric transmission line.*—The No. 4 wires have been replaced by larger ones, viz.:—No. 0.0 from the power station to about one mile further up the canal, with a view of getting better results in lighting the far end of the canal, and the change has proved very satisfactory.

The old three-wire cables laid across the canal at locks Nos. 1, 2 and 3 were taken up and replaced by single wire cables laid in galvanized iron pipes crossing at the foot of lock No. 2. These cables are now carrying the electric current across the canal at its original tension of 2,200 volts. The transformers on the south side of the canal have been placed in concrete boxes sunk into the ground near the gate and sluice motors.

*Water supply.*—A four-inch cast iron pipe was laid from the canal to the three electricians' lodgings, and the same size pipe laid during the previous year was extended across the canal at the head of lock No. 2 and to the overseer's house.

#### CAPITAL.

*Buildings.*—A small fireproof building (brick and concrete) was erected in the shop yard to house the electric transformers which had been formerly imprudently placed in the garret of the shop building.

*Concrete lining of slopes.*—The inner slope of the south embankment of the canal, for a total distance of 4,215 feet, was faced with a coat of concrete generally 18 inches in thickness. This work was performed under contract by Messrs. Haney, Miller, Quinlan and Robertson, by means of a plan specially designed for the purpose and



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approved by the department. Though the portions of the bank where leakage was most considerable have been protected during the year by this concrete lining, the works will be continued this year until every leak from the canal has been stopped.

*Side walls.*—Towards the end of last summer, a leak through the north bank of the canal through locks Nos. 1 and 2, which had given considerable trouble for some years, became so very threatening that it was found expedient to build a strong concrete wall in front of this bank before navigation would open again. This work was entrusted to Messrs. Haney, Miller, Quinlan and Robertson, who had on the spot a large plant to do the work with. At the end of the fiscal year, the contractors had the excavation done, and nearly all the foundation in place and were in a fair way to complete the wall for the opening of navigation.

## INCOME.

*Mooring posts.*—Ten new cast iron mooring posts inserted in a large mass of concrete were set up on the north side of the canal, where most needed, viz.: opposite the Montreal, Light, Heat and Power Company's intake channel and immediately above St. Dominique bridge. Many of the old posts have been taken up and reset in concrete blocks of much larger dimensions than were those originally used.

*Gate lifting scow.*—A steel scow with two large derricks on its deck, operated by worm gear winches and capable of lifting thirty tons each, has been received at the beginning of the season for the purpose of hanging the canal lock gates. The hull of this scow was built by Messrs. Beauchemin & Co., the derricks by the Phoenix Bridge and Iron Works, Ltd., and the winches by the Hall Engineering Co., and the fitting up was completed by the canal men.

## BEAUHARNOIS CANAL.

The company having this canal under rental have kept it closed to navigation during most of the last season for the purpose of taking borings from the head of the canal to where their power house is to be constructed. The canal was kept practically in the same state as it was during the previous year.

## INCOME.

*Ste. Barbe and Hungry Bay Dykes.*—The work of protecting these clay dykes against the invading waters of Lake St. Francis by building a chain of boulders some distance into the lake was continued during the winter. The protection of the Hungry bay dyke is now completed and will only have to be maintained in future, but the work of Ste. Barbe will have to be carried on a few years longer.

*Macadam.*—The macadamizing of the public road on top of Hungry bay dyke was commenced during the year and about 3,500 lineal feet of road were completed. The crushed stone for this work is purchased under contract from Mr. Alfred Cossette, but the trimming of the road, the placing of the crushed stone and the rolling of it was done by day labour under the supervision of an official of the department.

## STE. ANNE LOCK.

Length  $\frac{1}{2}$  mile, one lock 200 x 45 feet, 9 feet of water on sills, total rise 3 feet. Old lock still available to navigation 200 x 45 with 6 feet of water on sills.

## REPAIRS AND RENEWALS.

Besides the usual repairs to locks, buildings, fences, &c., the following were performed.

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*Guide Piers.*—The top of the two cribwork piers on each side of Baker's channel and of the division pier above the locks were repaired and the mooring posts on the first named pier were renewed.

*Lock Grounds.*—Gravel was deposited in all the alleys and on the ground surrounding the locks and the grass was kept short and in nice clean condition throughout the season.

*Slide.*—A permanent slide for hauling lock gates was constructed and a pair of spare gates were hauled up.

## INCOME.

*Bridges.*—The old wooden bridges over the slips in the wharf below the locks were replaced by others consisting of steel I beams covered with four-inch plank and resting on concrete abutments. A pipe railing was placed on the inner side of each bridge.

*Mooring posts.*—The wooden posts on each side of the new lock were replaced with large cast iron posts with moulded head inserted in heavy concrete mass sunk in the ground below the frost line. There were eight of these posts put in position.

## CARILLON AND GRENVILLE CANALS.

*CARILLON CANAL.*—Length  $\frac{3}{4}$  mile, 2 locks 200 x 45 feet, 9 feet of water on sills, total rise 16 feet.

*GRENVILLE CANAL.*—Length  $5\frac{3}{4}$  miles, 5 locks 200 x 45 feet, 9 feet of water on sills, total rise  $43\frac{3}{4}$  feet.

## REPAIRS AND RENEWALS.

Among the works performed under this heading may be mentioned the following as the most important:—

Maintenance of the canal banks, towpaths and roads, fences, telephone line, &c.

Cleaning ditches, by-washes, culverts, lock grounds, &c.

Painting lock and weir masonry with cement mortar.

Repairing lock gates, bridges, guide and boom piers, scows, &c.

Building new gates for locks Nos. 5 and 7, a wood shed and an ice-house for the use of the canal office.

Cutting new drain between locks Nos. 4 and 5.

## INCOME.

*Public road.*—The macadamizing of the two miles of road along the old abandoned canal at Carillon, part of which had been done during the previous year, was completed.

The stone crusher and the steam roller used on the above work were shipped respectively to the Soulanges canal and to Valleyfield.

*Carillon dam.*—An appropriation of \$15,000 had been voted for this year to complete the repairs to the gap in the Carillon dam, but this work could not be done on account of the water in the Ottawa river remaining much higher than usual. However, all the necessary timber for these repairs has been purchased and delivered on the spot. It is contemplated to resume work as soon as possible during the present fiscal year.

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## ST. OURS LOCK.

Length of canal,  $\frac{1}{2}$  mile; one lock, 200 x 45 feet, 7 feet of water on sills; total rise, 5 feet.

## REPAIRS AND RENEWALS.

All the various structures on the canal have been kept in very good repair during this year except the boom piers below the lock.

These piers have been only superficially repaired, it being understood that they will be replaced by permanent concrete structures within a year or two.

The chief items of work performed here are the following:—

*Guiding Booms.*—All the booms that are stretched along the boom piers in both the upper and lower entrances of the lock, have been taken out of the water and thoroughly repaired.

*Scows.*—The large derrick scow was recaulked and painted and so were the smaller vessels.

*Island.*—The island was kept clean and it was further protected against scouring by placing on its shores about 240 cubic yards of field stones.

*Painting.*—All the buildings and fences were whitewashed. The grounds around the lock and buildings have been kept in perfect order during the whole year.

## CHAMBLY CANAL.

Length, 12 miles; 9 locks, 118 x 22 $\frac{1}{2}$  feet, 6 $\frac{1}{2}$  feet of water on sills; total rise, 74 feet.

## REPAIRS AND RENEWALS.

The telephone and light services on the canal have been very satisfactory everywhere except in the harbour of St. Johns, where the lighting was supplied under contract by the St. Johns Electric Light Co. This company, however, has improved its power plant and better service is expected for the coming year.

The water at St. Johns was extremely low during the greatest part of the summer and on one day, was only 5 feet 11 inches higher than the sills of the guard lock. This unusually low water was attributed to the blasting of a large number of boulders on the crest of the natural dam immediately above the St. Johns rapids. The level of the water in the river above the canal will be watched closely this year, and should it shows signs to become as low as last year, a temporary clay and boulder dam will be built at some suitable point by the Public Works, pending the construction of the permanent dam at Vikerman's Point, below Ste. Therese island.

The canal was kept clean and in good state of repair.

The chief items of work performed under this heading during the year 1909-10, were the following:—

*Banks and Grounds.*—The canal banks and the grounds around the locks and buildings were kept clean of bad weeds and refuse of all kinds, and wherever the slope walls had tumbled down, they were rebuilt. All the farm roads off the tow-path were put in good order and some levelling was done with material taken from the canal bottom near the Canadian Pacific Railway swing bridge, at St. Johns, P.Q.

*Mooring Posts.*—About thirty mooring posts have been renewed at different points along the canal.

*Locks.*—Besides the usual pointing with cement, the gates were scraped and painted. A new pair of gates were put in place at lock No. 9. Two new guiding cribworks were built at the head of lock No. 2.

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*Drains and Weirs.*—Some of the drains were deepened and all the others were cleaned. The weirs have been kept in good working order.

*Bridges.*—A number of bridges had their floorings renewed and nearly every one was given a coat of paint. The approaches to bridges No. 3 and 8, were macadamized and a concrete sidewalk crossing the tow-path was built at bridge No. 8. The end walls of the pipe culverts under the public road to St. Johns, were rebuilt.

*Ditches.*—Several new ditches were cut along and on the canal property, the total length being about three miles.

*Buildings.*—The oldest structures have been pulled down and replaced. All the others have been thoroughly repaired, cleaned, whitewashed or painted.

*Fences.*—About 1,700 lineal feet of new fence were erected along the Deneault drain and about  $3\frac{1}{2}$  miles of the existing fences reset and repaired.

*Scows.*—The dredge and scows belonging to the canal were repaired and given one coat of paint. The machinery of the dredge and derricks was overhauled and somewhat altered with the view of getting better results, and a new bucket was purchased for the dredge.

## CAPITAL.

*St. Johns Harbour.*—The proposed improvements in the harbour of St. Johns consist in the removal of the Donaghy wharf, the extension of the present canal wharf up to the Central Vermont Railway bridge, the building of a new wharf parallel to the said bridge, on the up stream side, the erection of a breakwater and the laying of an inlet pipe line for the St. Johns aqueduct.

That portion of the improvements located above the bridge was completed during the fiscal year 1909-10 by Messrs. John G. Poupore & Co., to whom the contract for this work had been awarded on December 15, 1908.

All the works covered by this contract would likely have been completed by this time, had not the Grand Trunk Railway Co. objected to the department taking possession of their water lot, within which the greatest part of the improvements are located.

*Power house.*—The electric power house at Chambly, the foundations of which were laid during the previous year, was completed, but nothing yet has been done towards installing the electric machinery, there being no appropriation for this kind of work.

## INCOME.

*Bridges.*—The ramps to the Jones bridge across the canal and tow-path at St. Johns, were totally renewed, this work involving the driving of many piles. Ten wooden bridges across the public road from Chambly to St. Johns were replaced with culvert pipes of large diameter. The length of these culverts in all cases is equal to the full width of the road.

*Tow-path.*—The macadamizing of the tow-path along the canal, which had been going on for a number of years, was completed during the fiscal year just ended, and the tow-path from one end to the other is in perfect order.

*Booms.*—The guide booms on the east side of the upper entrance of the canal were totally renewed and covered with two-inch planks.

I have the honour to be, sir,

Your obedient servant,

L. S. PARISEAU,

*Acting Superintending Engineer Quebec Canals.*

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## LACHINE CANAL.

STATEMENT showing the depth of the River Water on the Mitre Sills of new Lock No. 1 at lower entrance, and new Lock No. 5 at upper entrance, during the fiscal year ending March 31, 1910.

Months.	NEW LOCK NO. 1, LOWER SILL.				NEW LOCK NO. 5, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April.....	37	0	20	10	19	4	16	1
May.....	25	1	20	6	21	1	19	2
June.....	24	4	18	6	21	4	17	6
July.....	18	4	17	0	17	4	16	8
August.....	17	10	16	1	17	2	16	2
September.....	16	5	15	7	16	2	15	8
October.....	16	5	14	10	15	10	15	2
November.....	16	1	14	3	15	2	14	10
December.....	21	10	14	6	15	9	14	6
1910.								
January.....	29	10	22	4	16	2	14	6
February.....	25	5	21	9	15	9	13	6
March.....	34	0	22	5	17	0	14	4

## SOULANGES 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 March 31, 1910.

Months.	LOCK NO. 1, LOWER SILL.				LOCK NO. 5, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April.....	21	9	19	6	17	8	16	6
May.....	23	0	20	5	17	7	17	0
June.....	22	9	19	2	17	4	17	0
July.....	19	2	18	5	17	2	17	0
August.....	18	5	17	9	17	0	16	8
September.....	17	9	17	4	16	8	16	4
October.....	17	4	16	9	16	6	16	0
November.....	17	0	16	8	16	3	15	6
December.....	18	2	16	8	16	6	15	6
1910.								
January.....	18	8	17	8	16	8	15	3
February.....	18	9	18	0	16	5	15	4
March.....	19	3	18	4	17	2	15	6

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## 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 March 31, 1910.

Months.	LOCK NO. 6, LOWER SILL.				LOCK NO. 14, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April .....	13	2	11	5	12	7	11	3
May .....	15	8	13	4	12	6	11	10
June .....	15	0	11	9	12	1	11	10
July .....	11	10	11	0	11	11	11	7
August .....	12	0	11	0	11	9	11	4
September .....	10	10	10	0	11	7	11	0
October .....	10	2	9	9	11	3	10	8
November .....	9	8	9	4	11	0	10	4
December .....	10	2	9	5	11	9	10	5
1910.								
January .....	15	0	10	2	11	11	10	4
February .....	20	0	12	10	10	11	9	9
March .....	13	0	11	6	11	10	10	5

## 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 March 31, 1910.

Months.	LOCK NO. 9, LOWER SILL.				LOCK NO. 1, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April .....	20	10	17	1	13	0	10	0
May .....	19	1	16	7	12	9	11	9
June .....	16	5	12	2	11	10	9	5
July .....	12	2	9	10	9	7	8	4
August .....	9	10	8	7	8	6	7	6
September .....	9	4	7	10	8	0	6	9
October .....	8	4	7	6	7	9	6	8
November .....	9	1	7	5	7	6	6	3
December .....	8	3	7	7	7	5	6	10
1910.								
January .....	10	0	7	8	8	2	6	11
February .....	10	9	9	5	8	5	8	0
March .....	16	11	10	11	12	4	8	6

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ST. OURS LOCK.

STATEMENT showing the depth of the River Water on the Mitre Sills of St. Ours Lock during the fiscal year ending March 31, 1910.

Months.	LOCK NO. 1, LOWER SILL.				LOCK NO. 1, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April	21	0	16	0	17	0	12	5
May	19	7	16	3	15	6	13	3
June	17	7	11	5	13	6	10	5
July	11	4	8	11	10	4	8	11
August	9	11	8	1	8	11	8	1
September	9	5	7	7	8	7	7	10
October	9	7	6	11	8	1	7	7
November	8	8	6	6	8	6	7	6
December	10	9	6	9	7	11	7	8
1910.								
January	11	0	8	7	8	10	7	6
February	10	3	8	3	8	9	8	3
March	17	1	9	8	13	4	9	0

STE. ANNE'S LOCK.

STATEMENT showing the depth of the River Water on the Mitre Sills of Ste. Anne's Lock at lower and upper entrances, during the fiscal year ending March 31, 1910.

March.	LOCK NO. 1, LOWER SILL.				LOCK NO. 1, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April	15	1	11	7	16	4	11	9
May	16	6	14	0	20	0	16	0
June	16	1	12	7	19	8	14	0
July	12	6	11	9	13	11	12	3
August	12	4	11	1	12	3	11	1
September	11	1	10	7	11	10	11	7
October	10	8	10	2	11	9	11	3
November	10	4	9	11	11	11	11	3
December	11	2	10	4	12	0	11	5
1910.								
January	11	7	10	2	11	5	11	0
February	10	9	9	7	11	2	10	7
March	12	5	9	6	13	4	10	6



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## CARILLON CANAL.

STATEMENT showing the depth of the River Water on the Mitre Sills of Lock No. 1, at lower entrance, and Lock No. 2, at upper entrance, during the fiscal year ending March 31, 1910.

Months.	LOCK NO. 1, LOWER SILL.				LOCK NO. 2, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April.....	18	5	12	11	18	6	12	4
May.....	22	9	17	8	22	8	17	0
June.....	22	6	15	7	22	4	15	7
July.....	15	5	13	6	15	5	13	6
August.....	15	3	12	11	15	3	12	7
September.....	13	3	12	10	12	10	12	4
October.....	13	1	12	4	12	9	12	0
November.....	12	11	12	3	12	8	12	0
December.....	13	4	12	7	13	10	12	5
1910.								
January.....	13	11	12	6	15	6	12	6
February.....	12	11	12	8	13	6	11	10
March.....	15	3	12	7	14	5	12	0

## GRENVILLE CANAL.

STATEMENT showing the depth of the River Water on the Mitre Sills of Lock No. 3, at lower entrance, and Lock No. 7, at upper entrance, during the fiscal year ending March 31, 1910.

Months.	LOCKS NO. 3, LOWER SILL.				LOCK NO. 7, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1909.								
April.....	22	7	15	4	19	3	12	0
May.....	28	6	22	2	24	11	18	9
June.....	27	11	19	3	23	10	16	6
July.....	19	1	16	4	16	8	13	8
August.....	18	7	15	4	16	0	12	6
September.....	15	6	15	2	12	10	12	4
October.....	15	5	14	8	12	9	12	0
November.....	15	6	14	7	12	10	12	0
December.....	16	4	14	11	12	10	12	4
1910.								
January.....	18	5	15	2	12	4	11	4
February.....	16	4	14	6	12	0	10	3
March.....	17	5	14	2	15	3	10	5

## ST. LAWRENCE CANALS.

OFFICE OF THE SUPERINTENDENT.

CORNWALL, Ont., March 30, 1910.

SIR,—I beg to forward herewith the annual report on the maintenance and operation of the Ontario-St. Lawrence canals for the fiscal year ending March 31, 1910.

The district stretches from Cornwall, at the foot of the Long Sault rapids on the St. Lawrence river, to Presque Isle bay on Lake Ontario, and embraces the Cornwall canal, overcoming the Long Sault rapids; the Farran Point canal, overcoming the Farran Point rapids; the Rapide Plat canal, overcoming the Rapide Plat, and the Galop canal, overcoming the Galop rapids and the Murray canal joining the Bay of Quinté and Presqu'Isle bay. The united length of canal is 28 miles, overcoming a rise of 78 feet in the river.

### THE CORNWALL CANAL

was opened for navigation May 3 and closed December 6, 1909, and was operated during the season without serious interruption or accident.

During the period the canal was unwatered in the spring, all repairs to structures below water were completed. In this time 50 feet of concrete wash wall was put in the south bank at each end of locks Nos. 19 and 20, at the lower ends of locks Nos. 18, 21, and Mille Roches bridge, and in both banks at the upper end of Cornwall bridge wing walls. The wash wall consists of a backing of small stone of about a foot in depth on the slope of the bank, faced with a foot thick of concrete and extending about a foot vertically below normal water level and about three feet above; two concrete culverts across the new bank on the north side between locks No. 18 and No. 19. All the weir valves at locks No. 18, No. 19 and No. 20 were taken out and repaired and refitted; all the fallen rip-rap was replaced.

The earth bank on the north side between locks No. 18 and No. 19 was built up to the grade, and will be completed during the next year with a concrete wash wall.

The rebuilding of the old timber entrance pier and wharf on the north side of the lower entrance to the canal, with a concrete superstructure, was completed, and came through the winter ice-shove in good condition.

All the spare gates for locks Nos. 15 and No. 17 were provided with a pin suspension gear instead of a screw; the valves all refitted and then the spare gates stepped, replacing the ones in use, which were similarly refitted and stored for spares. The same work was done on one pair for lock No. 19, making in all eight pairs of gates overhauled.

A new floor was laid over the weir bridges at locks Nos. 17 and No. 19.

Fender posts to keep side-wheel steamers off the lock copings were erected at locks Nos. 15, No. 17 and No. 18, and made ready for lock No. 19, to be erected during the coming year.

The Cornwall and Mille Roches bridges were painted.

A considerable quantity of stone was procured from neighbouring farmers during the early winter.

Two new fire-box side plates were put in the boiler of the *Alert*.

During the last months of the season extra men were temporarily employed on the operation of several of the locks. Their services did not prove of sufficient value to warrant their being employed permanently.

Thomas Carr, lockman at lock No. 17, was superannuated.

## THE WILLIAMSBURG CANALS

were opened May 1 and closed December 8, 1909, and were operated during the season without serious interruption or accident.

The rip-rap was repaired at different points along the line as required. Two hundred (200) cords of field stone were placed as a toe along the outer bank below the lift lock, Galop canal.

The Iroquois and the Cardinal bridges were painted. This completed the painting of all the bridges in the district.

All the lock gates, watch houses, &c., were painted.

Owing to the rebuilding of the piers at the head of the Galop canal it was necessary to find other storage space for spare gates, and they were taken away and stored near the lock for which each pair was intended.

All the ditches were cleaned out.

Extensive repairs were made to the north lower entrance pier, Farran Point, and the lower entrance pier at Morrisburg was refloored.

Ten iron snubbing posts set in a block of concrete were placed along the approach walls at lock No. 23 and 35, iron snubbing posts were placed between locks No. 27 and No. 28.

The work on Bridge street, Cardinal, was completed; and it is now in condition to be turned over to the municipality.

The work of rebuilding the spare gates for lock No. 24 is well under way, and will be completed early next year.

A large stock of field stone was procured for further protection to the outer bank of the Galop canal.

It has become evident that a considerable amount of cleaning up of the bottom of the Rapide Plat is necessary. An appropriation will be asked for the coming year.

The question of operating and lighting the Williamsburg canals by electric power is being gone into, and it is hoped that a scheme will be ready for next year.

## THE MURRAY CANAL

was opened for navigation on April 12, and closed December 7, 1909, and was operated throughout the season without interruption or accident.

All the bridges, houses, &c., were painted and maintained in good condition.

A new floor was put on the Smithfield bridge, and one new king post put in the Trenton road bridge.

The ditches were kept open and the banks came through the winter in excellent condition.

At the east end the banks were trimmed and re-levelled, and a stretch of 1,000 feet of rip-rap relaid.

The traffic on this canal has increased largely in late years, and further increase is promised. Many large freighters are using this route, but are forced to load light as the canal was built to give only 11-foot navigation. If this traffic is to continue, the question of widening and deepening the canal must be considered.

Appended are statements of water levels and fines and damages.

I am, sir,

Your obedient servant,

W. A. STEWART,

*Superintendent.*

A. W. CAMPBELL, Esq., C.E.,

Deputy Minister,

Department of Railways and Canals,

Ottawa, Ont.

SESSIONAL PAPER No. 20

STATEMENT of Fines and Damages, in connection with Ontario-St. Lawrence Canals, during Season of 1909.  
CORNWALL CANAL.

Lock.	Date.	Name of Vessels.	Damage.	Fine.	Name of Owner.	Remarks.
			\$ cts.	\$ cts.		
15	May 4	'Mary Ellen'		5 00	Ed. Jesner	Paid.
18	June 25	'Wasaga'		20 00	Collingwood Shipping Co.	"
15	" 30	'W. Gleeson'		5 00	"	"
20	July 27	'Odland'	2 18		A. Fredrickson	"
20	" 31	'A. Runions'		5 00	"	"
19	" 31	'G. Manson'		5 00	"	"
21	Aug. 9	'Dundee'		50 00	Inland Nav. Co.	"
15	" 10	'J. Dawson'		5 00	"	"
19	" 16	'F. Bourgon'		5 00	"	"
20	Sept. 16	'John Lambert'	30 00		G. L. & St. L. Trans. Co.	"
19	" 16	'Drooning Maud'	14 92		A. Fredrickson	"
19	" 17	'Meteor'	50 52		James Fendergast	"
20	" 22	'Glengarry'	13 78		H. W. Richardson	"
17	Oct. 11	'J. H. Plummer'		20 00	C. L. & O. Nav. Co.	"
20	" 16	'J. Cretor'	100 00		G. L. & St. L. Trans. Co.	"
18	" 19	'Waccanaw'	5 96		J. L. Croswaite	"
21	Nov. 23	'Newona'	15 00		Redford Steamship Line	Not paid.

WILLIAMSBURG CANALS.

22	June 25	'Ben Harrison'	100 00		J. L. Croswaite	Paid.
24	Nov. 10	'Keywest'	25 00		"	"

MURRAY CANAL.

Ry. Bge.	Oct. 2	'L. S. Porter'	23 25		Hepburn Bros.	Not paid.
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Record of Highest and Lowest Levels of Water on the Ontario-St. Lawrence Canals for Year ending March 31, 1910.

Month.	CORNWALL CANAL.				FARRAN'S POINT CANAL.				RAPIDE PLAT CANAL.				GALOP CANAL.				LEFT LOCK.		MURRAY CANAL.				
	Lock 15.		Lock 21.		Lower Lock 22.		Upper Lock 22.		Lock 23.				Lock 24.		Lock 25.		Lock 27.		Lock 28.		High.	Low.	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.			
1909.																							
April	17.3	15.9	17.9	15.5	18.7	17.3	19.5	18.0	18.7	17.0	18.0	16.2	21.0	19.5	16.8	15.5	17.6	16.1	14.3	12.3			
May	16.9	16.2	16.9	15.7	18.9	17.8	19.9	18.9	18.2	19.1	18.2	18.5	16.8	22.2	20.7	17.5	16.5	19.0	17.4	14.9	13.8		
June	16.5	16.1	17.2	16.5	19.2	18.5	20.2	19.4	19.4	18.6	19.4	18.7	17.9	22.2	21.3	17.8	16.9	18.7	17.9	14.8	14.1		
July	16.4	16.1	17.0	16.4	18.9	18.6	19.8	19.4	19.0	18.5	18.6	17.8	22.1	21.3	17.7	17.0	17.0	18.7	18.0	14.9	14.1		
August	16.3	15.9	16.6	16.3	18.7	18.0	19.6	18.9	18.6	18.0	18.0	17.3	21.5	20.7	17.0	16.5	18.1	17.4	14.4	13.6			
September	16.0	15.4	16.5	15.7	18.4	17.3	19.3	18.2	18.5	17.2	17.8	16.6	21.3	19.7	16.9	15.8	18.0	16.6	13.10	13.2			
October	15.7	15.0	16.0	15.4	17.8	16.7	18.6	17.5	17.7	16.6	17.7	16.0	20.3	19.0	16.5	15.4	17.4	15.8	13.3	12.7			
November	15.3	14.7	15.8	14.5	17.7	16.2	18.4	16.8	17.5	15.7	17.4	15.3	20.6	18.2	16.4	14.4	17.3	14.5	12.9	12.0			
December	16.5	14.6	16.0	14.5	18.3	16.3	19.0	16.8	18.0	15.6	18.5	14.9	21.5	17.9	16.2	14.8	17.0	15.0	12.8	11.9			
1910.																							
January	27.0	16.5	15.8	14.5	17.8	16.0	18.4	16.7	16.9	14.4	15.8	13.6	19.0	16.2	15.4	14.4	15.9	13.2	12.7	12.0			
February	25.3	21.7	15.0	13.8	16.6	15.3	17.1	15.6	16.3	14.1	15.5	13.7	18.5	16.0	15.1	13.8	15.3	13.1	12.6	12.1			
March	23.0	15.5	16.0	14.0	18.0	16.0	18.5	16.4	17.5	15.3	16.8	14.5	20.2	17.2	16.3	14.4	17.2	14.3	13.3	12.6			



## SESSIONAL PAPER No. 20

## RESIDENT ENGINEER'S OFFICE,

CORNWALL, April 1, 1910.

SIR,—I have the honour to submit my annual report on the works under my direction for the fiscal year ending March 31, 1910.

## CORNWALL CANAL.

*Improving Upper Entrance to Lock No. 17.*—Plans and specifications have been prepared and tenders are now being invited for this work.

The work contemplated comprises the construction of a cribwork and concrete approach wall on the north side of the upper entrance to this lock, the widening by dredging of the bottom of canal in the vicinity and the construction of a small waste weir to supplement the present waste weir to the river at this point, the capacity of which is insufficient to control the water in this level when the mills at the foot of the canal are closed.

The work as designed will materially assist vessels of the larger class entering this lock, the approach to which at present is extremely difficult.

*Repairing Washout in South Canal Bank above Lock No. 18.*—A contract was entered into with Mr. Thomas A. Nicholson, of St. Catharines, for this work, which was commenced in August, 1908, and carried on without interruption during the remainder of the season.

The canal was unwatered on March 29, 1909, when work was resumed, and during the month of April the concrete wall previously constructed across the washout was extended eastward to connect with the masonry retaining wall at the head of Lock No. 18, the temporary timber dam which had been constructed in the canal around the washout was removed, and the whole bottom of canal in the neighbourhood of the washout cleaned out and made ready for navigation.

This work was diligently prosecuted day and night under the most unfavourable weather conditions and the canal was opened for navigation on May 3.

The work of filling behind concrete wall, trimming, sodding and protecting the river side of new canal bank across washout was immediately proceeded with and the whole of the works embraced in this contract were satisfactorily completed on October 9, 1909. The final estimate for this work has been paid.

A portion of the south canal bank immediately west of the washout showed signs of weakness, so it was deemed expedient to extend the concrete wall westward for a distance of 465 feet, and accordingly plans and specifications were prepared, and tenders invited for this work. The contract was awarded to Mr. Gordon R. Phillips, of Cornwall.

During the winter months the contractor placed some materials on the ground, erected his plant and made all possible preparations for starting the work as soon as the canal was unwatered. The water was drawn off the canal on March 30, and on the following day the contractor commenced operations. This work will be pushed forward as rapidly as possible during the month of April to insure against any delay to the opening of navigation on May 1.

The work of trimming the high north slope above lock No. 21, under contract with Messrs. J. J. & V. S. Fallon, of Cornwall, and which was commenced during the season of 1908, was finally completed in a satisfactory manner on November 17, 1909.

The final estimate for this work has been paid.



## WILLIAMSBURG CANALS.

A contract was entered into on August 6, 1909, with Messrs. McCoy & Wilford, Ltd., for the removal of the tops of the old wooden piers and bridges across the head and tail race to the weir at lock No. 27, which were badly decayed, and the rebuilding of same in concrete and steel.

The work was commenced and carried on without interruption till the close of the season.

This work will be resumed this month, and I expect will be completed this season.

## MURRAY CANAL.

Several complaints have been received during the past two seasons from the owners of vessels navigating this canal regarding the present depth of water available for navigation. I had some soundings taken near the eastern entrance to the canal, which show that the full depth as originally constructed does not at present exist at certain points.

This canal as originally constructed provided for a depth of only 11 feet at low water stage in Lake Ontario.

Owing to the very large increase in traffic through this canal in the last two years and the large class of boats now navigating it, it will be necessary, I think, in the near future to have this canal placed on the same basis as the rest of the canals on the system and provide for 14-foot navigation at low water, and I purpose asking for a small appropriation to enable me to have surveys and estimates of cost made next season with this end in view.

I have the honour to be, sir,

Your obedient servant,

C. D. SARGENT,

*Resident Engineer.*

W. A. BOWDEN, Esq., C.E.,

Chief Engineer, Dept. of Railways and Canals,  
Ottawa, Ont.

## GALOP CANAL.

SUPERINTENDING ENGINEER'S OFFICE,

OTTAWA, April 7, 1910.

SIR,—I have the honour to submit my annual report upon works of construction and survey in connection with the enlargement of the Ontario-St. Lawrence canals for the fiscal year ending March 31, 1910.

## GALOP CANAL.

UPPER ENTRANCE.

This contract was awarded to Messrs. Murray & Cleveland in November, 1888, and was entirely completed on October 23, 1907.

The final estimate was completed and sent to the department on July 31, 1909. A number of claims have already been submitted to the department and have not as yet been adjusted or disposed of.

## SESSIONAL PAPER No. 20

## REMOVAL OF SHOALS IN RIVER, WEST OF UPPER ENTRANCE OF GALOP CANAL.

This contract was awarded to Mr. M. A. Cleveland on July 25, 1907, and was entirely completed on September 15, 1909, thereby affording an interrupted channel of seventeen feet deep of navigable water between the upper entrance of the Galop canal and the lower entrance of the North channel. The final estimate for this work was completed and sent to the department on January 3 last.

## NORTH CHANNEL AND 'GUT DAM.'

The contract for these works was awarded to Mr. M. A. Cleveland, and commenced on May 14, 1897, and completed on October 1, 1908.

A final estimate of the work was prepared in the Cornwall district office, completed and sent to the department on November 6, 1908.

A number of claims arising out of some material changes made in the original contract for this work still remain to be presented to the department for adjustment.

## GALOP RAPID IMPROVEMENT.

This work under contract with the Gilbert Bros. Engineering Company, Limited, since September 25, 1897, was stopped in September, 1906, the government having decided that no more money would be granted for the work.

Detail plans, cross-sections, diagrams and calculations for the final estimate of this work were completed in December, 1909. A number of disputed claims still remain to be adjusted before the Exchequer Court. In connection with these claims, detail cross-sections and calculations of quantities have also been prepared in the Cornwall office with a view of affording all necessary information bearing upon the claims.

All works in connection with the enlargement of canals in this district and final estimates having been completed, this office was closed on March 31 last.

## IMPROVEMENT OF RIVER STRETCHES BETWEEN CANALS.

I beg leave to draw your attention to the fact that, before the entire completion of this part of the canal system, it was contemplated to afford a more direct navigable route by straightening the river channel stretches between canals. In my report for year ending June 30, 1904, I suggested several improvements in this direction.

The chief engineer reported as follows, viz.: 'As the hydrographic survey service has been transferred from this department to the Marine and Fisheries Department this work, it appears to me, will devolve upon them.'

Since then I must say that the traffic upon the upper St. Lawrence river has increased materially and is assuming greater proportions every year.

A great number of large iron vessels were placed on this route. The many inconveniences and delays encountered in having to cross the river from one side to the other in order to follow the marked channel, have become a source of great drawback to navigation.

It is not a hidden fact that owing to these inconveniences many large crafts have been withdrawn from this route.

Besides, the entrances to several of the canals require to be materially improved.

With a view of overcoming these difficulties I will mention some of the improvements of immediate importance and their requirements. I beg to refer you to the following, viz.:—

1. The eddy at the entrance of the Farran's Point canal lock No. 22 is subject to frequent difficulties to large vessels, and has already proved disastrous to some. The cause of the eddy is due to the fact that on the north side of Croils island, which

1 GEORGE V., A. 1911

belongs to the United States, there are two rocky points projecting into the river against which the current dashes, and the result is that at the foot of the canal water whirls around into the bay immediately below the lock.

The United States not being directly interested in improving the river channel at this point, the only alternative being left to overcome the effects of this eddy would be to cut off a part of Baker's Point immediately below the above mentioned bay, and dredge out a straighter course from the entrance of the lock east, thereby affording a free and uninterrupted flow of the river on the north side of the river.

2. Further up the river is Weaver's Point, situated about two miles west of the village of Aultsville, and which is an objectionable feature to the channel. East and west of it, there is deep water.

To straighten the channel this point could be materially reduced.

3. A mile further up is Prunner's shoal which would require to be dredged out and possibly a small portion of Cook's Point immediately below, in order to form a better alignment.

4. About two miles below Morrisburg, 'Jackass shoal,' which lies in the middle of the river, requires to be removed. This shoal is triangular shape, and although carefully marked, long tows of barges have been known to break up during heavy storms and foggy weather, some of the barges becoming total wrecks.

5. The next objectionable feature that presents itself is at the lower entrance of the Rapide Plat canal, at Morrisburg. The channel at this point could be materially improved by cutting down Rose's Point situated a mile below Morrisburg.

6. At Pine Tree Point, opposite which is the narrowest part of the St. Lawrence, about two miles east of the village of Iroquois.

For some distance below this point the vessels follow the American or south side of the river and have to cross over, opposite Iroquois, in order to get into the entrance to lock No. 25.

Complaints have frequently been made by vesselmen on account of having to follow such a long wandering course instead of a more direct one.

To overcome this, a cut through Pine Tree Point would require to be made, and from thence a continuous series of small shoals would have to be dredged out in order to reach the lock in a more direct course.

7. The last and probably the most objectionable features of the river channel, is at a place about two miles west of Iroquois, where the river takes a sharp turn south of Toussant's Island.

During the navigation season, it has happened frequently that boats get into trouble in making this sharp turn, coming down stream, by running aground on the shoals of Toussant's Island. It is also a fact that owing to this danger, navigation companies have withdrawn their vessels from the St. Lawrence route. This inconvenience would be released by cutting a new channel between the north side of Toussant's Island and Presqn'Isle of the mainland.

I trust that these observations will meet with favourable consideration, that surveys of these places may soon be ordered to be made, and that the department may shortly realize the necessity of undertaking some of the most important suggested improvements.

I have the honour to be, sir,

Your obedient servant,

L. N. RHEAUME,

*Engineer in charge Ontario-St. Lawrence Canals.*

W. A. BOWDEN, Esq., C.E.,

Chief Engineer, Department of Railways and Canals,  
Ottawa, Ont.

SESSIONAL PAPER No. 20

ST. CATHARINES, ONT., March 31, 1910.

SIR,—I have the honour to report upon the maintenance and operation of the Welland canal and its branches for the fiscal year ending March 31, 1910.

## NAVIGATION SEASON.

The canal opened for navigation on April 15 and closed December 20, 1909.

## ACCIDENTS.

One serious accident occurred during the year, the Steamer *Gargantua*, bound up on May 16, 1909, carried away three gates in lock No. 21. Repairs were carried out quickly, spare gates being stepped and navigation resumed in twenty hours.

## IMPROVEMENTS—NEW CANAL.

Mr. Joseph Battle has completed his contract to build dock south of the town of Welland, and the dock is now being used occasionally.

Mr. W. E. Phin has not quite completed his contract for widening the canal about a mile north of Welland. He is now trimming the slopes, and the whole work will be completed in a couple of months.

## PORT COLBORNE.

Messrs. Hogan and Macdonnell have made slow progress with clearing up the excavation of the outer harbour. A good channel, 22 feet in depth, at a time when there is 14 feet of water on the sill of the lock is available to the elevator, and the contractors are now making an effort to have the whole harbour cleared and the contract completed by October 1.

The government elevator did a small amount of business last fall, and it is expected will do a fair business the coming year. The Grand Trunk Railway Company have decided to use it for lightering grain to Port Dalhousie instead of their own old elevator. The railway spur connecting the Grand Trunk with the elevator was completed in 1909 by the department.

## REPAIRS—NEW CANAL.

Ordinary repairs to structures on the new canal were carried out during the year.

Mr. David Walker completed his contract for placing rip-rap on certain portions of the summit level where the old stone had been washed away by high water and the action of waves caused by passing vessels.

A dangerous leak broke through the bank at lock No. 19 weir on July 11, necessitating the drawing of the level, delaying navigation two days, during which time the leak was temporarily stopped, and while the water was out of the canal in March, 1910, an old dry wall at the head of the weir through which the water passed was torn down and rebuilt in concrete.

## REPAIRS—OLD CANAL.

The water was not drawn from the old canal this spring, the foundations of the locks and weirs being considered in safe condition.

A new steel bridge, with concrete floor, was placed over the raceway at lock No. 2.

## WELLAND CANAL FEEDER.

The lock at the junction was unwatered in the spring of 1909, the foundation repaired and new gates placed in position.

The swing bridge across the feeder at Bolton road was entirely rebuilt on a pile and concrete foundation. A new wooden superstructure was built, the bolts and castings from the old bridge at Port Robinson lock being utilized.

## PORT MAITLAND.

Mr. M. J. Hogan satisfactorily completed his contract for renewing superstructure of west pier at Port Maitland with concrete.

## PORT ROBINSON.

The swing bridge across the head of the lock was replaced by the old bridge which formerly crossed the new canal a short distance north of the village, it being cut down to suit its new requirements.

## WELLAND SHIP CANAL.

During the past year a large number of borings were taken along the route of the proposed Welland ship canal mentioned in my last report. This work will be continued during the coming year before a definite line is decided upon.

## GENERAL.

The water in Lakes Erie and Ontario was kept well above normal during the whole of the year.

Mr. John E. Scott, overseer of the feeder division, was superannuated on May 1, 1909.

The following superannuated employees died during the year:—

Michael McCarthy, on June 2, 1909.

John E. Scott, on June 17, 1909.

Aaron Higgins, on December 7, 1909.

Attached is a statement of moneys collected for damages caused to canal property by different vessels; also a statement showing the highest and lowest recorded depths of water on the mitre sills of the locks at Port Dalhousie and Port Colborne for each month of the year.

I have the honour to be, sir,

Your obedient servant,

J. L. WELLER,

*Superintending Engineer.*

W. A. BOWDEN, Esq.,

Chief Engineer, Dept. Railways and Canals,  
Ottawa, Ont.



SESSIONAL PAPER No. 20

## WELLAND CANAL.

STATEMENT showing the highest and lowest depths of water on the Lower Mitre Sill,  
Lock No. 1, New Welland Canal, Port Dalhousie, for the fiscal year ending March  
31, 1910.

Months.	Lower Sill.		Months.	Lower Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1909.	Ft. In.	Ft. In.	1909.	Ft. In.	Ft. In.
April .....	13 8	12 7	November.....	12 8	12 4
May .....	11 6	13 6	December.....	12 4	12 1
June.....	14 6	14 2	1910.		
July.....	14 3	14 0	January.....	12 3	11 11
August.....	14 2	13 9	February.....	12 3	12 1
September.....	13 10	13 2	March.....	12 10	12 2
October.....	13 1	12 7			

STATEMENT showing the highest and lowest depths of water on the Upper Mitre Sill,  
Lock No. 27, New Welland Canal, Port Colborne, for the fiscal year ending March  
31, 1910.

Months.	Upper sill.		Months.	Upper Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1909.	Ft. In.	Ft. In.	1909.	Ft. In.	Ft. In.
April.....	13 2	10 8	November.....	13 7	10 8
May.....	13 6	11 8	December.....	16 0	13 0
June.....	13 2	11 11	1910.		
July.....	13 0	12 4	January.....	12 2	9 8
August.....	12 6	12 1	February.....	11 0	10 2
September.....	13 0	11 4	March.....	11 11	10 6
October.....	14 5	10 6			



1 GEORGE V., A. 1911

STATEMENT of Damages to Welland Canal property during the fiscal year ending March 31, 1910, and the amount paid on account of said damages.

Date of Damage.	Name of Vessel.	Amount of Damage.	Amount Paid.	Date paid.	Where paid.
1909.		\$ cts.	\$ cts.	1909.	
May 12....	Tug 'J. E. Russell'.....	30 00	30 00	May 14....	Port Colborne.
June 2....	Str. 'Corrunna'.....	26 94	26 94	Aug. 3....	Port Dalhousie.
May 16....	" 'Gargantua'.....	6,485 66	5,000 00	May 18....	Port Colborne.
July 29 ..	" 'Robt. Wallace'.....	100 10	100 10	Aug. 24....	Port Dalhousie.
				1910.	
Nov. 11....	" 'Samuel Marshall'.....	100 05	100 05	May 18....	Port Dalhousie.

## SAULT STE. MARIE CANAL.

## SUPERINTENDING ENGINEER'S OFFICE.

SAULT STE. MARIE, Ont., April 1, 1910.

SIR,—I have the honour to report upon the maintenance and operation of the Sault Ste. Marie canal for the fiscal year ending March 31, 1910.

The canal opened for traffic on April 21, 1909, and closed on December 16, having been in operation for 225 days. Traffic was interrupted on three occasions, amounting in all to about 14 days.

Traffic passing this point during the last season showed a very large increase over the figures for 1908, but amounted to about the same as in 1907. The traffic through the Canadian canal, however, showed an increase of 86 per cent over 1908 and 46 per cent over 1907, indicating that a larger proportion of the traffic went through the Canadian canal than heretofore, which was owing, largely, to the fact that the depth of water on the sill of the Canadian lock is about six inches greater than on the sill of the American lock, and also owing to the fact that the approaches to the Canadian canal have been greatly improved.

The usual exchange of ship's reports was made with the St. Mary's Falls canal from which a statistical report has been compiled and published by the United States canal authorities, of the traffic passing this point, and from which the following statement is derived.

## SESSIONAL PAPER No. 20

Year.	Number of Vessels passed.	Registered Tonnage of Vessels.	Total Freight Tonnage.	Cost of Carrying	Estimated	Percentage	Number of Passengers.
				per mile ton.	Value of freight carried.	of Freight carried in Canadian Vessels.	
				Mills.	\$	p. c.	
1855	193	106,296	14,503				4,270
1860	916	408,657	153,721				9,230
1865	997	409,062	181,688				19,777
1870	1,828	690,826	539,883				17,153
1875	2,023	1,259,534	833,465				19,685
1880	3,503	1,734,890	1,321,906				25,766
1885	5,380	3,035,987	3,256,628				36,147
1890	10,557	8,454,435	9,041,213	1 3	102,214,948	3 5	24,856
1891	10,191	8,400,685	8,588,759	1 35	128,178,208	4 0	26,190
1892	12,580	10,647,203	11,214,333	1 31	135,117,267	3 8	25,896
1893	12,008	8,949,754	10,796,572	1 1	145,436,957	4 1	18,869
1894	14,491	13,110,366	13,195,860	99	113,114,503	3 5	27,236
1895	17,956	16,806,781	15,062,580	1 14	159,575,129	3 75	31,156
1896	18,615	17,249,418	16,239,071	1 0	195,146,842	3	37,066
1897	17,171	17,619,923	18,982,755	83	218,235,927	3 0	40,213
1898	17,761	18,622,764	21,234,634	79	233,069,739	2 2	43,426
1899	20,255	21,958,347	25,255,810	1 5	281,364,750	3 1	49,082
1900	19,452	22,315,834	25,643,073	1 18	267,011,959	3 0	58,555
1901	20,041	24,626,976	28,403,065	99	289,906,865	4 0	59,663
1902	22,659	31,955,582	35,961,146	89	358,306,300	4 0	59,377
1903	18,596	27,736,444	34,674,437	92	349,405,014	6 0	55,175
1904	16,120	24,364,133	31,546,106	81	334,562,686	6 0	37,695
1905	21,679	36,617,699	44,270,680	85	416,965,484	5 0	54,204
1906	22,155	41,098,324	51,751,080	84	537,463,454	5 0	63,033
1907	20,437	44,087,974	58,217,214	80	569,830,188	5 0	62,758
1908	15,181	31,091,730	41,390,557	69	470,141,318	7 0	53,287
1909	13,204	46,751,717	57,895,149	79	626,104,173	6 0	59,948

## ACCIDENTS.

On June 9 last, at 1.45 p.m., while the Canadian Pacific Railway Company's steamer *Assiniboia* was in the lock, the *Crescent City* of the Pittsburg Steamship Company entering the lock at the upper end, and Mr. C. S. Boone's dredge No. 10 was lying near the end of the lower north entrance pier the steamer *Perry G. Walker*, of the Gilchrist Transportation Company, entered the lower approach to the canal and attempted to make a landing at the north pier, but through some misunderstanding of the signals the engine failed to reverse in time and the steamer was carried against the south lower main gate, forcing it back and allowing the north gate to fall over. The force of the current carried the *Walker* back, her bow swinging to the south and the *Assiniboia* was carried down against her, striking a glancing blow on the starboard side amidships.

The *Crescent City* made every effort to retard her motion by getting lines out and reversing her engine, so as to give the other vessels time to get out of the way, but she was carried against the *Assiniboia*, striking the latter a glancing blow on the starboard quarter.

The *Walker* also collided with the north and south entrance piers, doing serious damage to both of them.

The *Crescent City* dropped on to the breast wall of the upper main gates, carrying away the timber work from the top and lower face of the wall and also breaking off the corner of the masonry.

Both the *Assiniboia* and *Crescent City* collided with the lower main gates in passing, breaking both gates, the north gate on a line parallel to the timber and the south gate on an oblique line from the centre of the bottom timber to about the centre of the toe of the gate.

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All the vessels made their way to the American side of the river, with the assistance of tugs, where they were examined by divers. The *Assiniboia*, after waiting some hours and making sure that she was not seriously damaged, proceeded on her way to Owen Sound. The *Walker*, after making some temporary repairs was able to proceed up through the American lock on the 12th, on her way to Superior. The *Crescent City* sank at the wharf on the American side of the river, but was raised three or four days later and proceeded on her way to Cleveland.

The upper main gates, which were open at the time of the accident, remained in position for a few moments, but were finally drawn away from the wall by the current and torn from their fastenings.

The auxiliary gates were made secure and then attention was given to the closing of the movable dam, which work was accomplished at 9 p.m., with the exception of six wickets which jammed and one wicket frame which buckled so badly that it could not be used, and was hoisted up out of the way. The six wickets were forced down to place with fifty ton hydraulic jacks.

The space, 6 feet x 25 feet, which should have been closed by the broken wicket and frame, was closed by making a bulkhead of 10-inch x 12-inch x 24 feet pine timbers and forcing it down with hydraulic jacks. In this operation two fifty-ton and one one-hundred ton hydraulic jacks were used, and the bulkhead forced down 24 feet, when it refused to go further, and the final 1 foot of space closed by loading a stick of timber with sand bags and lowering it down until the current took it in to place.

This placing of the bulkhead proved to be a work of considerable difficulty, owing to the fact that the timber had to be forced over the rivet heads and brace rods on the upper side of the frames. Had the surface of the frames been smooth much less difficulty would have been experienced.

The openings between the wicket frames were partly closed with planks, bundles of straw and sand bags and on the afternoon of the 13th it was decided to make an attempt to close the auxiliary gates, the necessary tackle having previously been got ready.

At 3.10 p.m. on the 13th, with the current running at three miles per hour, the auxiliary gates were safely closed, having been severely strained during the operation.

Forty-five minutes after the gates were closed the water had risen to the upper level between the gates and the dam, giving an idea of the amount of leakage through the dam.

The upper and lower guard gates were then closed, considerable difficulty being experienced in closing the latter owing to the large amount of sediment deposited around the gates, and the pumps were not started until 2 a.m. on the 14th. The work of pumping out the lock proceeded very slowly, as the culvert leading to the pumps was badly clogged.

After the lock was unwatered, it was found that the breast wall at the upper main gates was swept clean of sheaves, timber work, &c., and the top corner of the lower side of the wall chipped off. New sheaves, which were on hand, were placed, new timbers put in position and the wall repaired with concrete.

In the bottom of the lock, immediately below the upper breast wall, both thicknesses of planking were torn off for a considerable area and the timbers over one culvert broken for an area of about 10 feet square, apparently by the south main gate when it was carried away. These timbers and planking were replaced.

Thirty-six of the forty gratings, which cover the entrance to the culverts at the upper end, were torn off and carried down into the culverts. These had to be taken to pieces, straightened and replaced.

A very large quantity of sand and stones, carried down from above the lock, was deposited at both ends of the lock, and in the culverts, all of which was removed.

Three light cables, which crossed the lock at the lower end and which were carried away, were replaced.

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All of the work in the lock bottom was completed at noon on the 17th, the water let into the lock, and the work of raising the dam commenced.

The damaged lower main gates were removed and placed behind the lower entrance pier. The upper main gates were located by sweeping, on the bottom in the lower entrance and were raised and placed behind the lower entrance pier.

The lower entrance was swept and a large deposit found immediately below the lock, all of which was removed by a dredge, and a derrick scow with a diver.

The spare upper main gates which were built last spring were stepped at 4 p.m. on the 18th, but owing to some difficulty in the fit of the gates, the lock was not opened for traffic until 5.30 p.m. on the 21st.

The locking of vessels was resumed with the new solid timber upper main gates and the old frame auxiliary gates, the latter being used in place of the lower main gates which were carried away. The only other gates left were the old frame upper and lower guard gates. These frame gates were all in bad condition, more particularly the auxiliary gates, and it was thought best to abandon them and replace them with solid timber gates. A contract was, therefore, entered into with Messrs. Roger Miller & Sons to build seven pairs of gates, that is, one pair of upper guard gates, one pair of lower guard gates, one pair of upper main gates for spare, two pairs each of lower main and auxiliary gates, one pair of each being for spare; so that when the contract for the building of gates is completed the lock will be equipped throughout with solid timber gates and with spare gates for the upper and lower main and auxiliary gates.

A full set of solid timber gates will be stepped by the opening of navigation this season, and all gates will be equipped with fastenings so that when they are pulled back into the recesses they will be locked to the wall, and thus be secured from being carried away in case of another accident of this kind.

The movable dam, which on the whole was a decided success, developed a number of weaknesses, more particularly in the bracing of the wicket frames. This bracing on the lower end of the frames consisted of 1-inch rods, most of which bent, allowing the frames to buckle; one frame being as much as 5 feet out of line at one end.

A great deal of difficulty was experienced in forcing the bulkhead down and also in placing planks over the openings between the frames on account of the brace rods and round rivet heads which interfered. The dam could be much improved by making the upper face of the frames smooth, by countersinking the rivets and placing the bracing on the inside of the frame, so that timber for planks could be forced down, if it became necessary to close the water off completely.

The cribwork of the lower entrance piers, where damaged by the *Walker*, has since been repaired.

At noon on September 5 the steamer *A. H. Hawgood*, belonging to Messrs. Hawgood & Co., of Cleveland, while downbound and crossing over from the south to the north pier, failed to answer her helm readily and came against the north wall with such force as to turn the float up on edge.

A hole 2 feet x 6 inches x 6 inches was made in her No. 1 port tank, which filled and the vessel settled about two and one-half feet to port. She was backed up to the end of the north pier and lightered and was passed down through the lock at 2 a.m. Traffic was not interrupted.

At 10 p.m. on September 25 the steamer *Midland King*, of the Midland Navigation Company, when approaching the lock from below, sheared to starboard, striking the lock wall, crushing in her fender streak and bending a plate between frames on the starboard side.

On November 26, while the steamer *Empress of Midland*, of the Midland Navigation Company was working her way towards the lock, along the north upper entrance wall, with two linemen ashore, the lock valves were partly opened, creating a current. The vessel was checked with her lines, which parted, allowing her to swing across the canal with her stern against the south wall. The captain then attempted to



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swing the stern of the vessel back by working the wheel when the blades of the latter were stripped off by striking the wall.

On December 27, while repairs to the lock were in progress, one man fell from the top of the wall down to the bottom of the lock and was instantly killed, while another man who was on the lock bottom had his arm broken by a falling timber.

#### PRECAUTIONS TAKEN TO PREVENT ACCIDENT TO THE LOCK.

Owing to the accident to the canal on June 9 last it was considered necessary to take precautions to prevent such accident in future, and to accomplish this end rules were posted up in the office to regulate the movement of boats approaching the canal. To see that these rules were carried out and to assist boats in landing at the piers, two extra linemen were appointed and stationed, one on the south pier in the lower entrance and the other on the north pier in the upper entrance.

All vessels are expected to come to a stop at the entrance piers, unless the gates are open for them, and to put linemen ashore. They are then permitted to enter the lock with their lines ready to check the movement of the vessel if necessary.

#### CONGESTION OF TRAFFIC.

Owing to the large increase in traffic during the last season, and also owing to the fact that the movement of vessels is not continuous, some days there being comparatively few boats and on others a great many, it was found impossible on busy days to accommodate all the waiting vessels at the piers, and a number were compelled to anchor out in the river to await their turn. As the place of anchoring is about two miles above the lock and beyond the control of the lockmaster, it became necessary during the latter part of last season to put on a patrol boat to regulate the movement of these vessels, send them to the lock in their proper turn and prevent them from racing for the lock. These arrangements worked well and it would seem desirable in view of the probable large increase in traffic in the future to continue them permanently.

#### INTERRUPTIONS TO TRAFFIC.

On two occasions during the past season the Poe lock of the American canal was out of commission, on the first occasion for three days, when the Canadian canal was working continuous for 101 hours passing 184 vessels of a total net registered tonnage of 553,287; and on the second occasion for eight days when the Canadian canal was in continuous operation for 264 hours passing 460 vessels of a total net registered tonnage of 1,372,145.

On the latter occasion the blockade of vessels proved to be quite serious, there being at one time 87 vessels waiting in the river above and 25 vessels waiting in the river below the canal.

Most of these vessels were delayed from 60 to 100 hours, while four vessels, which were too wide for the Canadian lock, were delayed a week. An estimate of the loss to the vessels delayed, based on their earning capacity, shows a loss of \$250,000.

#### OBSTRUCTION TO NAVIGATION.

A great deal of trouble was experienced during last season by vessels grounding near the end of the north upper entrance wall. Soundings taken at this point showed a deposit of clay and stones about 25 feet in width by 150 feet in length. This shoal was removed by a dredge and derrick scow.

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## PAVEMENTS.

Owing to the numerous accidents which have occurred to lockmen and others in walking along the lock wall where lines from vessels were stretched across, a concrete pavement was constructed parallel to the lock and behind the mooring posts.

## DRAFT OF VESSELS.

It has been found in the past that the marks on the bow and stern of vessels, indicating their draft, do not give the correct draft of the vessels, owing to the fact that loaded vessels will sag amidships as much as six inches when loaded. This has resulted in vessels being locked through with a greater draft than that recommended and the gate cables were frequently cut, causing considerable delay. This suggests the desirability of having all vessels marked amidships as well as at bow and stern, and an attempt was made during last season to have vessel owners mark their vessels in this way.

## RANGES.

At the opening of last season the rear lower entrance range tower was blown down in a storm, and a temporary range was established by using the front range for a back range and erecting a temporary range in front. The rear tower has since been erected and the range restored as before.

In the upper entrance the old range was abandoned during last season owing to the dredging operations which were in progress and a temporary range erected. As the dredging of the channel was completed and a new centre line adopted, two new steel towers were erected for front and back ranges, and the old wooden beacon which formerly acted as a front range will shortly be removed.

## NORTH UPPER ENTRANCE PIER.

This pier, which had been in a bad condition for some time, collapsed at the shore end during the early part of last season, and it was decided to dredge out the old pier and rebuild it on a line continuous with the north entrance wall. Accordingly a contract was entered into with Mr. J. J. Collins on September 18, 1909, to rebuild the pier, but owing to the lateness of the season nothing was done. This work will be commenced, as soon as the weather will permit, this spring.

## NORTH LOWER ENTRANCE PIER.

The portion of this pier above water is in bad condition, and will be required to be overhauled. A portion of this work will be done during the coming season and the remainder carried over another year.

I have the honour to be, sir,

Your obedient servant,

J. W. LEB. ROSS,

*Superintending Engineer.*

W. A. BOWDEN, Esq.,  
Acting Chief Engineer,  
Dept. Railways and Canals,  
Ottawa, Ont.



SAULT STE. MARIE CANAL.

COMPARATIVE STATEMENT since Opening of Lock, Sept. 9, 1895.

	Season.	Increase or decrease over previous season.	Season.	Increase or decrease over previous season.	Season.	Increase or decrease over previous season.
	1895.		1896.		1897.	
Period open	(Sept. 9. Dec. 6.)		May 7. Dec. 10.		April 21. Dec. 14.	
Canadian registered tonnage	125,240		586,571	461,331	398,343	-188,228
U.S. registered tonnage	623,131		3,810,794	3,187,663	3,406,018	-404,776
Total tonnage	748,371		4,397,365	3,648,994	3,804,361	-593,004
Lockages	698		3,042	2,344	2,976	-66
Vessel passages	1,193		5,189	3,996	4,376	-813
Time passing lock	212 h. 27 m.		984 h. 22 m.	771h. 55m.	684 h. 11 m.	300h. 11m.
Average time lockage	18.26 m.		18.42 m.		13.97 m.	
	1898.		1899.		1900.	
Period open	(April 11. Dec. 9.)		April 26. Dec. 20.		April 23. Dec. 16.	
Canadian registered tonnage	403,331	4,988	561,759	158,428	579,528	17,769
U.S. registered tonnage	2,354,606	-1,051,412	2,388,441	33,835	1,616,139	-772,302
Total tonnage	2,757,937	-1,046,424	2,950,200	192,263	2,195,667	-754,533
Lockages	2,520	-456	2,610	90	2,205	-405
Vessel passages	3,712	-664	3,820	108	3,163	-657
Time passing lock	609 h. 30 m.	-74h. 40m.	643 h. 16 m.	33h. 46m.	541 h. 24 m.	-101h 52m.
Average time lockage	14.51 m.		14.73 m.		14.73 m.	
	1901.		1902.		1903.	
Period open	(April 20. Dec. 21.)		April 1. Dec. 20.		April 2. Dec. 13.	
Canadian registered tonnage	776,331	196,803	1,366,087	589,756	1,616,385	250,298
U.S. registered tonnage	1,672,631	56,492	3,238,069	1,565,438	3,145,020	- 93,049
Total tonnage	2,448,962	253,295	4,604,156	2,155,194	4,761,405	157,249
Lockages	2,906	701	3,418	512	3,242	-176
Vessel passages	4,243	1,080	5,169	926	4,418	-751
Time passing lock	724 h. 38 m.	183h. 14m.	925 h. 57 m.	201h. 19m.	883 h. 10 m.	-42h. 47m.
Average time lockage	14.96 m.		16.25 m.		16.34 m.	
	1904.		1905.		1906.	
Period open	(April 30. Dec. 26.)		April 10. Dec. 20.		April 10. Dec. 20.	
Canadian registered tonnage	1,557,335	-59,050	1,799,336	242,001	1,959,186	159,850
U.S. registered tonnage	2,637,090	471,930	3,739,224	1,066,134	4,399,990	660,766
Total tonnage	4,230,425	530,980	5,538,560	1,308,135	6,359,176	820,616
Lockages	3,012	-230	4,031	1,019	4,152	121
Vessel passages	4,092	-326	5,853	1,761	5,913	60
Time passing lock	811 h. 28 m.	-71h. 42m.	1060 h. 38 m.	249h. 10m.	1131 h. 23 m.	70h. 24m.
Average time lockage	16.16 m.		15.79 m.		16.35 m.	
	1907.		1908.		1909.	
Period open	(April 22. Dec. 15.)		April 21. Dec. 15.		April 21. Dec. 16.	
Canadian registered tonnage	2,288,349	329,143	2,556,552	268,203	2,912,586	356,034
U.S. registered tonnage	9,887,633	5,487,643	7,038,389	-2,849,244	14,899,562	7,861,173
Total tonnage	12,175,982	5,816,786	9,594,941	-2,581,041	17,812,148	8,217,207
Lockages	4,596	444	3,667	929	5,046	1,379
Vessel passages	6,153	240	5,344	809	6,420	1,076
Time passing lock	1378 h. 58 m.	247h. 35m.	1258 h. 50 m.	-120h. 8m.	1853 h. 45 m.	594h. 55m.
Average time lockage	18.10 m.		20.60 m.		17.31 m.	

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## RIDEAU CANAL.

SUPERINTENDING ENGINEER'S OFFICE,

OTTAWA, April 1, 1910.

SIR,—I have the honour to submit herewith my report on the Rideau canal for the fiscal year ending March 31, 1910.

Navigation opened at Ottawa on May 1, 1909.

Navigation opened at Kingston Mills on May 1, 1909.

Navigation closed at Ottawa on November 30, 1909.

Navigation closed at Kingston Mills on November 29, 1909.

My last report which was written a few days before the spring freshet commenced last year, stated that I did not anticipate any serious damages therefrom, but I regret to have to record a most serious washout in the bank of the river at Black Rapids lock station, where the new dam abutted into it, on the Gloucester side of the river—a washout which delayed through navigation to Ottawa until the middle of June, as the break could not be closed until the water had subsided.

Particulars of this accident will be found under the heading of 'Black Rapids' in this report.

With the exception of the delay at the above mentioned point, navigation was uninterrupted for the whole season.

This year the spring freshet commenced the first week in March—a phenomenally early break up; earlier in fact than has ever been recorded in the history of the canal, and the water rose so fast that the work of rebuilding the west bulkhead at Hogsback (which was going on at the time) had to be temporarily abandoned, as it could not be completed until after the water had subsided. The apron is still too deeply submerged to resume work, but we have a month yet before navigation opens, and as the water must surely fall now that the freshet is subsiding, I have no anxiety about having the structure ready for navigation by May 1; in fact one week will be sufficient to raise all the bents, as all the sills except one are in place and the rest of the structure is framed ready for erection.

The principal works and repairs executed along the line of the Rideau canal during the past fiscal year ending March 31, 1910, are as follows:—

## OTTAWA LOCK STATION (8 Locks and Basin).

Two pairs of lock gates for locks Nos. 5 and 6 were framed last summer, and are now being hung in place. The wide flight of stone steps on each side of lock No. 3, which had been dangerous on account of the disintegration of the stone, were covered last summer from top to bottom with a three-inch coat of fine concrete. The result is most satisfactory as this cement coating has stood the frost of last winter without a crack; and now these two fine flights of steps—which are sixteen feet wide, and each of which contains 20 steps—are as good as new. Sundry small repairs were made to the wharfs and roads round the canal basin.

A large quantity of stone was taken from the excavation for the new Grand Trunk railway hotel at the head of the locks—the stone having been given free by the contractor, Mr. John O'Toole, and taken on our scows to Black Rapids lock station; and there used for filling the new cribs built last winter. The Grand Trunk Railway Company is now, by permission of the Department, taking down the old cribwork on

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the east side of the basin, and building in its place a fine concrete retaining wall, from Sappers to Laurier bridges.

OTTAWA EAST SWING BRIDGE.

The approaches and swing span were replanked. An iron pipe railing on cast standards was erected by contract with the International Marine Signal Company, of Ottawa. Small repairs were made to the timber rest piers, and the bridge and the bridge keeper's house were painted.

BANK STREET SWING BRIDGE.

The east pier of the bridge (which was being built when I made my last report) was completed. The turntable was repaired and small general repairs made. The bridge keeper's house and the bridge were painted.

CONCESSION STREET SWING BRIDGE.

Small repairs were made to the flooring of the bridge, and the bridge and the bridge keeper's house were painted. The roadway between this bridge and the St. Lawrence and Ottawa Railway bridge (Canadian Pacific Railway) across the top of Dow's lake dam, was raised and graded with gravel; the work being done by contract with Mr. Owen McCarten, of Billings Bridge, Ont.

HARTWELL'S LOCK STATION (2 Locks).

The lockmaster's and lock labourers' houses were painted. About 900 feet of the eastern side of the cut were rip-rapped with stone to save the banks, and sundry repairs were made to the station generally.

HOGSBACK LOCK STATION (2 Locks and 1 Swing Bridge).

The lower end of the apron below west bulkhead was extended about 70 feet down stream, and has answered its purpose well; but it requires to be still further carried out this summer, to reduce the steep pitch of the water and ice during freshets, to save the scouring out of the soft shale rock at its foot. A new double boom was placed across the bay above the bulkheads to anchor the ice. A considerable length of the cut was rip-rapped with stone to save the erosion of the banks, which work has been gradually carried on for the past few years, and I hope this summer will complete it.

The west bulkhead which had become unsound from age, was taken down, the new one having been framed last year. The front of this structure was excavated and sheeted down to the rock; but before the bents could be erected, the unusually early break up, which occurred the first week in March, fully one month ahead of its usual time, flooded the site of the work, and we were consequently forced to cease work temporarily, until the water subsided. All the new sills, excepting one, were in place, and nothing remained but to erect the bents upon them and connect them with the roadway at each end.

This could have been done in a week, had the water not stopped the work; and it will be finished before navigation opens. No damage of any kind occurred, and we saved all the framed timber which was lying ready to erect. The only inconvenience occasioned was the interruption to highway travel across the bulkheads, but as this roadway is not recognized as a bridge (having been always posted 'No thoroughfare' at each end), no one has any real grievance at being turned back; but in order to protect the public, barriers have been erected at each end, and a night watchman placed in charge until the crossing is re-established.

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The rest and protection piers above the upper lock were rebuilt, the lockmaster's house was painted, and sundry repairs were made to the station in general.

## BLACK RAPIDS LOCK STATION (1 Lock).

As stated in the preamble to this report, very serious damage was done by the washing out of the river bank on the Gloucester side, at the point where the new dam was built into it. The freshet in 1909 was the highest ever recorded, and the water cut round the end of the dam abutment and into the banks (which are nothing but sand) to such an extent that the dam was left standing about 200 feet out in the river. An enormous quantity of sand was cut out of the banks which are about 25 to 30 feet high; but fortunately it found its way into deep portions of the river below, and shoals were formed away from the channel, so that no obstruction to navigation arose from this cause.

To close this breach in order to impound the water for navigation, a coffer dam of square timber cribwork had to be put in, extending diagonally upstream for 375 feet; and great difficulty was experienced in connecting it with the shores, on account of the sand formation, which was eaten away by the water whenever a junction with the banks was made. Eventually, however, this was done; much vexatious delay having occurred whilst waiting for the first volume of the freshet to subside, and the cribs were placed in position and loaded with sacks of sand (no stone being available).

The next difficulty was the caulking of these cribs, as after they were sheeted with 3-inch plank, the water continually scoured underneath them, as the bottom was also fine sand and boulders; but in the end the leakage was finally overcome by means of large canvas tarpaulins, each being 200 feet x 40 feet, which were nailed to the sheeting and held out in the water by ropes and gradually allowed to be drawn down by the suction of the leakage. Sand and clay were then piled on top of the canvas, and the leakage stopped sufficiently to maintain navigation and allow of the repairs being made to the main dam.

All this work involved a delay to navigation of about six weeks, but when it is remembered that the coffer dam had to be built in the middle of a rushing river over 12 feet deep, with no anchorage but sand hills, no foundation but sand, and no ballast but sand bags; and also the fact that all the materials used in its construction had to be transported eleven miles to the site of the work over country roads, and at a season of the year when all roads are at their worst, I think it will be admitted that no undue delay was occasioned to the boatmen.

By direction of Mr. M. J. Butler, late chief engineer, the main dam was extended 100 feet, and a wing crib was built both above and below the dam, and up the gully into the bank.

The whole of the main dam has been covered with  $\frac{3}{4}$ -inch steel plate; the plate having been purchased from Messrs. Drummond, McCall & Company, of Montreal, and the contract of laying the same having been awarded to the International Marine Signal Company of Ottawa. The new dam has stood the present freshet well, but there is a troublesome leakage under the wing crib at the point where it turns up the gully. I am of the opinion that 10-inch x 12-inch square piles are required all round the face of this portion of the crib, as sheeting cannot be driven down by manual power through the sand and boulders; but a pile driver can drive square timber down, and in this way I hope check the leakage. I have sent our pile driver down to the spot, and the piles will, I hope, arrive in two weeks, which will give us two weeks to drive them before navigation opens, after which it is proposed to deposit clay by means of a dredge and dump sews to completely staunch all the leakage.

The stone filling for all this work, amounting to over 3,000 cubic yards was supplied from our own quarry; but taken out and delivered into the cribs by contract with Mr. Bruley, of Billings' Bridge, Ont. The lower gates of the lock were rebuilt and the lower mitre sill renewed and concreted—the latter work necessitating the



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pumping out of the lock. The waste weir bulkhead was also renewed, and a new stone filled cribwork facing was built from the lock to the waste weir. The lay-by piers above the lock were also rebuilt, and repairs were made to the ice breakers in the river.

#### LONG ISLAND LOCK STATION (3 Locks and 1 Swing Bridge).

A new boom was framed and laid at the head of the island, and repairs made to the tops of the piers at the same place. Repairs were made to the piers at the White Horse dam, and sundry small repairs made to the station in general.

#### MANOTICK BRIDGE.

The bridge was painted by the bridge-tender, and sundry repairs made to the flooring and piers.

#### WELLINGTON BRIDGE.

Sundry small repairs were made to the flooring of the bridge by the bridge-tender. Next winter, however, the entire superstructure requires to be raised off the piers, and the latter rebuilt down to low water mark.

#### BECKETT'S LANDING BRIDGE.

No repairs were made to this bridge.

#### BURRITT'S RAPIDS LOCK STATION (1 Lock).

Extensive repairs were made here this winter to the south chamber wall and both upper wings of the lock, which were taken down and rebuilt—the lock having to be dammed above and below and pumped out for this purpose.

The lower gates were also renewed. A considerable stretch of the north side of the upper cut was faced with stone and filled up where it had been washed away—thus continuing the work commenced last year. Sundry small repairs were made to the station in general.

#### BURRITT'S RAPIDS BRIDGE.

The only repairs at this bridge consisted of pointing the masonry of the piers, which work is still in progress.

#### NICHOLSON'S LOCK STATION (2 Locks and 1 Swing Bridge).

Two pairs of lock gates were renewed, *i.e.*, the upper gates of the lower and upper locks respectively, and two new sluice frames were put in. The upper wing walls, upper sill and gate recesses of the upper lock, were taken down and rebuilt with new stone. The lower sill of the upper lock was repaired, concreted and planked, and the chamber walls grouted. The old timber waste weir at the head of the upper cut was taken out and a masonry weir built in its stead. Sundry small repairs were also made to the station in general.

#### CLOWES LOCK STATION (1 Lock).

Small repairs were made to the station generally, and some stumps were blasted out of the river above the lock, during the winter.

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## MERRICKVILLE LOCK STATION (3 Locks, 2 Basins, 2 Bridges).

The north waste weir, which was slightly damaged by ice a year ago, has been repaired; as were also the stop-log piers at the head of the cut. Some new stop-logs were framed, and sundry small repairs were made to the station in general.

## KILMARNOCK LOCK STATION (1 Lock and 1 Bridge).

The timber bulkhead was taken down and rebuilt during the winter, and repairs made to the back dam in the break ground. This dam is merely a pile of stones and cannot be made tight within a reasonable expenditure. A new dam should be built further up the river; and I intend making an examination of the river for this purpose during the coming summer.

## EDMONDS LOCK STATION (1 Lock).

The by-wash was re-covered and planked. Two new swing bars were framed and placed on the lock gates. Some wire fencing was erected round the lock house, and sundry small repairs were made to the station generally.

## OLD SLY'S LOCK STATION (2 Locks and 1 Bridge).

Sundry small repairs were made to the station in general.

## SMITH'S FALLS COMBINED LOCK STATION (3 Locks, 1 Basin, 2 Bridges).

The old frame addition to the lock house was torn down and rebuilt, and the whole building re-shingled. A new flight of steps was built on the south side of the upper lock near the band stand to save the lock slopes. A new circular rest wall of concrete was laid under the heel of the swing bridge, and two new swing bars were framed for the lock gates. The work of filling up the south side of the basin was continued last year as usual, and now a large area of this useless stretch of water is filled up, and is proving a great saving in water, and also has reduced the leakage at that point. The work will be continued this year.

## SMITH'S FALLS DETACHED LOCK STATION (1 Lock and 2 Bridges).

A new wharf was built at the head of the lock, which will prove of great value to the boats and also be the means of saving much of the water which has hitherto been required to fill the basin. This will not be required as much now as the boats need not go down into the basin, as they can stop at the new wharf. Our dredge excavated a small channel above the dam in the vicinity of the boat houses, in order to give the numerous motor boats a means of access to the main channel. The turntable of the swing bridge was repaired, and sundry small repairs were made to the station generally. The location of the Canadian Northern railway which was laid out along the dam and across the lock, having been objected to on account of being too close to our works, was changed, and is now located about 400 feet above the lock where it will not interfere in any way with navigation.

## POONAMALIE LOCK STATION (1 Lock).

The upper lock gates were taken out and repaired, and small repairs were made to the upper sluices. The stop-log piers at the head of the upper cut were also rebuilt from low water line up. The foot of the long concrete dam was repaired where it has been damaged by ice and water, and sundry small repairs were made to the station generally.



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I may state that the lockages at this station have increased very largely during the last two seasons; the total number last year being 3,076, an increase of nearly 500 over 1908, and of nearly 900 over 1907.

BEVERIDGES LOCK STATION (2 Locks and 1 Bridge).

The back dam was repaired with clay. The swing bridge was re-planked with 3-inch plank, and some culverts in the cut were repaired. Repairs were made to the lock sluices, and the cribwork protection piers below the lower lock in Rideau lake, which had been heaved up by ice, were replaced and respiked and refilled with stone. Small repairs were made to the lock house and to the station generally.

PERTH BRANCH (Basin and 4 Bridges).

Gore Street bridge was painted. The culvert at Craig Street bridge was repaired, and the roadway from Beckwith street bridge to the Canadian Pacific railway car shops was graded and gravelled. About 900 feet of dry stone walling was built along the face of the canal to protect the clay banks, and sundry small repairs made to wharfs and basin. Bridge-tender Russell deserves the greatest credit for the improvements he has made to the basin and surroundings (which are in the heart of the town), in the shape of the grass lawns and flower beds which he has made and which beautify the spot, and which are much appreciated by the residents of Perth.

BOB'S LAKE RESERVOIR DAM.

No repairs were made last year to this dam, which feeds the Tay river, and which is situated about 24 miles above Perth.

OLIVER'S FERRY BRIDGE.

Sundry small repairs were made by the bridge-tender.

THE NARROWS LOCK STATION (1 Lock and 1 Bridge).

The old by-wash was taken out and a new one framed and put in. Sundry small repairs were made to the station generally.

NEWBORO LOCK STATION (1 Lock and 1 Bridge).

Both the upper wing walls of the lock, the gate recesses, and portions of the chamber walls, were taken down and rebuilt. For this work the lock had to be dammed above and below and pumped out. The work was delayed by the early freshet this year, which filled up the lock; but the dams were raised and strengthened, and the work completed after about ten days delay. Both the upper and lower mitre sills were re-bolted, concreted and planked. Repairs were made to the piers at the head of the cut, and also below the lock. Two small timber piers were built in the lake below the lock, to mark the shoals at Whitehall and Fingerboard islands respectively.

CHAFFEY'S LOCK STATION (1 Lock and 1 Bridge).

One pair of lock gates were renewed, and the swing bridge across the lock was rebuilt. Two new swing bars were framed. Sundry small repairs were made to the lockmaster and lock labourer's house.

DAVIS'S LOCK STATION (1 Lock).

The lay-by piers at the head of the lock were taken down and rebuilt, and the dam was protected in front of the storehouse by means of cribwork. Sundry small repairs were made to the station generally.

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## JONES'S FALLS LOCK STATION (4 Locks, 1 Basin, 2 Bridges).

Two of the lock recesses were concreted and repaired. The swing bridge across the upper lock was taken down and rebuilt. Considerable gravel and debris were cleaned out of the lower lock by our diver, who also repaired the lower mitre sill. A small wharf was built at the head of the upper lock for the accommodation of small boats. The two bridges were painted and sundry small repairs were made to the roads and to the dam, and to the station in general.

## MORTON DAM.

Some gravel was placed in front of the dam, and small repairs were made to the planking and handrailing. .

## BRASS' POINT BRIDGE.

No repairs were made to the bridge last year.

## BREWER'S UPPER MILLS LOCK STATION (2 Locks, 1 Basin, 1 Bridge).

A considerable quantity of woven wire fencing was erected from the 'Roundtail' to the end of the reserve on the north side of the canal—a distance of over a mile. This was rendered necessary on account of long standing friction between the lock officials and the owner of the land adjoining—each side paying half the cost of the same. Sundry small repairs were made to the station in general.

## BREWER'S LOWER MILLS LOCK STATION (1 Locks, 1 Bridge).

The old swing bridge across the lock was taken down and rebuilt; and sundry small repairs were made to the station in general.

## KINGSTON MILLS LOCK STATION (4 Locks, 1 Basin, 2 Bridges).

The long bridge across the waste water channel, which was built of timber on trestle bents, was taken down, and a fine structure of steel on concrete piers substituted therefor. The contract for the substructure, consisting of two concrete abutments, rip-rap, dry stone walling, roadway, fencing, &c., &c., was awarded by contract from the department to Messrs. Fallon Bros., of Cornwall, Ont., and the steel superstructure was awarded to the Hamilton Bridge Works. The old addition to the block-house was partly taken down and enlarged, and sundry small repairs were made to the other lock labourers' houses. Three hundred cubic yards of stone were quarried and placed where required on the embankments by contract with Mr. J. Keenan, of Kingston Mills. Small repairs were made to the sluice frames and to the station generally. The basin wall is showing signs of age and will require to be rebuilt next year.

## GENERAL.

The usual spring repairs of pointing and grouting the lock masonry, painting of gates and bridges, &c., were made by our lock labourers. The stone for the repairs to the locks last winter was taken out and cut in Westport quarry, where we moved a year ago from Elgin, as the latter quarry was exhausted. The stone is of most excellent quality, and the quarry itself is much more conveniently situated with regard to shipping facilities and consequently the stone costs us far less than when procured at Elgin.

All our large supplies were furnished by tender, the various contracts being awarded by the department as follows:—

Lock gate and bridge timber (B.C. fir), to the Hurdman Lumber Company.

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Smaller dimension timber and plank to the Hurdman Lumber Company, the W. C. Edwards Company, Limited, the Ottawa Lumber Company, and the Stewarton Lumber Company.

The Portland cement required was awarded to the Lakefield Portland Cement Company.

The paint was awarded to Messrs. Brandram-Henderson, Limited, of Montreal; and the oil to McColl Bros. & Company, of Montreal.

## DREDGING PLANT.

The dredge *Rideau* was employed all last summer in making a 50-foot channel through the drowned lands across Sawlog bay, and she has completed about half the distance. This cut when completed will save over one mile in distance from Poona-malie to Oliver's Ferry. The dredge also excavated a small channel in front of the boat houses at the head of the detached lock at Smith's Falls and wintered in one of the locks at Smith's Falls. A new swinging engine was purchased for her from Messrs. Beatty & Company, of Welland; and a new coal scow was built for her this winter at Ottawa. The tug *Loretta* was employed last season towing scows and delivering timber, stone, paint, oil, &c., along the canal; and also on inspection work.

She has been supplied with a Nash Century steam steering engine, which is not yet fitted up, although it is on board.

The following is a statement of the highest and lowest water on the lower mitre sills of the lower locks at Ottawa and Kingston Mills lock stations respectively, from April 1, 1909, to March 31, 1910:—

OTTAWA, LOCK NO. 1.				KINGSTON MILLS, LOCK NO. 47			
Highest.		Lowest.		Highest.		Lowest.	
Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Apr. 30.....	18 7	Apr. 1.....	9 6	Apr. 28-30.....	8 9	Apr. 1.....	8 2
May 28-29.....	26 10	May 1.....	18 7	May 31.....	9 0	May 11-18.....	8 8
June 1.....	26 2	June 30.....	15 5	June 1-5.....	9 0	June 29-30.....	8 9
July 1.....	15 2	July 23.....	11 7	July 1-2.....	8 9	July 26-29.....	8 6
Aug. 1.....	14 9	Aug. 30-31.....	10 0	Aug. 1-5.....	8 7	Aug. 22-31.....	8 4
Sept. 21-23.....	10 2	Sept. 3-6.....	9 9	Sept. 1.....	8 4	Sept. 23-30.....	7 8
Oct. 7-8.....	10 0	Oct. 18.....	9 0	Oct. 11-12.....	7 9	Oct. 28-31.....	7 4
Nov. 25-27.....	9 10	Nov. 7-8.....	9 1	Nov. 1-14.....	7 4	Nov. 15-30.....	7 3
Dec. 15.....	10 10	Dec. 9-13.....	9 8	Dec. 1-3.....	7 2	Dec. 24-31.....	6 11
Jan. 24-26.....	9 9	Jan. 20.....	8 10	Jan. 1-11.....	6 11	Jan. 28-31.....	6 8
Feb. 1.....	9 5	Feb. 27-28.....	8 1	Feb. 20-28.....	6 8	Feb. 7-10.....	6 6
Mar. 31.....	12 9	Mar. 1-3.....	8 2	Mar. 30-31.....	8 0	Mar 1.....	6 8

I have the honour to be, sir,

Your obedient servant.

A. T. PHILLIPS, *M. Can. Soc. C.E.*,

*Superintending Engineer.*

W. A. BOWDEN, Esq., C.E.,

Acting Chief Engineer Canals,  
Ottawa, Ont.

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## TRENT CANAL.

SUPERINTENDENT'S OFFICE,

PETERBOROUGH, May 26, 1910.

SIR,—I have the honour to submit herewith my annual report of the maintenance and operation of the Trent canal for the fiscal year, from April 1, 1909, to March 31, 1910.

The extent of the canal completed is the same as last year, viz., 160 miles.

Navigation opened and closed on the different stretches, as follows:—

Division extending from Lake Simcoe to Fenelon Falls, opened May 1, closed November 1.

Division extending from Fenelon Falls to Lakefield, opened April 21, closed November 20.

Division extending from Lakefield to Peterborough, opened May 10, closed November 15.

Division extending from Peterborough to Healey's Falls, opened April 17, closed November 27.

The following work was carried out during the year:—

## HASTINGS.

The highway bridge was replanked.

## RICE LAKE.

A new pier was built for the lighthouse at the mouth of the Otonabee river. The wharf at Hall's Landing was repaired.

## OTONABEE RIVER.

Considerable dredging was done at Yankee Bonnet. There is now a splendid channel with nine feet of water at this point, which heretofore was the most dangerous place between Peterborough and Rice lake.

## LOCK NO. 7, (PETERBOROUGH).

The lock and bridge were repainted. A small house was erected for the bridge-tender.

## PETERBOROUGH HYDRAULIC LIFT LOCK.

The lift lock was repainted.

## PETERBOROUGH TO LAKEFIELD.

The canal from the Peterborough lift lock to the golf grounds, a distance of one and one-half miles, was rip-rapped on both sides. From Nassau to Lakefield, a distance of about six miles, the east bank of the canal was rip-rapped. About three miles of fencing was built on this section. The lockhouses were repainted and considerable dredging and drilling were done at the entrance to the lock at Lakefield. A new slide and pier were built at No. 5 dam.

## LAKEFIELD.

A shelter 20 feet x 30 feet, for the accommodation of the public was built at the Lakefield dock. The lockmaster's house was repaired and repainted.

## LAKEFIELD TO YOUNG'S POINT.

The booms separating the steamboat channel from the lumbermen's channel, between these two points, a distance of six miles, were repaired and new chains placed on the booms.

## YOUNG'S POINT.

The office was rebuilt and painted. New arms were placed on the lockgates, and the grounds were levelled off.

## STONY LAKE.

A number of private wharfs, that became submerged, by reason of the action of the government in raising the water level in Stony lake for navigation purposes, were raised proportionately. The steamboat channels in the lake were buoyed out.

## BURLEIGH FALLS.

The bridge over Perry's creek was rebuilt, as well as the approaches thereto.

## LOVESICK.

The lockmaster's house was rebuilt. The lockgates from the water up were rebuilt.

## BUCKHORN.

The new concrete dam was taken over from the contractors. The government property was repainted.

## BOBCAYGEON.

A new house for the lockmaster was built at Bobcaygeon, and certain minor repairs were done to the dam.

## CHEMONG LAKE.

The booms were repaired. An addition to the swing bridge pier was built.

## SCUGOG RIVER.

The Scugog river from Sturgeon lake to Lindsay has been kept in good condition for navigation purposes. All the lighthouses were painted and put in good order, a number of new buoys were placed in the river, and the sunken logs were removed from the steamboat channel.

## LINDSAY.

The rest pier at the south Lindsay street bridge was repaired and the bridge was replanked.

## FENELON FALLS.

A great deal of work was carried on at Fenelon Falls during the past year. A new concrete walk was put in at the lock, some sodding was done, and a water works



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system for watering the grass was installed. A concrete walk was laid in front of the lockmaster's house, and the grounds levelled up. The work of deepening the channel from Cameron lake to the lock was continued, and a turning basin was completed east of the railway bridge. This is 200 feet long by 175 feet wide. From the Grand Trunk railway bridge to Cameron lake, a distance of about 800 feet, there is a splendid channel. This is fifty feet wide at the railway bridge and about two hundred feet at the entrance to the lake, and has a depth of nine feet. The average depth of the material dredged was about five feet. The material was used to make a breakwater on the north side, from the railway bridge to the lake, and on the south side, from a point about 350 feet below, to the railway bridge and the end of the west entrance.

A storehouse and coal shed were built at Fenelon Falls.

The abutment pier at the south end of the dam from the water's edge was re-built. A new platform was built over the power canal or headgates to the Lindsay Light, Heat and Power Company's plant. A new set of stop logs was supplied here, and a new set of winches was placed in position.

## BELOW FENELON FALLS.

In the river below Fenelon Falls, a pier 16 feet x 24 feet was re-built from the water's edge, four courses of timber, and filled with stone. This pier is also used for booming logs.

## ROSEDALE.

Some minor repairs were done to the old lock. The bridge was re-planked.

## COBOCONK.

The landing pier was repaired and filled in to the shore with stone.

## BEAVERTON.

A lighthouse was erected at the entrance of the Beaverton harbour, and the channel to the entrance of the harbour was buoyed out.

## LAKE SIMCOE.

The entrance to the canal was buoyed out and some minor repairs were done to the lighthouse.

## LAKE SIMCOE TO LOCK NO. 4.

All flood wood and other debris was removed from the channel, some fencing was done on the north side near the Grand Trunk railway track, the high level bridge across the canal on the Grand Trunk railway was painted, the west gate at Lock 4 was repaired, and the roadway at Lock 5 was repaired. A new well was sunk at Lock 5 and a small piece of land sixteen and a half feet in width across Lot 10, immediately south of the Trent canal property was acquired by the department, in order to have sufficient land to construct a drain.

## FROM LOCK 4 TO BOUNDARY ROAD BRIDGE.

The coping and rip-rapping on the south side of the canal near Lock 3 was repaired. The lockmaster's house at Lock 3 was painted. Four hundred and fifty feet of tile drain was dug up and made deeper, and the tile replaced, and one hundred feet of open drain made for an outlet westward near Dam 3. The iron bridge across the canal on the Portage Road near 'Keans' was replanked, and a wash-out at the end of the bridge on Trespass road was repaired. The channel immediately west of Lock 2 was



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deepened by excavating the bottom of the canal for a distance of sixty feet. About three hundred and sixty-five feet of rip-rapping was done on the north side of the canal near Dam 3, about four hundred and eighty feet near Dam 2, sixty feet at a point near Dam 3 and one hundred and thirty feet on the south side of the canal opposite the 'Kean' property. 1,670 feet of rip-rapping was done on the south side of the canal, and 500 feet on the north side of the canal, from Lock 2 to Lock 1. The gates at Lock 2 were repaired and a well sunk at this point.

#### BOUNDARY ROAD BRIDGE TO KIRKFIELD HYDRAULIC LIFT LOCK.

A great quantity of flood wood was taken out of the canal at this point. This flood wood comes down from the flooded reaches of the canal, and if not removed, would be a serious impediment to navigation. A washout near 'Bishop's' property at Bolsover was repaired, and a quantity of stone placed in same. A small wash-out, caused by the high water last spring, on the road north of the high level bridge on the Fourth Concession was repaired, and 400 feet of rip-rapping was done along this stretch.

#### KIRKFIELD HYDRAULIC LIFT LOCK.

Extensive improvements have been carried out at the Kirkfield hydraulic lift lock during the past year. New fences have been erected, a great deal of painting has been done, and a general plan of beautifying the grounds around the lift lock and lock-masters' houses have been adopted.

#### KIRKFIELD HYDRAULIC LIFT LOCK TO BALSAM LAKE.

One hundred and ninety-two rods of wire fencing was erected from the town line to the Grand Trunk railway, west of the canal, and three hundred and two rods of wire fencing was placed from the Grand Trunk tracks to the Portage road on Lot 49 west of the canal.

#### RESERVOIR WATERS.

There is in connection with the Trent canal, what is known as 'reservoir waters,' which consist of numerous rivers and streams, not on the route of, but tributary to the canal. Dams have been built at the outlet of many of the lakes on these streams, and the water is conserved until such times in the dry summer and fall season, as it may be required for navigation and power purposes. Considerable work was done on these waters during the past year, as the following will show:—

#### GULL RIVER.

*Norland.*—The dam at this point was repaired.

*Elliott's Falls.*—A new maple floor was placed in the slide at this dam, new stop-posts were provided and the dam put into first-class condition.

*Moore's Falls.*—New rollers were put in, and the dam generally repaired.

*Horseshoe Dam.*—A new concrete dam was built here. This dam will regulate the flow of the water in the Gull river. The present dam replaces an old wooden structure that had rotted away. The new dam is 16 feet high from the sill, and holds about 10 feet of water on Horseshoe lake, and backs the water up into Mountain lake. The dam has four 20 foot weirs, or sluices, and the piers are six feet wide. The abutment on the east side is 25 feet long at base. On the west side the abutment runs up stream for about 40 feet, so as to form a rest for a boom when running logs to the dam.

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*Hall's Lake.*—The dam between Hall's lake and Bushkong lake was repaired.

*Hawk Lake.*—The old dam at Hawk lake was repaired by placing in new stop-log posts and a new set of stop-logs. A new platform was also placed on the dam. This is a depot dam, there being a camp here for the caretaker of the Gull river works. This camp was repaired this year.

*Redstone Lake.*—The pile dam was repaired, but this dam will have to be rebuilt shortly.

*Keneese Lake.*—The dam was repaired and a stopping place was built to replace the one destroyed by fire in September, 1908.

*Eagle Lake.*—The dam was repaired, and installed new apparatus for handling stoplogs.

*Oblong lake.*—This dam was repaired and new rollers for handling stop-logs were installed.

*Big Bob Dam, (Tp. of Anson).*—This dam was repaired and new rollers installed.

## MISSISSAGUA RIVER.

*Scott's Dam.*—The slide was repaired, some work was done on the platform, and new rollers were installed.

*Gull Lake.*—A new floor was put on the dam, and some new stop-logs provided. A set of winches was installed.

*Bottle Lake Dam.*—Some new stop-logs were provided, and the dam was repaired.

## SQUAW RIVER.

Dams Nos. 1 and 2 south of the Bobcaygeon road were repaired. Maple floors were placed in the timber slides, new stop-logs were put in and new platform placed on the dam.

## BURNT RIVER.

*Cushog Lake, (Tp. of Snowden).*—A new concrete dam was built here. The dam holds five feet of water on Cushog, Sawers, and Head lake, a distance of 12 miles.

## GENERAL.

The plant was kept in first-class condition. The hull of the old dredge *Trent* was converted into a cookery house and blacksmith shop. Scows Nos. 2, 3 and 5 were repaired, and the tug *J. B. McColl* was rebuilt. The tug was formerly known as the *Empire*.

During the year we lost by death George Silverthorne, bridge-tender, Bolsover, and David Galloway, caretaker of the dam at Norland, on the Gull river.

No serious accidents occurred throughout the year and the traffic was the largest in the history of the canal.

The water was kept at a steady and uniform height throughout the entire year, and there were no complaints from navigation interests, the lumbermen or power companies.

I am, sir,

Your obedient servant,

J. H. McCLELLAN,

*Superintendent.*

W. A. BOWDEN, Esq., C.E.,

Chief Engineer, Department of Railways and Canals,  
Ottawa, Ont.

## TRENT CANAL.

SUPERINTENDING ENGINEER'S OFFICE.

PETERBOROUGH, May 23, 1910.

W. A. BOWDEN, Esq.,  
Chief Engineer,  
Department Railways and Canals,  
Ottawa, Ont.

DEAR SIR,—I have the honour to submit my annual report for the fiscal year ended March 31, 1910, covering the work of construction chargeable to 'Capital,' Trent canal.

## ONTARIO-RICE LAKE DIVISION.

This division embraces the fifty-six and a half miles of all river route between Trenton on Lake Ontario and Rice lake, which will comprise when completed nine and a half miles of canal, thirteen miles of submarine channel and thirty-four miles of deep river whose average width will be about 500 feet. The rise between extreme low water level of Lake Ontario and normal navigation level of Rice lake is 369 feet, which rise will be overcome by 18 locks ranging from 9 to 27 feet in height. Fourteen concrete dams, with stop-log sluices, will be required for the regulation of the river, and at them 75,000 h.p. gross may reasonably be developed at the low water stage of the river, but this quantity may be increased somewhat by a larger expenditure in tail race excavation. The normal navigation level of the natural reaches of the river and Rice lake will be that of ordinary summer level, so that practically no damage will be done by flooding the land along the river and lake shores. In the rapids the dams will hold the river at as high a level as practical, which, in the majority of cases, will be lower than the top of the river banks. The canals and channels with sides showing above water will have a minimum bottom width of 80 feet except in two cases of short canals above locks where the bottom width will be only 50 feet, and the submerged channels will have a minimum bottom width of 100 feet, which will be marked at frequent intervals by small piers. The canals and submarine channels will have a depth of 9 feet.

There will be sixteen bridges, ten of which will be for highways and six for railways. They will be all swing or bascule spans, except that for the main line of the Grand Trunk railway at Trenton Junction, which will be a high level fixed bridge, under which there will be a clear head room of 27 feet at a stage of high water in Lake Ontario.

The locks will be of concrete and will have 8 feet 4 inches of water on the sills, with chambers 33 feet wide by 175 feet long between hollow quoins. They will accommodate barges of 1,000 tons, whose size will be about 150 feet long by 30 feet beam, and drawing 8 feet of water. Entrance piers of not less than 150 feet in length will be provided above and below each lock. The locks will be filled through culverts 4 feet wide by 5 feet high in the side walls, which will be equipped with 'wagon' valves for controlling the water. The lock gates will be of the solid timber type and the upper gates in all cases will be set on the top of lift walls. They will be operated by struts or bars working in hand power winches set in recesses, which will be formed in the lock walls.

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The total cost of the improvement of this part of the 'Trent Navigation' will amount to about \$6,750,000, the first vote for which was made by parliament during the session of 1907. The project involves the removal of about one and a half million cubic yards of earth, one and a quarter million cubic yards of loose and solid rock, and the building of about four hundred thousand cubic yards of concrete.

For construction purposes the division has been divided into seven sections, five of which are under contract, and tenders for the other two have been received. Of the total estimated cost of the division, about 75 per cent of the amount will be covered by the main contracts for the seven sections on which were expended for work done and materials delivered up to March 31, 1910, \$1,285,092.40. Locks Nos. 2, 3, 6, 7 and 14 and dams Nos. 2, 3, 6, 7, 11 and 12 are built.

The following tables give the location of the locks and dams with their respective lifts and hydraulic power:—

## LOCKS.

No. of Section.	No. of Lock.	Miles from Trenton	Locality of Lock.	Lift of Lock.	WATER LEVELS.		Remarks.
					Lower Reach.	Upper Reach.	
1	1	1.8	Trenton Junct'n.	20 ft.	241.0	261.0	Elev. 241.0 is approx. extreme low water level of Lake Ontario, fall of 1895.
1	2	2.4	.....	20 "	261.0	281.0	
1	3	3.9	Glen Miller.....	27 "	281.0	308.0	
2	4	5.2	.....	18 "	308.0	326.0	
2	5	6.4	.....	18 "	326.0	344.0	
2	6	7.3	Frankford.....	16 "	344.0	369.0	
3	7	13.9	Glen Ross.....	9 "	360.0	369.0	
4	8	25.2	Percy Landing..	20 "	369.0	389.0	
4	9	26.4	.....	16 "	389.0	405.0	
4	10	27.9	.....	24 "	405.0	429.0	
4	11	29.6	Ranney Falls...	24 "	429.0	453.0	Nos. 11 and 12 are in flight.
4	12	29.6	".....	24 "	453.0	477.0	
5	13	32.1	Campbellford..	23 "	477.0	500.0	
5	14	33.6	Middle Falls...	25 "	500.0	525.0	
6	15	36.1	Crow Bay.....	22 "	525.0	547.0	
6	16	36.5	Heeley Falls...	27 "	547.0	574.0	Nos. 16 and 17 are in flight.
6	17	36.5	.....	27 "	574.0	601.0	
7	18	51.0	Hastings.....	9 "	601.0	610.0	Elev. 610.0 is normal level of Rice Lake.

Total rise, 369 feet.

DAMS.

No. of section.	No. of dam.	Miles from Trenton bridge.	Locality of dam.	WATER LEVELS.		WATER POWER.			Remarks.
				Upper.	Lower.	Available head in feet.	Low water flow cubic feet per second.	Gross horse-power.	
1	1	1.7	Trenton Junct'n.	261.0	243.5	17.5	2,000	3,977	At extreme low water level, elevation 241.0; of Lake Ontario a head of 20.0 feet can be obtained.
1	2	2.4	.....	281.0	261.0	20.0	2,000	4,545	A head of 27 feet can only be developed here with the consent and in conjunction with the Miller Bros., Ltd., who are now using a head of 9 feet here. In the event of their not consenting a head of only 15 feet can be obtained at dam No. 3.
1	3	4.6	Glen Miller.....	308.0	281.0	27.0	2,000	6,137	
2	4	5.2	.....	326.0	308.0	18.0	2,000	4,090	The water-power at this point is owned by the Trent River Paper Co., who have developed part of it. During high water in the spring the head of 16 feet will be reduced some.
2	5	6.6	.....	344.0	326.0	18.0	2,000	4,090	
2	6	8.1	Frankford.....	360.0	344.0	16.0	2,000	3,636	
3	7	14.2	Glen Ross.....	369.0	364.0	5.0	2,000	1,136	By a large expenditure of money a head of 9 feet could be obtained here. During high water the head of 5 feet at the dam may be reduced some.
4	8	26.4	Foot of Myers Island.	405.0	375.0	30.0	2,000	6,817	Thirty feet head requires about 25,000 cu. yds. of rock excavation for tailrace. Twenty-five feet head available with no tailrace excavation. Thirty-six feet head can be obtained at great cost for tailrace excavation in rock.
4	9	28.7	Head of Myers Island.	429.0	405.0	24	2,000	5,454	Considerable tailrace excavation required to get 24 feet head. About 21 feet head available with no tailrace excavation.
4	10	30.6	Ranney Falls...	477.0	429.0	48	2,000	10,908	The power on the river at this point is owned and controlled by various parties whose united consent would have to be obtained in order to develop the 48 feet head in the vicinity of lock No. 12. Otherwise only 15.5 feet head can be obtained at dam No. 10. The balance, 32.5 feet, would have to be developed by a second dam built by private enterprise.
5	11	32.5	Stephens Rapids, Campbellford.	500.0	477.0	23	2,000	5,227	Developed by the Seymour Power and Electric Co.
5	12	33.6	Middle Falls....	525.0	500.0	25	2,000	5,681	Developed by the Municipality of Campbellford.
6	13	36.8	Heeley Falls....	601.0	535.0	66	1,500	11,250	A head of 76 feet could be obtained at considerable expense for tailrace excavation.
7	14	51.0	Hastings.....	610.0	601.0	9	1,500	1,534	In high water the nine feet head will be reduced by backwater.

Total horse-power, 74,482.



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*Section No. 1.*—This section extends from Trenton to Glen Miller, a distance of about  $4\frac{1}{2}$  miles, on which length of river there are three locks and dams.

A contract for the work was entered into with Messrs. Larkin & Sangster on March 10, 1908, and the total value of work done and materials delivered up to March 31, 1910, amounted to \$567,325.39 or about 60 per cent of the value of the contract. The principal items of work done are: 205,527 cubic yards earth, 156,270 cubic yards solid rock, and 42,425 cubic yards concrete. Locks and dams Nos. 2 and 3 are finished. The short canals leading into and out of these locks are partly excavated and their entrance piers are in course of construction. The pit for Lock No. 1 is being taken out, and the excavation for the canal below the lock is nearly finished.

One of the fixed spans at the east end of the Glen Miller highway bridge has been taken out, and a swing bridge built in place of it, which was opened for traffic at the end of February, 1909.

The Contractors have constantly maintained a good force and equipment on the works, which have been carried on by them in an energetic and workmanlike manner, and the close of this season will probably see the works of Section No. 1 completely finished at and north of the Grand Trunk Railway, Trenton Junction.

*Grand Trunk Railway Bridge, Trenton Junction.*—An agreement was entered into on June 9, 1909, with the Grand Trunk railway system for the construction of a bridge to carry the tracks of their main line over the canal at Trenton Junction.

Lock No. 1 is located immediately north of the railway embankment, and its lower walls are extended to the south side of the railway, which design permits of a high level fixed bridge being used for carrying the railway over the canal. The bridge is designed for three tracks, and also provides for raising them in the future at least seven feet. For the present the clear head room under the bridge at a stage of high water in Lake Ontario will be 27 feet, but when it is raised, the clearance may be 34 feet.

Owing to lack of funds, no work was done on the bridge during the fiscal year 1909-10, but construction was begun by the railway company last month, as the bridge must be built and finished before Messrs. Larkin and Sangster can complete the lower entrance piers and channel of lock No. 1.

*Section No. 2.*—This section extends from Glen Miller to Frankford, a distance of about  $4\frac{1}{2}$  miles, on which stretch of river there are three locks and dams.

A contract for the work was entered into with Messrs. Dennon and Rogers on May 30, 1908, and the total value of work done and materials delivered up to March 31, 1910, amounted to \$159,952.39, or about 26 per cent of the value of the contract. The principal items of work done are: 38,709 cubic yards earth, 29,387 cubic yards solid rock, and 18,363 cubic yards concrete. Dam No. 6 is finished except the bridge across it and lock No. 6 is also finished except its lower entrance piers. Some excavation and part of the core walls for the short canal connecting lock and dam No. 6 have been done. The pivot piers and abutments or the swing bridge across the canal on Bridge street, Frankford, have been built, and the Hamilton Bridge Co., are now erecting the superstructure. A little excavation has been done at the sites of Locks Nos. 4 and 5, but no work has been done at dams Nos. 4 and 5.

The work on this section is proceeding very slowly and if the structures on it are to be finished concurrently with those on the other sections of the division, the contractors will have to provide more plant and maintain constantly a much larger force of men and teams than they have at present.

*Section No. 3.*—This section extends from Frankford to a point three miles west of Glen Ross, a distance of  $7\frac{1}{2}$  miles. At Glen Ross there are a lock and dam, and two bridges.

A contract for the work was entered into with the Canadian General Development Co., Ltd., on April 24, 1908, and the total value of work done and materials



delivered up to March 31, 1910, amounted to \$151,042.32, or about 63 per cent of the value of the contract. The principal items of work done are:—10,948 cubic yards earth, 74,669 cubic yards solid rock, and 10,226 cubic yards concrete. Lock and Dam No. 7 at Glen Ross, and the short canal above and below the lock are finished. The bridges across the canal above the lock for the Frankford highway and the Central Ontario railway are also finished and in use. The Central Ontario railway bridge was placed in commission on April 29, 1909.

The whole of the work on this section is finished except the dredging in the river, which has not been touched, as the contractors have no dredging fleet on the ground, and may wait until they can bring one in from Lake Ontario.

*Section No. 4.*—This section extends from Adams landing, a point three miles west of Glen Ross to Campbellford, a distance of about 14 miles. There are between Bradley bay and Campbellford five locks, three dams and four bridges; and  $1\frac{1}{4}$  miles of concrete retaining wall for enclosing the river through the town of Campbellford, together with a large quantity of earth and rock excavation. During the past two years the route of the canal through Campbellford was very carefully studied and the plans and specifications for letting the work were finally completed last winter and the work advertised, tenders for which were received on the 5th instant.

*Section No. 5.*—This section extends from Campbellford to Crow bay, a distance of 3 miles. On the section are two locks and dams.

A contract for the work was entered into with Messrs. Brown & Aylmer on September 28, 1907, and the total value of work done and materials delivered up to March 31, 1910, amounted to \$342,722.90, or about 62 per cent of the value of the contract. The principal items of work done are, 65,380 cubic yards earth, 39,248 cubic yards solid rock, and 31,552 cubic yards concrete. Dam No. 11 (Stephen's rapids), dam No. 12 and lock No. 14 at Middle Falls are entirely finished. The only structure on this section yet to build is lock No. 13 at Stephen's rapids, which will be built this season. The channel leading from Crow Bay to lock No. 14 will be finished early this summer, when the contractors intend moving their Lobnitz rock breaker and dredge down on to the reach between locks 13 and 14. The dredging fleet was built on Crow bay during the winter of 1907-8, and has since been employed on the bay.

At Middle Falls the municipality of Campbellford have built a hydro-electric plant between the river shore and lock 14, which they are operating under the terms of lease No. 18115. A development of 5,700 h.p. gross under a head of 25 feet may be obtained at this point during the low water stage of the river. The works comprise a forebay about 600 feet long, 11 feet deep and 50 feet wide cut out of solid rock; and a small power house built of rock faced ashlar, with a concrete pressure chamber in front of it divided into three separate compartments. No work was required to be done for a tail race. There are installed at present one 1,470 h.p. double runner turbine direct connected on a horizontal shaft to a 750 k.w. alternating current generator. Also one 80 h.p. turbine connected to a 55 k.w. direct current exciter. There are also switch boards, line instruments, lightning arresters, a hand power travelling crane, and a type N Lombard governor which maintains the speed within  $\frac{1}{2}$  per cent normal. The three phase, 60 cycle current is generated and transmitted at 2,400 volts. The station is connected with the town by  $2\frac{1}{2}$  miles of cedar pole transmission line, the conductors being plain bare copper wire No. 000. Within the corporation limits there are 15 miles of distribution line. Their lighting load at present is about 260 k.w. and they have to date sold to different parties in the town 140 h.p. The corporation have recently entered into an agreement with the Seymour Power Company by which it agrees to supply the company with 1,000 k.w. for a period of five years, and in pursuance of the above are proceeding to install a 1,950 h.p. turbine and a 1,000 k.w. generator. The hydraulic machinery was supplied by S. Morgan Smith, and the electric apparatus by the Allis-Chalmers-Bullock, Ltd., except the 1,000 k.w. generator

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which will be supplied by the Swedish General Electric Co. The corporation has at present a surplus power which it hopes will soon be taken up, when this is done, they intend to proceed with the full development of the minimum flow of the river at their power station. The plant was placed in commission on September 18, 1909.

At dam No. 11 (Stephen's rapids) the Seymour Power and Electric Company have built a hydro-electric plant on the east side of the river, about 1,000 feet below the dam. This plant is operated under the terms of lease No. 17829 granted to Mr. J. G. G. Kerry, and will develop under a 23 feet head at the low water stage of the river about 5,300 h.p. gross. The works consist of a forebay about 150 feet wide by 1,060 feet long contained between concrete walls, a concrete power house and a short tail-race. The superstructure of the building, which will be fully finished this summer, is of ashlar faced block. The equipment will consist of five double runner vertical shaft turbines of 870 h.p. each, installed in separate wheel pits built of reinforced concrete. Their operation is controlled by governors of the Monerett type, which are designed to automatically, and completely close the turbine gates in four seconds of time in case any accident occurs to the machinery. The alternating current generators are of the vertical shaft umbrella type with a rated capacity of 750 k.v.a. The house is equipped with both turbine driven and motor driven exciter set for maintaining the fields of the generators. It is also provided with an electric overhead crane furnished by the Advance Machine Works, Walkerville, Ont. There is a full switch board of modern type, oil switches, choke coils, lightning arresters, &c. The three phase 60 cycle current is generated at 2,400 volts and is stepped up to a transmission voltage of 44,000 volts. The hydraulic machinery was supplied by Messrs. Wm. Kennedy & Sons, Owen Sound, Ont., and the electric equipment by the Canadian Electric Company, Peterborough, Ont. The company have built an extensive system of cedar pole transmission line; the conductors used are aluminum cable of 7 strand No. 2, B.W.G., which is now so far advanced that power can be delivered to Marmora, Deloro, Madoc, Tweed, Sulphide, Stirling, Belleville and adjoining places. The completion of the plant was far enough advanced last fall for the company to begin the delivery of power, which they began delivering to Deloro mines on December 5, 1909. Since that date the plant has been in constant operation.

*Section No. 6.*—This section extends from the lower end of Crow bay to 1,000 feet west of Heeley Falls bridge, a distance of about three miles. There are three locks, one dam and one bridge on the section, together with a large quantity of earth and rock excavation. The short canal at this point is located on the west side of the river and is designed to overcome the 76 feet rise between Crow bay and the 14 miles of river reach between Heeley Falls and Hastings. The plans and specification for this section were finished last year and the work advertised this spring, tenders for which were received on April 26, 1910, and the contract for the construction of the section has been awarded to Messrs. Haney, Quinlan and Robertson.

*Section No. 7.*—This section extends from Heeley Falls to Rice lake, a distance of about 19½ miles. The principal works consist of a large quantity of earth and rock dredging in the river, a new lock and dam at Hastings, a new swing bridge at Trent bridge and new guide piers at the Grand Trunk railway bridge, Hastings.

A contract for the work was entered into with the Randolph Macdonald Company, Ltd., on January 4, 1909, but owing to the lack of funds only \$34,049.40 worth of work, chiefly dredging, and materials delivered were done by March 31, 1910. The company last year built a dredge, tug, scows and a drill boat. Last fall they built a coffer-dam around the pit for the new lock, and are now preparing to unwater it and proceed with the excavation of the foundation and construction of the lock, which will be finished this season. The new lock is located far enough below the highway swing bridge so as to permit the use of extension walls for the bridge to swing over instead of over the chamber as was the case with the old

lock, which was put out of commission on April 15, 1910, when its gates were unstepped and the dam surrounding the pit for the new one was closed.

#### BURLEIGH FALLS DAM.

During the fall of 1908 a survey of Lovesick lake was made with the object of ascertaining whether the level of the lake, which is about four feet lower than Deer bay, could not be raised up to the level of the latter and thereby drown out the lock and dams at Lovesick. The survey clearly demonstrated that this could be very readily and economically done, and the plans for the new concrete dam at Burleigh Falls to replace the present dilapidated wooden structure, originally built in 1888, were prepared accordingly. This scheme involves at a future date the construction of a single lock at Burleigh Falls of about 27 feet lift to replace the present flight lock at this point and the four feet lift at Lovesick.

A contract for the new dam, which will be located about 50 feet below the present one, was entered into with Messrs. Bishop & Buchannan on December 14, 1909. The work done and materials delivered up to March 31, 1910, amounted to \$2,194.76. The contractors have delivered some gravel, timber, &c., and will proceed with the execution of the work this season.

#### LINDSAY SECTION.

During the summer of 1908 a survey of the Scugog river at Lindsay was made, preliminary to the preparation of plans and specifications for a new lock, and dam at Lindsay, and a new bridge at Wellington street. A contract for the work was entered into with Messrs. John Ritchie & Co., on January 20, 1909.

The total value of work done and materials delivered up to March 31, 1910, was \$31,700.13. The work embraced in this contract will be completed early this summer. The lock is finished, and the gates built at Rosedale by this office last year will be stepped this month and the lock put in commission. The dam was finished last fall and its sluices materially assisted in maintaining a more uniform level of the river this spring than ever obtained before, and in the future no further trouble should be experienced by excessive and long continued high water on the river above Lindsay as has obtained every spring in past years.

The present lock and dam are built on the site of the original structures whose construction was begun by the province of Upper Canada in 1837 and finished in the fall of 1843. The 1843 lock would appear to have remained in commission up to 1859, when it was converted into a timber slide and remained as such until 1870, when it was rebuilt by the province of Ontario, which entered into a contract with Thomas Walters on February 3, 1870, for rebuilding it in timber, when it was again placed in commission in the spring of 1871. The walls were rebuilt on the old foundations without disturbing the mitre sills, and were again renewed in 1885.

When the lock was finished in 1843, or sometime afterwards a highway bridge was built across it, which remained in existence until after 1860 when it was replaced by a bridge on the line of Lindsay street below the lock.

The original dam was built about 246 feet long, but for some years past was only 167 feet long. In 1882 a canoe slide and platform was built over the end of it next the lock, which accounts in part for the shorter length of the dam in recent years. The difference in height between the sills of the lock and the crest of the dam as finished in 1843 would appear to have been 12 feet, which agrees exactly with the actual difference in height between the sills of the old lock and the highest point of the crest of the old dam as determined by us before they were removed last year. Considering the top of the stop-logs of the sluices of the new dam as part of the crest, the total length of crest of the new structure is 167 feet, or the same length as the old one, and its elevation is 46.6, or the same level as the highest point of the old crest. The new dam has



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two stop-log sluices each 15 feet long by five feet deep for the purpose of providing free discharge for spring or other floods.

	Distance from centre line of Lindsay St. bridge to upper H. Quoins.	Length of lock between H. Quoins.	Coping of lock.	Upper mitre sill.	Lower mitre sill.	Upper stop-log sill.
	Feet.	Feet.		Elevations. Constuction datum of new lock.		
Old lock.....	191.4	133	49.6	34.6	34.5	39.5
New lock.....	202.9	142	49.6	36.77	33.0	38.27

The centre line of the old and new locks is the same. Normal water level above the lock is elevation 46.6, and below it elevation 40.0.

On April 6, 1910, a contract was entered into with the Hamilton Bridge Works Company, Ltd., for the superstructure of the new Wellington street bridge, which is to be a Strauss Trunnion Bascule bridge, embracing a 73-foot deck plate girder movable span, which will be operated by electricity. The electrical equipment will be provided by the Canadian General Electric Company, the whole of which is to be finished and ready for operation by September 1, 1910.

## ROSEDALE SECTION.

The works of this section consist of a canal across the narrow peninsula between Cameron and Balsam lakes, a lock, dam and dredging in the Gull river between its confluence with the canal and deep water in Balsam lake. The lock is the same size as those of the Ontario-Rice lake division, and the canal and river channel will be 100 feet wide on the bottom with a depth of 9 feet at normal lake levels. The distance via the new canal between the 9 feet contours in Cameron and Balsam lakes is 1.8 miles, or 1.2 miles shorter than via the Gull river and the old lock.

A contract for the construction of this section was entered into with the Randolph Macdonald, Company, Ltd., on February 24, 1908, and the total value of work done and materials delivered up to March 31, 1910, amounted to \$134,919.74. The principal items of work done are: 195,000 cubic yards earth, 4,600 cubic yards solid rock, and 7,740 cubic yards concrete. The lock and its entrance piers are finished, and also the excavation for the canal, and some dredging has been done in the Cameron lake channel and in the Gull river. The gates for the lock were built on the ground by this office last year and stepped early this month, and upon removal of the cofferdam at the head of the canal this week, the new lock will be placed in commission and the old one closed to navigation. The dam which is located 1,500 feet higher up the river than the old one will be built this summer, and it is expected that the whole of the works will be completed this season except the dredging.

The improvements now in progress will replace the old wooden lock and dam built by Mr. Wm. Whiteside who in 1869 entered into a contract with the provincial government for their construction. The lock was not finally completed and placed in commission until late in 1873. His contract also included the building of a swing bridge across the river at this point, which was replaced by the Dominion government in 1897 by a steel swing span erected on a concrete substructure. In 1897 the Dominion government also completed the excavation of a channel 90 feet wide by 7 feet

deep in the river between the old lock and Balsam lake, which channel up to then was only about  $3\frac{1}{2}$  feet deep.

#### HOLLAND RIVER DIVISION.

This division is divided into two sections. Section No. 1 extends from Cook's bay, Lake Simcoe, to Holland landing, on the east branch of the Holland river, a distance of  $8\frac{1}{2}$  miles. Section No. 2 extends from Holland landing to Newmarket, a distance of  $4\frac{1}{2}$  miles. The whole of section No. 1 is on the Lake Simcoe level, and the total rise between Holland Landing and Newmarket is 43 feet, which will be overcome by three locks.

*Section No. 1.*—A contract for the construction of this section, chiefly dredging, was entered into with the Lake Simcoe Dredging Co., on August 30, 1906.

The company had only dredged 12,392 cubic yards of material at the close of the season 1907 when they abandoned the work, and the department took it out of their hands in May, 1908.

A final estimate in favour of the Lake Simcoe Dredging Co. amounting to \$2,465.20 for the work done was sent into the department in October, 1908.

This section has not been re-let.

*Section No. 2.*—A contract for the construction of this section which consists of three locks, three dams, four highway bridges, one dock and a large quantity of earth excavation, stone protection, lining, &c., was entered into with Mr. John Riley on February 12, 1908, and assigned by him to Messrs. Russell, Dill and Lothian, on February 19, 1908, and by them to the York Construction Co., Ltd., on April 3, 1908, who are carrying on the work.

The total value of the work done and materials delivered up to March 31, 1910, amounted to \$225,062.32, or about 37 per cent of the value of the contract. The principal items of work done are: 420,000 cubic yards earth, 10,050 cubic yards concrete, 13,150 lineal feet of piles driven, 4,600 cubic yards stone protection in place, and 12,740 cubic yards puddle. There are delivered on the work ready for placing 4,590 cubic yards stone protection, all the steel reinforcing required for dams, timber for stop-logs, hollow quoin casings for Locks 1 and 2, &c. Lock and Dam No. 3 located about one mile below Huron street, Newmarket, are finished, except the lower entrance piers of the lock and the foot bridge across the dam. The Newmarket dock is half built, which will be finished this season, together with lock and Dam No. 3, and the mile of canal between them. About 52 per cent of the excavation on the section has been done, and it is the contractors' intention to devote most of their energies to completing this part of the work this season, for which purpose the steam shovel has been moved down to reach 1-2; and reaches 2-3, and Newmarket will be finished by scraper teams, and the Lake Simcoe reach below Lock No. 1 will be excavated by a cableway erected last year for this purpose. Green Lane bridge situated half a mile below Lock No. 3 is finished and in commission. No work has been done on Locks 1 and 2 and their highway bridges, nor at the high level bridge for the Bradford road.

*Queensville Road Bridge.*—This bridge crosses the east branch of the Holland river, about two miles north of Bradford road, Holland landing. A contract for the substructure of the bridge was entered into with Messrs. D. Couroy & Sons on December 1, 1906, and was finally completed by them in June 1908. A final estimate for the work amounting to \$18,212 was sent in to the department in January, 1909.

A contract for the superstructure of the bridge was entered into with the Dominion Bridge Co., on October 12, 1906, for \$4,872, which they finally completed on August 21, 1907, and the bridge was placed in commission that fall.

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*Water Supply.*—Last year the whole of the valley between Newmarket and Aurora was surveyed and cross-sectioned for the purpose of determining the location and size of the reservoir dams required for supplying the canal with water between Newmarket and Holland landing. Plans for this purpose are now being prepared. Last June concrete measuring weirs were built on the river south of Newmarket and also on the Bogartown branch of the river, at which tri-weekly readings and oftener during rainy weather have since been taken for the purpose of accurately and positively determining the run off of the valley. These readings will be continued until the reservoirs have been built and finished.

## BRIDGES.

A contract was entered into with the Hamilton Bridge Works Co., Ltd., on October 10, 1908, for the manufacture and erection of six highway swing bridges and one railway swing bridge.

The highway swing bridges at Glen Millar, Glen Ross and Green Lane are finished and in commission. The swing span for the Central Ontario Railway at Glen Ross has also been finished and placed in commission. The highway bridge at Frankford has been erected, but will not be in commission until the approaches to it are finished by the contractors for the substructure. The highway spans for Yonge street, Holland landing and second concession road, section 2, Holland river division are fabricated, and stored in the company's yards at Hamilton ready for shipping.

On April 6, 1910, a contract was entered into with the Hamilton Bridge Works Co., Ltd., for the manufacture and erection of a Strauss Trunnion Basecule highway bridge for Wellington street, Lindsay, according to the plans and specifications prepared by the Strauss Basecule and Concrete Bridge Co., Chicago. This bridge will have a 73 feet movable leaf and is to be ready for operation on September 1 next. It will in all probability be the first bridge of the kind erected and finished in Canada.

## WAGON VALVE FOR LOCKS.

A contract for the manufacture and erection of the wagon valves required for the filling culverts of the new locks and regulating sluices of the canal was entered into with the Dominion Bridge Co., Ltd., on October 5, 1908. Since that date the valves for Locks 7 and 14 of the Ontario-Rice Lake division and those for the Rosedale lock have been installed, and the company are at present installing those for Locks 2, 3 and 6 of the Ontario-Rice Lake division. A large part of the metal for the balance of the valves is fabricated and stored in the company's yards at Dominion, Que., ready for shipping.

The 'wagon' valve is a modified type of the 'stone' valve. It may be described as a counterweighted iron gate mounted on two pairs of large wheels, which travel upon rails bolted to a rigid steel frame embedded in the side walls of the wells formed over the culverts in the concrete walls of the locks. The counterweights move in guides and follow the motion of the valves. The characteristics of the valve are:—that the bearing is always on the rails through the wheels; and that the vertical and upper horizontal water seals of the valve are made by adjustable bronze plates which make a planed surface contact with the faced sides of the steel cast guide rails and upper seating on valve frames respectively. The seals do not make the valve absolutely water tight. The valves are erected on the down stream side of their respective wells, and the valves with their water seals can be adjusted, or taken out for repairs and replaced, without the aid of a diver, or disturbing their operating winches at the top of the wells. The valve openings are 4 feet wide by 5 feet high and the valves are designed to work under heads varying from 4 to 40 feet.

On March 5, 1909, the Dominion Bridge Company made a series of tests to find the tractive effort required for working the valves. A set of rails were placed hori-



zontally and the tests were all made with dry bearings. With the valve alone, weighing 2,300 pounds and no external load, the total tractive effort required to move it was 65 pounds. A load of 40,000 pounds was then placed on the back of the valve and the total tractive effort required to move it was 1,500 pounds, on repeating the test on the unloaded valve at conclusion of tests the total tractive effort required was found to be reduced to 55 pounds. A dynamometer was used for measuring the pull in each case. The tractive effort required to move the valve was less than 4 per cent of the total load throughout the tests.

When the valves were installed at the Middle Falls lock, an opportunity was afforded of testing them under a head of 11 feet. Two men easily and fully opened the valve (5 feet rise) in thirty seconds, and one man in 45 to 75 seconds. The valve opens easily for the first 12 to 15 inches, when a decided increase in load occurs for a few seconds only and which rapidly eases off as the valve rises. In no case did the load tend to re-act on the horizontal levers (4 feet radius) of the winches, and the grip at the levers could be released at any time under any condition of load without the winch running back on the operator, the load being held steadily by the mechanical brake with which the winches are equipped. Whenever the operators let go the levers, the reverse action at the handles was only from 2 to 3 inches in extent at the most, when releasing the grip.

The following tests were made in the Dominion Bridge Co.'s shops at Dominion on one of the above mechanical brakes on February 5, 1909.

A lever of 96 inches effective length was attached to the brake gear wheel, and a similar lever to the brake shaft below the brake discs. Hand power was applied to the lever to raise a load carried on a platform and suspended by a rope over a pulley, thence to the second lever below the brake disc. A load producing a torque of 6,970 inch pounds on the brake shaft was readily raised, and completely controlled by one man. A load producing a torque of 14,440 inch pounds on the brake shaft was readily raised, and completely controlled by two men. A load producing a torque of 25,100 inch pounds on the brake shaft was readily raised, and completely controlled by four men. In all cases one man alone completely controlled the lowering, and the brake automatically held the load on releasing the handles, only a few inches fly back at the end of the hand lever was observed on relasing it at any time during the tests.

A provision for 9,800 pounds as a maximum load on the valve chain was the basis of strength, with a counterweight of 1,800 pounds, leaving a net load of 8,000 pounds to be dealt with by the winch. The brake shaft torque required to deal with this load, that is to say, to sustain it, was estimated at 16,000 inch pounds.

It was now decided to test the limit of usefulness of the brake and a load producing a torque of 46,600 inch pounds on the brake shaft was applied; no attempt was made to raise the load by handpower, but the lowering was readily controlled by one man exercising ordinary care. The brake began to slip with this load, which may be taken as its useful limit. No sign of weakness could be found on examining the brake, during or after the application of this load.

#### LOCK GATE OPERATING MACHINES.

A contract was entered into with Mr. Herbert B. Collier on May 7, 1909, for the supply and delivery of the operating machines, anchorage fittings and pivots required for the lock gates of the new locks along the canal.

The operating machines, anchorage fittings and pivots for the Rosedale and Lindsay locks have been installed, and those for Lock No. 3, Holland river division, and for Locks 2, 3 6, 7 and 14, Ontario-Rice Lake Division, have been delivered and partly installed.

The contractor has also finished and stored ready for shipping when required, in the Wm. Hamilton Co.'s shops, Peterborough, a large part of the machines, anchorage fittings and pivots required for the other locks embraced in his contract.

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## GENERAL.

*Cement.*—About 81,500 barrels of Portland cement were used on the works during the year. It was supplied and delivered under contract by the Lakefield Portland Cement Company.

*Lock gates.*—The lock gates for the Rosedale and Lindsay locks were built by this office at Rosedale last year. Mr. Jas. A. Hadcock had immediate charge of the work and carried it out in a first class and workmanlike manner. The gates are of the solid timber type and are built of British Columbia fir, which was supplied by Messrs. Mason, Gordon & Co., Montreal, and the metal work was fabricated and delivered by the William Hamilton Co., Peterborough.

The gates for the Rosedale lock were stepped last week, and those for the Lindsay lock are being delivered and will be stepped this week.

*Lake surveys.*—No charts of the chain of lakes which form part of the Trent navigation have ever been made, and with the object of making a complete and reliable set of charts of these inland waters, hydrographic surveys of the lakes were begun two years ago, which have since been intermittently carried on. The field work for the surveys of Rice, Lovesick, Sturgeon, Cameron and Balsam lakes and the Otonabee river are practically finished and next winter the surveys of Katchewanoe, Clear, Stoney, Deer, Buckhorn and Pigeon lakes will be proceeded with. Very little office work in connection with the charts has yet been done.

In the fall of 1908 the Geodetic branch of the Public Works Department ran a line of precise levels from a Lake Ontario gauge at Brighton to Orillia, *via* the Grand Trunk railway to Trenton, and thence by the C. O. railway to Anson Junction, and thence *via* the Midland division of the Grand Trunk railway to Orillia where they connected with their Toronto-North Bay line of levels ran some years before in connection with the Georgian Bay canal survey. Since then this office has run branch lines from the above line of levels between Peterborough and Lindsay *via* the lakes and between Lindsay and Rosedale; in order that the hydrographic surveys of the lakes and all work thereon in future could be referred to a common datum, *viz.*, mean sea level, New York.

I am, sir,

Your obedient servant,

ALEX. J. GRANT,

*Superintending Engineer.*

## SAULT STE. MARIE CANAL.

ENGINEER'S OFFICE,

SAULT STE. MARIE, ONT., April 1, 1910.

SIR,—I have the honour to submit my annual report on the improvements in progress to the upper entrance of the Sault Ste. Marie canal for the fiscal year ending March 31, 1910.

## DREDGING UPPER ENTRANCE.

The contract entered into with Mr. C. S. Boone for the deepening and widening through the Vidal shoals situated about two miles above the lock, was brought to a satisfactory completion November 12, 1909, which provided for a channelway of 500 feet in width and a depth of 21 feet, 5 inches at low water stage.

A contract was entered into with Mr. J. J. Collins for the widening of the channelway on the north side from the westerly end of the north pier (under construction) and on line with same extending westerly to intersect with a production of the northerly limit of the channel as defined passing through the Vidal shoals. The depth to be secured to be on a plane of 21 feet 5 inches below the lowest recorded water line. Work was started on this contract October 27, 1909, but owing to the lateness in the season very little progress was made.

## RANGE BEACON—UPPER ENTRANCE.

During the coming season, it is proposed to remove the Beacon range and a small shoal in the vicinity of same. The Beacon stands within the limits of the improved channel and is much in the way of vessels turning between the upper channel and canal lock reach. The Department of Marine will put in place a permanent range for the upper channel outside the channel limits.

## STUDIES FOR A POSSIBLE ADDITIONAL LOCK AT THE SOO.

During the latter part of the year preliminary surveys were started for a proposed new ship canal. Three lines were laid down over which levels have been taken, one to the north of the present canal and two to the south. From the information obtained the line farthest south is looked upon the most favorably. The surveys so far have been of a very preliminary nature and much data must be obtained before the most favorable location for a new canal can be determined. This coming season it is proposed to sound the possible approaches and gather such data as will be necessary to form an approximate estimate of the cost of a lock that will meet the requirements of the estimated increase and development of lake commerce.

A study of the requirements of so important an undertaking must receive the most careful attention of those entrusted with its development, and should not be hampered by time which is so often the case in large public works which are started sometimes before the designs have been worked out.

I desire to draw attention to a few facts that have come before my attention and which lead me to believe that the time is now opportune for a serious consideration of the requirement of a new lock and canal in the near future on the Canadian side of the St. Mary's Falls.

At the present time the United States government have undertaken the construction of a new lock to be known as the 'Davis lock,' and have under consideration

## SESSIONAL PAPER No. 20

another lock of like dimensions to the Davis lock which is to be 1,350 feet long by 80 feet wide in the chamber, with a depth of 25 feet at low water stage on the mitre sill. Work has already been started and it is contemplated the new Davis lock will be put in commission in the year 1914.

The immediate need of this new undertaking has been forcibly demonstrated during the past season of navigation. Serious accidents have happened to both the Canadian and Poe locks which might be termed unavoidable, with the result that for days at a time, while repairs were being hurried forward to put the lock in commission, expensive delays were necessitated to lake traffic. On one occasion the number of vessels awaiting lockage and at anchor reached the enormous number of eighty, representing about 450,00 tons of freight delayed in transmission. The delay to some of the boats on this occasion reached three days. Outside the feature of accidents, it is frequently noted that a slight congestion in traffic will mean the loss of as much as six hours and more which should the same conditions occur frequently would amount to the value of an extra trip or more to the vessels so detained.

The channels between the lakes have been deepened to provide a greater draft than the present locks at Sault Ste. Marie will allow, and with the opening of the new Davis lock an increase of two feet in draft will be provided with a further allowance of four feet to make easier the passage of vessels in and out of the lock.

The depth of the channels connecting the lakes has been increased since the opening of the Canadian and Poe locks  $4\frac{1}{2}$  feet, and in the lower approach to the Canadian lock the channel was deepened 3 feet in the same period. From the above it may be deducted that there is  $1\frac{1}{2}$  feet more water provided than in the Canadian canal approach at the lower entrance. Which means that there are two feet nine inches more than there is on the floor of the lock chamber of the Canadian lock.

This additional depth of  $4\frac{1}{2}$  feet provided in the channels connecting the lakes secures a depth of 21 feet when Lake Huron stands at low water stage (elevation, 579.00) which means a draft for loading of twenty feet at extreme low stage which will increase to 22 feet during the season of navigation.

It is not contemplated that a greater depth than 21 feet will be provided in the channels between the lakes, although the new Davis lock when completed will pass through a draft of 24 feet, but to insure that draft in the channels would mean a tremendous amount of work at a very great outlay.

With the depth now available careful watch is kept of the stage of water and advantage is taken of any increase to load the vessels deeper. A recommended draft is issued from the canal offices which is obtained from the mean stage as recorded by the water gauges.

During the past season the recommended draft of the Canadian lock for up bound was in excess of six inches of that of the American lock due to the difference in the controlling elevations of the locks, and for down bound, with the same controlling elevations, an additional draft was obtained by opening the filling valves and raising the water in the lock chamber, which could not be done to the same extent in the Poe lock chamber owing to the additional width of forty feet over the Canadian lock.

The result of this additional draft provided at the Canadian lock is marked by the great increase in tonnage this past season. Vessels were loaded at the ore docks for the lock to be used in transit and as many used the lock of greater draft as it was possible to accommodate at the time of passage.

The opening of part of the improved channelway at the upper entrance made it possible for vessels to use the full draft of the Canadian lock this season.

The deepening of the upper approach to the Canadian canal has provided 21 feet, 5 inches at extreme low water level, and 24 feet 5 inches at the regulated stage to be maintained.



1 GEORGE V., A. 1911

Vessels navigating the lakes have increased to a length of 607 feet and 60 feet beam and can draw over 21 feet of water. With the coming of these large vessels, the time taken up in approaching, locking, and clearing has increased.

A notable increase in the Canadian tonnage has been made in the past five years. The statistics show that the Canadian registered tonnage, relative to the Canadian canal, increased from 1,557,337 tons in 1904, to 2,912,586 tons in 1909.

The reasons for proposing a new canal at Sault Ste. Marie are: First, to keep pace with the rapid increase in Canadian tonnage with the development of the west. Secondly, to provide a lock of a width that will accommodate boats now plying on the lakes and being built of greater beam than the present lock will pass through. Thirdly, to provide additional draft both in the lock and approaches so that vessels may load to pass through the Canadian canal drawing as much water as will be provided by the new canal now under construction by the United States government.

I have the honour to be,

Your obedient servant,

F. B. FRIPP,

*Engineer in Charge.*

W. A. BOWDEN, Esq.,  
Acting Chief Engineer,  
Department of Railways and Canals,  
Ottawa, Ont.

#### ST. PETER'S CANAL.

March 31, 1910.

SIR,—I have the honour to submit my annual report of work and operation St. Peter's canal, under my charge during the fiscal year ending March 31, 1910.

The only repairs done to canal the past year was the placing of six new mooring posts, the hanging of 7 fenders, reaving 5 new chains.

The canal lock is still in a bad condition. We had to get the marine diver on two occasions last fall to clear away foul chains and shimmer up track, &c. The operating of gates is very heavy, particularly at low tide; when the tide is high they are more or less buoyant and come easier. You will find report of Mr. Sargent, C.E., inspecting engineer, September, 1908, which will give you an idea of conditions and the necessary repairs and improvements required on lock and canal. However, barring accidents, I think we can manage the operating for at least the coming season. Captains and crews of steamers and vessels are very off-handed in helping to move the gates, and it would not surprise me that at the opening of navigation this spring, I will require one or two more men on the canal staff.

Navigation opened on April 12, 1909, and closed January 11, 1910; during that time, 1,304 steamers and vessels passed up and down canal.

There is one tidal lock and four pairs of gates on St. Peter's canal.

Meantime, I have the honour to be,

Your obedient servant,

JOHN H. DEVEREUX,

*Lockmaster.*

W. A. BOWDEN, Esq.,  
Acting Chief Engineer,  
Railways and Canals,  
Ottawa.

## PART VIII.—MISCELLANEOUS.

Table of distances, Intercolonial and Prince Edward Island Railways.

### INTERCOLONIAL RAILWAY.

Expenses, earnings, freight tonnage and passengers yearly since July 1, 1876.  
 Earnings, yearly since July 1, 1876.  
 Local and through freight, yearly since July 1, 1876.  
 Local and through passengers, yearly since July 1, 1876.  
 Coal carried from Nova Scotia collieries, yearly since July 1, 1876.  
 Grain carried for shipment, yearly since July 1, 1876.  
 Flour and meal carried, yearly since July 1, 1876.  
 Grain carried, yearly since July 1, 1876.  
 Lumber carried, yearly since July 1, 1876.  
 Live stock carried, yearly since July 1, 1876.  
 Ocean-borne goods carried, yearly since July 1, 1876.  
 Raw and refined sugar carried, yearly since July 1, 1876.  
 Fresh and salt fish carried, yearly since July 1, 1876.  
 Ocean-borne passenger business at Halifax for fiscal year 1909-10.  
 Ocean-borne passenger business at St. John for the fiscal year 1909-10.  
 Ocean-borne passenger business at Quebec for fiscal year 1909-10.  
 Ocean-borne freight traffic via Halifax for fiscal year 1909-10.  
 Ocean-borne freight traffic via St. John for fiscal year 1909-10.

### WINDSOR BRANCH.

Earnings, expenses and profits or losses, yearly from 1880.

### PRINCE EDWARD ISLAND RAILWAY.

Expenses, earnings, freight and passenger traffic, yearly from 1875.

### CANALS.

Statement showing total cost of construction and enlargement from Montreal to Port Arthur.  
 Statement showing total cost of construction and enlargement from Lachine to Ottawa.  
 Statement showing total cost of construction and enlargement from Ottawa to Kingston.  
 Statement showing total cost of construction and enlargement from St. Johns to Sorel.  
 Statement showing total cost of construction and enlargement from Lake Ontario to Georgian Bay.  
 Statement showing total cost of construction and enlargement from Atlantic Ocean to Bras d'Or Lakes.  
 Dates of opening and closing of canals for the season of 1909.  
 Freight traffic in 1908 and 1909.  
 Diagrams showing dimensions of smallest lock on each canal, &c.  
 Dimensions and other features of the several canal works, and descriptions of the intermediate water navigations:

1. Between Montreal and Port Arthur or Fort William, Lake Superior.
2. Montreal, Ottawa and Kingston.
3. River Richelieu and Chambly Canal to Lake Champlain.
4. Trent Canal.
5. St. Peters Canal.





## INTERCOLONIAL RAILWAY.

The Intercolonial railway touches six Atlantic ocean ports, namely, Point du Chêne, Pieton, Halifax, St. John, Sydney and North Sydney, as well as the River St. Lawrence ports of Lévis, opposite Quebec, and Montreal.

The total length of the road operated during the year ended March 31, 1910, was 1,447.13 miles.

The following are the through distances:—

	Miles.
Montreal to Halifax, via Lévis. . . . .	827
“ “ St. John, via Lévis. . . . .	740
“ “ Sydney, via Lévis. . . . .	990
“ “ North Sydney, via Lévis. . . . .	983

Freight is carried direct via St. Henri, which would reduce each of the above distances by 3 miles.

## MAIN LINE AND BRANCHES.

(As remeasured in 1908.)

	Miles.
Halifax to Truro. . . . .	61.87
Dartmouth Branch . . . . .	12.00
Truro to Moncton. . . . .	123.77
Moncton to St. John. . . . .	89.31
Pointe du Chêne Branch. . . . .	11.98
Moncton to Campbellton. . . . .	185.37
Campbellton to Ste. Flavie. . . . .	105.03
Indiantown Branch. . . . .	13.45
Ste. Flavie to Rivière du Loup. . . . .	83.29
Rivière Ouelle Branch. . . . .	6.19
Rivière du Loup to Pointe Lévis. . . . .	115.55
Hadlow to Chaudière Curve. . . . .	5.63
Chaudière to Ste. Rosalie. . . . .	115.53
St. Charles Junction to Chaudière Junction. . . . .	16.73
Nicolet Branch. . . . .	14.70
Dalhousie Branch. . . . .	6.28
Pictou to Oxford Junction. . . . .	69.39
Brown's Point to Stellarton. . . . .	11.90
Junction near New Glasgow to Pictou Landing. . . . .	8.18
Pugwash Junction to Pugwash . . . . .	4.54
Truro to Mulgrave. . . . .	122.30
Mulgrave to Point Tupper (Ferry). . . . .	0.80
Point Tupper to Sydney. . . . .	91.17
North Sydney Junction to Sydney Mines. . . . .	7.07
Fredericton to Loggieville. . . . .	124.80

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1,406.83

## LEASED.

Length of main line from Pointe Lévis to Hadlow. . . . .	1.48	
Chaudière Curve to Chaudière. . . . .	1.19	
Ste. Rosalie Junction to Montreal. . . . .	37.63	40.30

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Total miles. . . . . 1,447.13

## FREIGHT BRANCHES OWNED.

	Miles.
Switch near North street to D.W.T., Halifax. . . . .	0.85
Halifax Cotton Factory. . . . .	2.10
Dartmouth Station to end of line. . . . .	2.12
Sydney Station to wharf. . . . .	1.06
North Sydney Station to wharf. . . . .	0.82
Switch near Pictou landing to coal wharf. . . . .	0.75
Pictou Station to wharf. . . . .	0.15
Pictou Station to Copper Crown Smelter. . . . .	0.72
Logan's Tannery siding. . . . .	0.48
Pugwash Station to wharf. . . . .	0.07
Sackville Wharf Branch. . . . .	0.47
Dorchester Wharf Branch. . . . .	1.00
Moncton Wharf Branch. . . . .	1.00
Courtney Bay Branch. . . . .	2.39
St. John water front extension. . . . .	0.44
St. John Station to Deep Water Wharf. . . . .	0.28
Newcastle Wharf Branch. . . . .	1.75
Dalhousie Station to wharf. . . . .	0.50
Campbellton Wharf Branch. . . . .	0.43
Rimouski Wharf Branch. . . . .	2.00
Trois Pistoles Spur. . . . .	2.38
Rivière du Loup Wharf Branch. . . . .	4.35
St. Pacôme Spur. . . . .	1.27
Nicolet Station to wharf. . . . .	2.08
Carmel Branch, main line to village. . . . .	1.05
Blackville to Indiantown. . . . .	8.50
Fort Lawrence Spur . . . . .	1.18
Wallace Spur. . . . .	2.00
Petit Rocher Spur to wharf. . . . .	1.35
	43.54

## WINDSOR BRANCH.

This road extends from Windsor Junction, on the Intercolonial railway, to Windsor, N.S., a distance of 32 miles.

## PRINCE EDWARD ISLAND RAILWAY.

## LENGTH OF LINE.

	Miles.
Souris to Tignish. . . . .	166
Mount Stewart to Georgetown. . . . .	24
Charlottetown to Royalty Junction. . . . .	5
Emerald Junction to Cape Traverse. . . . .	13
Alberton to Cascumpec wharf. . . . .	1
Charlottetown to Murray Harbour. . . . .	52.3
Montague Junction to Montague. . . . .	6.2
	267.5

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## INTERCOLONIAL RAILWAY.

The following table shows the working expenses, gross earnings, the tonnage of freight and number of passengers carried each year since July 1, 1876.

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	45	2,079,262	66		9,605		18	838,956	779,994
1882-83	840	2,360,373	27	2,370,910	10		17,547		18	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	989,986	957,228
1885-86	946	2,583,999	67	2,450,093	88			133,905	79	1,023,788	932,880
1886-87	977	2,922,369	62	2,600,116	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			276,847	73	1,218,877	1,136,272
1889-90	971	3,560,575	74	3,012,739	87			847,835	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
1892-93	1,142	3,045,317	50	3,065,499	09		20,181		59	1,388,080	1,292,878
1893-94	1,142	2,981,671	98	2,987,510	27		5,838		29	1,342,710	1,301,062
1894-95	1,142	2,936,902	74	2,940,717	95		3,815		21	1,276,816	1,352,667
1895-96	1,142	3,012,827	62	2,957,670	10			55,187	52	1,379,618	1,471,866
1896-97	1,145	2,925,968	67	2,866,028	02			59,940	65	1,296,028	1,501,690
1897-98	1,201	3,327,648	51	3,117,669	85			209,978	66	1,434,576	1,523,444
1898-99	1,301	3,675,686	21	3,738,331	44		62,645		43	1,750,761	1,603,095
1899-1900	1,301	4,431,404	69	4,552,071	71		120,667		02	2,151,208	1,029,754
1900-01	1,301	5,460,422	64	4,972,235	87			488,186	77	2,111,310	2,517,295
1901-02	1,301	5,574,563	30	5,671,385	91		96,822		61	2,385,816	2,186,226
1902-03	1,315	6,196,633	19	6,324,323	72		127,670		53	2,790,737	2,404,230
1903-04	1,321	7,239,982	04	6,339,231	43			900,750	61	2,664,149	2,663,156
1904-05	1,446	8,508,826	75	6,783,522	83			1,725,303	92	2,782,257	2,810,960
1905-06	1,446	7,581,914	36	7,643,829	90		61,915		54	3,156,189	2,737,160
1906-07	1,448	6,030,171	83	6,248,311	00		218,139		17	2,606,073	2,044,847
1907-08	1,448	9,157,435	53	9,173,558	80		16,123		27	4,134,064	2,789,371
1908-09	*1,447-13	9,328,021	55	8,527,069	46			800,952	09	3,573,972	2,907,287
1909-10	1,447-13	8,645,070	33	9,268,234	99		623,164		66	3,927,240	3,122,324

† The year 1906-07 was nine months only; the Canadian fiscal year having been changed to close on March 31, instead of June 30.

\* The railway was remeasured in this year.

1 GEORGE V., A. 1911

## INTERCOLONIAL RAILWAY.

STATEMENT of Earnings, yearly, from July 1, 1876, to March 31, 1910.

Year.	Miles in Operation.	Passenger Traffic.		Freight Traffic.		Mails and Sundries.		Total.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
1876-7.....	714	460,368	15	607,564	99	86,512	21	1,154,443	33
1877-8.....	714	475,256	82	801,709	82	101,985	07	1,378,946	78
1878-9.....	714	451,893	29	752,490	85	88,715	55	1,294,009	69
1879-80.....	829	490,338	66	915,486	50	100,473	32	1,506,298	48
1880-1.....	840	545,114	48	1,113,872	21	101,407	23	1,760,493	92
1881-2.....	840	651,296	94	1,303,496	00	124,470	72	2,079,262	66
1882-3.....	840	741,992	72	1,487,601	98	141,326	40	2,379,910	10
1883-4.....	887	775,783	77	1,461,390	37	147,240	78	2,383,414	92
1884-5.....	941	747,285	13	1,542,052	10	151,566	35	2,441,203	66
1885-6.....	946	765,900	03	1,523,487	72	160,706	13	2,450,093	88
1886-7.....	977	828,328	28	1,677,971	59	153,817	06	2,660,116	93
1887-8.....	971	884,448	07	1,932,877	85	166,010	13	2,983,336	95
1888-9.....	971	906,246	47	1,909,094	44	152,460	09	2,967,801	00
1889-90.....	971	895,094	53	1,964,646	86	152,993	48	3,012,739	87
1890-1.....	1,094	962,316	88	1,854,629	88	160,448	62	2,977,395	38
1891-2.....	1,142	961,427	94	1,803,529	03	180,485	00	2,945,441	97
1892-3.....	1,142	1,002,912	74	1,868,853	84	184,468	80	3,063,499	09
1893-4.....	1,142	958,915	13	1,834,126	34	193,762	51	2,987,502	27
1894-5.....	1,142	963,914	44	1,782,608	54	194,194	97	2,940,717	95
1895-6.....	1,142	971,426	26	1,788,813	18	197,400	66	2,957,640	10
1896-7.....	1,145	979,005	57	1,687,050	42	199,472	03	2,866,028	02
1897-8.....	1,201	1,053,864	64	1,857,740	06	206,065	15	3,117,669	85
1898-9.....	1,315	1,167,453	16	2,348,096	58	222,781	70	3,738,331	44
1899-1900.....	1,315	1,404,469	87	2,912,790	52	234,811	32	4,552,071	91
1900-1.....	1,315	1,607,166	79	3,121,006	15	244,062	93	4,972,235	87
1901-2.....	1,315	1,770,941	13	3,644,513	42	255,931	36	5,761,385	91
1902-3.....	1,315	1,927,916	87	4,128,256	00	268,151	75	6,324,323	72
1903-4.....	1,321	2,021,568	40	4,041,122	48	276,540	55	6,339,231	43
1904-5.....	1,446	2,105,066	75	4,373,178	75	305,277	53	6,783,522	83
1905-6.....	1,446	2,297,716	52	5,019,803	53	326,307	85	7,643,829	90
1906-7.....	1,448	1,952,438	88	4,032,745	00	263,127	12	*6,248,311	00
1907-8.....	1,448	2,711,416	98	6,054,493	45	407,643	37	9,173,358	80
1908-9.....	*1,447	2,628,218	57	5,502,550	58	396,300	31	8,527,069	46
1909-10.....	1,447	2,765,884	66	6,048,884	18	453,466	15	9,268,234	99

\* As remeasured in this year. † 1906-07, nine months only.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY.

STATEMENT showing the Number of Tons of Local and Through Freight carried, yearly, from July 1, 1876, to March 31, 1910.

Year.	Miles in Operation.	Local Freight.	Through Freight.	Total.
1876-7.	714	The information for these years was destroyed when the general offices in Moncton were burned.		421,327
1877-8.	714			522,710
1878-9.	714			510,861
1879-80.	829			561,924
1880-1.	840			725,777
1881-2.	840	571,784	267,272	838,956
1882-3.	840	537,025	443,936	970,961
1883-4.	887	584,581	424,656	1,009,237
1884-5.	941	506,574	483,352	989,936
1885-6.	946	580,076	443,712	1,023,788
1886-7.	977	633,455	509,565	1,143,020
1887-8.	971	727,599	561,224	1,288,823
1888-9.	971	624,436	594,441	1,218,877
1889-90.	971	756,696	612,123	1,368,819
1890-1.	1,094	797,492	507,042	1,304,534
1891-2.	1,142	750,783	513,792	1,264,575
1892-3.	1,142	1,030,628	357,452	1,388,080
1893-4.	1,142	966,114	376,596	1,342,710
1894-5.	1,142	901,374	366,442	1,267,816
1895-6.	1,142	1,101,229	368,389	1,379,618
1896-7.	1,145	927,167	368,859	1,296,028
1897-8.	1,201	1,053,569	381,007	1,434,576
1898-9.	1,315	1,351,569	399,192	1,750,761
1899-1900.	1,315	1,713,928	437,280	2,151,208
1900-1.	1,315	1,633,671	477,639	2,111,310
1901-2.	1,315	1,914,551	471,265	2,385,816
1902-3.	1,315	2,239,993	550,744	2,790,737
1903-4.	1,321	2,123,261	540,888	2,664,149
1904-5.	1,446	2,119,528	662,729	2,782,257
1905-6.	1,446	2,413,863	742,326	3,156,189
1906-7.	1,448	1,996,869	609,204	*2,606,073
1907-8.	1,448	3,227,435	906,629	4,134,064
1908-9.	†1,447 13	2,742,454	831,518	3,573,972
1909-10.	1,447 13	2,958,642	968,598	3,927,240

\* 1906-07 nine months only. † As remeasured in this year.



## INTERCOLONIAL RAILWAY.

STATEMENT of the Number of Local and Through Passengers carried, yearly, from July 1, 1876, to March 31, 1910.

Year.	Miles in Operation.	Number of Local Passengers.	Number of Through Passengers.	Total.
1876-7.	714	The information for these years was destroyed when the general offices in Moncton were burned.		613,420
1877-8.	714			619,957
1878-9.	714			640,101
1879-80.	829			581,483
1880-1.	840			631,245
1881-2.	840	647,534	132,460	779,994
1882-3.	840	728,186	150,414	878,600
1883-4.	887	784,715	159,921	944,636
1884-5.	941	812,028	145,200	957,228
1885-6.	946	784,817	148,063	932,880
1886-7.	977	814,032	128,732	942,784
1887-8.	971	948,324	91,839	1,040,163
1888-9.	971	1,050,592	85,680	1,136,272
1889-90.	971	1,112,695	91,531	1,219,233
1890-1.	1,094	1,203,814	94,490	1,298,304
1891-2.	1,142	1,198,649	99,083	1,297,732
1892-3.	1,142	1,188,827	104,051	1,292,878
1893-4.	1,142	1,216,027	85,035	1,301,062
1894-5.	1,142	1,272,284	80,383	1,352,667
1895-6.	1,142	1,386,803	85,063	1,471,866
1896-7.	1,145	1,416,631	85,059	1,501,690
1897-8.	1,201	1,438,590	89,854	1,523,444
1898-9.	1,315	1,504,652	98,443	1,603,095
1899-1900.	1,315	1,878,858	112,896	1,791,754
1900-1.	1,315	1,905,599	119,696	2,025,295
1901-2.	1,315	2,061,196	125,030	2,186,226
1902-3.	1,315	2,255,013	149,217	2,404,230
1903-4.	1,321	2,447,843	215,313	2,663,156
1904-5.	1,446	2,589,928	221,032	2,810,960
1905-6.	1,446	2,491,472	245,688	2,737,160
*1906-7.	1,448	1,853,126	191,721	2,044,847
1907-8.	1,448	2,593,886	195,485	2,789,371
1908-9.	†1,447 '13	2,656,217	251,020	2,907,237
1909-10.	1,447 '13	2,873,547	248,777	3,122,324

\* 1906-07 nine months only.

† As remeasured in this year.

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The following table shows the number of Tons of Coal carried over the Intercolonial railway from the Nova Scotia collieries to Ste. Rosalie, Montreal and St. John for points west thereof, and to local stations in each year since July 1, 1876.

Year.	For the West.			To Local Stations.	Total.
	Via Ste-Rosalie.	Via Montreal.	Via St. John.		
1876-7.....				103,420	103,420
1877-8.....				97,043	97,043
1878-9.....		300		112,232	112,532
1879-80.....		1,097		135,369	136,466
1880-1.....		6,102	4,022	174,483	184,607
1881-2.....		18,015	11,779	218,364	248,158
1882-3.....		12,837	22,206	227,380	262,423
1883-4.....		32,014	19,532	252,014	293,562
1884-5.....		133,440	1,773	213,791	349,004
1885-6.....		171,170	21,150	215,272	407,592
1886-7.....		192,871	27,536	233,178	453,585
1887-8.....		183,704	36,228	309,727	529,659
1888-9.....		160,026	27,923	338,538	526,487
1889-0.....		164,453	25,126	366,967	554,546
1890-1.....		113,996	69,213	344,829	498,038
1891-2.....		35,447	5,918	392,441	433,806
1892-3.....		136,868	3,775	402,653	543,296
1893-4.....		102,273	8,028	367,390	478,691
1894-5.....		67,082	7,865	310,253	385,200
1895-6.....		53,124	9,681	369,708	432,513
1896-7.....		38,395	12,305	331,469	382,172
1897-8.....		9,084	9,796	351,069	369,949
1898-99.....		4,644	5,399	484,163	494,206
1899-1900.....		3,495		599,714	603,289
1900-1.....	136			506,454	506,590
1901-2.....	1,131	5,763	3,640	546,986	557,520
1902-3.....	2,200	7,817	6,775	725,727	742,519
1903-4.....	2,260	637	513	691,346	694,761
1904-5.....	800	265	5,022	596,290	602,377
1905-6.....	7,542	1,625	661	610,444	620,272
*1906-7.....	1,737	2,808	3,252	624,833	632,630
1907-8.....	22	183	4,245	1,061,694	1,066,134
1908-9.....	514	945	4,243	909,050	914,752
1909-10.....	42	890	1,452	1,003,120	1,003,504

\*1906-07 nine months only.

1 GEORGE V., A. 1911

TABLE showing the number of Bushels of Grain carried during each year over the Interecolonial railway for shipment since July 1, 1876.

Year.	Bushels.		Total.	Year.	Bushels.		Total.
	Via Chaudière.	Via St. John.			Via Chaudière.	Via St. John.	
1876-77.....				1893-94.....	Nil	8,026	8,026
1877-78.....				1894-95.....	"	Nil.	Nil.
1878-79.....				1895-96.....	"	"	"
1879-80.....				1896-97.....	"	"	"
1880-81.....				1897-98.....	8,000	"	8,000
1881-82.....				1898-99.....	30,000	"	30,000
1882-83.....	31,011		31,011	1899-1900.....	13,239	"	13,239
1883-84.....	73,389		73,389	1900-01.....	147	"	147
1884-85.....	300,901		300,901	1901-02.....	Nil.	"	Nil.
1885-86.....	389,122		389,122	1902-03.....	"	"	"
1886-87.....	575,880		575,880	1903-04.....	147,438	"	147,438
1887-88.....	69,021		69,021	1904-05.....	Nil	"	Nil.
1888-89.....	129,725		129,725	1905-06.....	*170,000		170,000
1889-90.....	502,012		502,012	1906-07.....			Nil.
1890-91.....	148,803	59,543	218,337	1907-08.....			"
1891-92.....	845,997	519,500	1,265,497	1908-09.....			"
1892-93.....	156,306	197,666	352,975	1909-10.....			"

\* Via Montreal. 1906-1907 nine months only.

TABLE showing the number of Barrels of Flour and Meal carried during each year over the Interecolonial railway since July 1, 1876.

Year.	Barrels.	Year.	Barrels.
1876-77.....	254,710	1893-94.....	944,967
1877-78.....	557,778	1894-95.....	938,351
1878-79.....	630,329	1895-96.....	822,097
1879-80.....	535,248	1896-97.....	847,701
1880-81.....	672,310	1897-98.....	987,408
1881-82.....	692,095	1898-99.....	1,157,250
1882-83.....	983,916	1899-1900.....	1,234,077
1883-84.....	817,134	1900-01.....	1,292,106
1884-85.....	935,977	1901-02.....	1,311,707
1885-86.....	761,127	1902-03.....	1,521,540
1886-87.....	763,894	1903-04.....	1,607,050
1887-88.....	871,838	1904-05.....	1,769,450
1888-89.....	948,514	1905-06.....	1,882,630
1889-90.....	1,116,050	1906-07.....	1,531,140
1890-91.....	1,013,129	1907-08.....	1,528,620
1891-92.....	954,015	1908-09.....	1,466,920
1892-93.....	856,913	1909-10.....	1,608,170

1906-07, nine months only.

## SESSIONAL PAPER No. 20

TABLE showing the number of Bushels of Grain carried during each year over the Inter-colonial railway since July 1, 1876.

Year.	Bushels.	Year.	Bushels.
1876-77.....	292,852	1893-94.....	1,304,684
1877-78.....	331,170	1894-95.....	1,036,384
1878-79.....	302,921	1895-96.....	1,064,385
1879-80.....	534,021	1896-97.....	1,093,499
1880-81.....	505,678	1897-98.....	1,551,372
1881-82.....	560,253	1898-99.....	2,595,353
1882-83.....	1,195,601	1899-1900.....	2,720,453
1883-84.....	654,673	1900-1901.....	3,535,364
1884-85.....	734,902	1901-02.....	2,959,761
1885-86.....	849,800	1902-03.....	3,392,252
1886-87.....	1,018,395	1903-04.....	2,788,772
1887-88.....	1,219,035	1904-05.....	3,317,910
1888-89.....	1,256,158	1905-06.....	2,924,226
1889-90.....	2,610,202	1906-07.....	2,231,864
1890-91.....	2,890,921	1907-08.....	4,567,245
1891-92.....	3,776,677	1908-09.....	4,727,268
1892-93.....	1,514,619	1909-10.....	7,074,042

1906-07 nine months only.

TABLE showing the quantity of lumber in feet carried during each year over the Inter-colonial railway since July 1, 1876.

Year.	Feet.	Year.	Feet.
1876-77.....	50,096,474	1893-94.....	200,507,949
1877-78.....	56,626,547	1894-95.....	202,247,269
1878-79.....	55,626,696	1895-96.....	226,332,715
1879-80.....	55,462,654	1896-97.....	243,355,725
1880-81.....	72,841,388	1897-98.....	354,093,816
1881-82.....	78,356,418	1898-99.....	306,554,031
1882-83.....	104,633,417	1899-1900.....	379,350,074
1883-84.....	131,120,948	1900-1901.....	396,858,964
1884-85.....	138,493,675	1901-02.....	428,051,029
1885-86.....	117,186,512	1902-03.....	459,231,589
1886-87.....	161,801,763	1903-04.....	465,379,803
1887-88.....	197,755,272	1904-05.....	518,434,310
1888-89.....	199,507,777	1905-06.....	572,878,600
1889-90.....	210,886,071	1906-07.....	452,602,703
1890-91.....	184,188,324	1907-08.....	754,759,383
1891-92.....	175,474,340	1908-09.....	571,395,101
1892-93.....	181,211,013	1909-10.....	677,805,611

1906-07 nine months only.

1 GEORGE V., A. 1911

TABLE showing the number of Live Stock carried during each year over the Inter-colonial railway since July 1, 1876.

Year.	Number.	Year.	Number.
1876-77.....	34,414	1893-94.....	79,203
1877-78.....	46,498	1894-95.....	72,106
1878-79.....	47,584	1895-96.....	64,051
1879-80.....	70,990	1896-97.....	72,082
1880-81.....	61,574	1897-98.....	89,301
1881-82.....	73,479	1898-99.....	109,821
1882-83.....	68,338	1899-1900.....	92,813
1883-84.....	60,090	1900-01.....	95,923
1884-85.....	70,785	1901-02.....	98,495
1885-86.....	74,498	1902-03.....	127,060
1886-87.....	82,896	1903-04.....	113,006
1887-88.....	98,302	1904-05.....	110,670
1888-89.....	85,960	1905-06.....	106,589
1889-90.....	80,771	1906-07.....	97,381
1890-91.....	95,529	1907-08.....	99,824
1891-92.....	87,889	1908-09.....	104,165
1892-93.....	93,369	1909-10.....	106,712

1906-07 nine months.

TABLE showing the number of Tons of Ocean-borne goods to and from Europe carried over the Intercolonial railway during each year since July 1, 1876.

Year.	Via Ste. Rosalie and from the West.	Via Mont- real to and from the West.	Via St. John to and from the West.	To and from Local Stations.	Total.
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		23,835	33,571
1892-93.....		7,295		12,319	19,714
1893-94.....		3,023	204	13,455	16,682
1894-95.....		6,749	213	10,399	17,361
1895-96.....		3,767	314	16,748	20,829
1896-97.....		2,654	263	17,239	20,156
1897-98.....		5,950	1,637	18,633	26,220
1898-99.....		2,462	243	31,555	34,263
1899-1900.....		6,880	307	37,108	39,794
1900-01.....	322	7,780	1,142	155,514	163,838
1901-02.....	1,106	11,925	1,528	172,733	183,147
1902-03.....	817	21,377	1,194	124,695	138,631
1903-04.....	2,079	15,325	2,994	146,070	174,520
1904-05.....	284	17,217	3,687	85,853	105,149
1905-06.....	2,026	15,922	5,337	128,462	153,042
1906-07.....	1,384	16,652	436	110,447	128,219
1907-08.....	2,440	16,652	519	134,541	154,052
1908-09.....	2,487	23,402	649	119,913	146,451
1909-10.....	2,367	21,064	5,818	131,273	160,522

1906-07 nine months only.



SESSIONAL PAPER No. 20

TABLE showing the number of Tons of Raw and Refined Sugar carried over the Inter-colonial Railway during each year since since July 1, 1876.

Year.	RAW SUGAR.					REFINED SUGAR.				
	Via Ste. Rosalie.	To Montreal for the west.	To St. John for the West.	To Local Stations	Total.	To Ste. Rosalie for the West.	To Montreal for the West.	To St. John for the West.	To Local Stations	Total.
		Tons.	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		7,674		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	7,647	12,414	32,721
1892-93....				10,137	10,137		8,327	6,456	7,840	22,623
1893-94....				6,775	6,775		17,729	6,967	8,885	33,581
1894-95....				10,342	10,342		13,351	15,819	4,695	33,865
1895-96....				9,824	9,824		15,138	13,734	11,309	40,181
1896-97....				4,925	4,925		5,694	8,069	6,957	20,720
1897-98....							6,624	8,821	10,989	26,534
1898-99....							8,138	2,193	15,833	26,164
1899-1900....		96			96		9,795	257	19,655	29,907
1900-01....		489			489		14,791	12	10,615	25,821
1901-02....		90		11,553	11,643	3,101	6,831	861	18,839	29,632
1902-03....		194		17,137	17,331	3,183	5,763	1,636	20,529	31,111
1903-04....	357	875		7,495	8,727	6,013	8,628	879	29,400	44,920
1904-05....	602	509	78	1,495	15,684	1,446	7,107	224	22,937	31,764
1905-06....		715	68	9,308	10,091	4,235	12,268	176	24,780	41,450
1906-07....		394		14,671	15,065	1,998	5,898	2,374	13,927	24,197
1907-08....		912		4,371	5,283	5,280	10,555	723	21,073	37,631
1908-09....	6	1,705		6,817	8,528	5,095	8,906	979	21,527	36,507
1909-10....	309	2,000		12,203	14,512	6,402	9,217	1,051	23,224	39,894

1906-07—nine months only.



TABLE showing the number of Tons of Fresh and Salt Fish carried over the Inter-colonial railway during each year since 1876.

Year.	FRESH FISH.					SALT FISH.				
	Via Ste. Rosalie.	Via Mont-real.	Via St. John	To Local Stations	Total.	Via Ste. Rosalie.	Via Mont-real.	Via St. John	To Local Stations	Total.
	Tons.	Tons.	Tons.	Tons.	Tons	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77.....		530	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		3,229	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		1,689	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	3,286	7,106
1891-92.....		1,367	1,746	547	3,660		1,946	928	1,889	4,763
1892-93.....		1,683	1,875	3,340	6,898		3,262	1,811	2,176	7,249
1893-94.....		1,959	2,192	2,224	6,375		2,921	1,814	2,962	7,697
1894-95.....		2,006	3,726	1,160	6,892		2,075	1,849	5,285	10,209
1895-96.....		1,966	3,059	1,319	6,344		1,863	1,087	2,791	5,741
1896-97.....		3,307	3,115	1,286	7,708		2,168	1,176	2,536	5,880
1897-98.....		3,575	3,703	1,052	8,330		1,729	1,066	2,210	5,005
1898-99.....		1,210	2,070	3,305	6,583		1,651	1,198	3,625	5,474
1899-1900.....		2,547	2,706	3,686	8,939		2,421	1,563	2,659	6,643
1900-01.....	37	2,009	3,207	4,125	9,393	360	3,419	1,346	4,643	9,768
1901-02.....	219	3,013	4,373	5,477	13,082	283	3,150	1,413	5,196	10,042
1902-03.....	140	2,269	3,040	4,842	10,289	493	2,808	1,615	6,579	11,495
1903-04.....	539	1,939	3,588	5,002	11,068	225	2,359	564	5,848	8,996
1904-05.....	779	1,902	3,674	5,516	11,871	433	2,673	272	6,759	10,137
1905-06.....	234	2,748	2,439	7,706	13,177	683	2,740	346	6,994	10,763
1906-07.....	320	2,882	3,712	7,400	14,314	307	3,156	416	6,348	10,227
1907-08.....	199	3,288	1,353	6,224	11,064	661	2,856	1,976	7,034	12,527
1908-09.....	312	2,965	2,794	6,946	13,017	668	4,078	1,682	4,866	11,244
1909-10.....	547	3,965	2,616	6,525	13,653	697	3,759	806	9,606	14,868

1906-07—nine months only

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## WINDSOR BRANCH.

This road is operated by the Dominion Atlantic Railway Company (formerly the Windsor and Annapolis Railway Company), under a lease which covers also running powers over the Intercolonial railway between Windsor Junction and Halifax. The company retain two-thirds of the gross earnings, and the government receive one-third of the gross earnings, for maintaining the way and works.

Year.	Miles in operation.	One-third gross earnings.	Proportion credited to line Windsor Junction to Halifax.	Proportion credited to the Windsor Branch.	Maintenance expenses.	Profit.	Loss.
		\$ 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	21,052 19	13,099 55	7,953 64	
1882-83..	32	31,199 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	8,237 00	25,327 58	26,042 33		714 75
1887-88..	32	32,242 85	6,689 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 48	33,508 35	28,931 71	1,303 42	
1891-92..	32	42,891 23	9,382 38	30,235 13	19,514 37	13,994 48	
1892-93..	32	43,901 28	9,585 17	34,316 11	16,889 95	17,426 16	
1893-94..	32	41,834 70	8,859 23	32,975 47	17,645 09	15,330 38	
1894-95..	32	50,703 84	11,626 20	39,077 64	14,640 07	24,437 57	
1895-96..	32	47,456 74	10,894 91	36,561 83	16,476 46	20,985 37	
1896-97..	32	54,208 81	13,605 58	46,603 23	10,821 04	29,782 19	
1897-98..	32	48,892 21	11,665 57	37,226 64	18,181 09	14,045 01	
1898-99..	32	56,314 51	13,840 48	42,474 04	12,873 06	29,600 94	
1899-1900	32	62,266 61	14,925 18	47,351 43	12,891 56	34,459 87	
1900-01..	32	62,523 20	15,261 31	47,261 89	16,862 66	30,399 23	
1901-02	32	65,315 38	15,710 79	49,604 59	16,376 27	33,228 32	
1902-03..	32	56,417 38	13,856 57	42,560 81	17,843 19	24,717 62	
1903-04..	32	72,708 54	19,074 49	53,634 05	24,281 09	29,352 96	
1904-05..	32	66,798 46	16,759 79	50,038 67	26,863 16	23,175 51	
1905-06..	32	65,936 66	16,484 16	49,452 50	17,485 97	31,966 53	
1906-07..	32	61,597 30	16,156 78	45,440 52	15,425 32	30,015 20	
1907-08..	32	76,471 58	20,041 17	56,430 41	37,912 11	18,518 20	
1908-09..	32	75,781 80	19,750 47	56,031 33	36,234 55	19,796 78	
1909-10..	32	81,861 73	21,207 75	60,653 98	23,549 90	37,104 08	

1906-07—nine months only.

## PRINCE EDWARD ISLAND RAILWAY.

The following table shows the working expenses, the gross and net earnings, the tons of freight and number of persons carried each year since June 30, 1875, when the road was first opened for traffic:—

Year.	Miles in operation.	Working expenses.		Gross earnings.		Loss.	Tons of freight carried.	No. of passengers carried.	
		§	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	38,668	111,428
1878-79	199	223,313	12	125,855	99	97,457	21	38,923	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	155,363	37	48,984	00	63,589	103,067
1887-88	211	229,639	95	158,365	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
1892-93	211	226,422	17	162,690	42	63,731	75	56,718	132,111
1893-94	211	226,891	06	158,533	83	68,257	23	53,577	123,727
1894-95	211	232,105	19	149,654	71	83,250	41	48,325	125,089
1895-96	211	225,138	56	146,476	54	78,662	02	46,395	122,586
1896-97	211	240,489	90	153,443	13	87,946	77	52,151	121,498
1897-98	211	231,418	74	158,950	61	72,468	13	57,539	126,510
1898-99	211	218,053	01	165,021	03	53,040	98	57,958	129,667
1899-1900	211	220,931	81	174,738	73	46,193	08	62,227	147,471
1900-01	211	261,766	24	193,833	48	67,883	76	73,696	157,793
1901-02	210	270,159	97	197,999	97	72,160	00	75,3-1	184,748
1902-03	209	259,637	82	217,714	24	41,923	58	80,582	205,265
1903-04	209	335,695	44	234,390	03	101,305	41	86,286	224,517
1904-05	209	370,464	44	217,330	61	153,133	83	75,969	235,194
1905-06	261	294,253	16	257,270	57	36,982	59	87,162	256,092
1906-07	267	283,148	50	215,434	97	67,713	53	67,144	232,371
1907-08	267	399,947	79	304,579	83	95,367	96	97,250	317,828
1908-09	267·5	400,330	00	311,319	63	89,010	78	106,090	332,758
1909-10	267·5	427,283	73	319,074	74	108,208	99	105,741	351,038

1906-07—nine months only.

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CANALS.

STATEMENT showing the total cost of the individual Dominion canal works and connecting waters, up to March 31, 1910.

*Route from Montreal to Lake Superior.*

	Original Construction.		Enlargement of Canals.		Improvements to St. Lawrence River and Lakes.		Totals.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Lachine Canal .....	2,589,532	85	9,786,178	93			12,375,711	78
Lake St. Louis .....					298,176	11	298,176	11
Soulanges Canal .....	7,126,135	61					7,126,135	61
Beauharnois Canal .....	1,636,690	26					1,636,690	26
Lake St. Francis .....					75,906	71	75,906	71
Cornwall Canal .....	1,945,624	73	5,289,142	41			7,234,767	14
Williamsburg Canal .....	1,320,655	54	10,696	26			1,331,351	80
Farran's Point Canal .....			877,090	57			877,090	57
Rapide Plat Canal .....			2,158,242	00			2,158,242	00
Galops Canal .....			6,120,985	18			6,120,985	18
Galops Rapids .....					1,072,227	11	1,072,227	11
St. Lawrence River and Reaches .....					711,238	93	711,238	93
North Channel .....					1,684,389	51	1,684,389	51
Murray Canal .....	1,248,946	71					1,248,946	71
Welland Canal .....	7,693,824	03	20,813,039	16			28,506,863	19
Sault. Ste. Marie Canal .....	4,868,532	60					4,868,532	60
	28,429,942	33	45,055,374	51	3,841,938	37	77,327,255	21

*Route from Lachine to Ottawa.*

	Original Construction.		Enlargement.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Ste. Anne's Lock .....	134,456	51	1,035,759	12	1,170,215	63
Carillon and Grenville .....	63,053	64	4,119,039	32	4,182,092	96
Culbute Canal (superseded) .....	382,776	46			382,776	46
Total .....	580,286	61	5,154,798	44	5,735,085	05

Construction by the Imperial Government is not included. Records relating to same were kept in Ordnance Office, Montreal, and were destroyed by fire in 1852.

*Route from Ottawa to Kingston.*

	Original Construction.		Enlargement.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Rideau Canal .....	4,085,889	21			4,085,889	21
Tay Canal .....	489,599	23			489,599	23
Total .....	4,575,488	44			4,575,488	44

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*Route from St. Johns, P.Q., to Sorel.*

	Original Construction.	Enlargement.	Total.
	§ cts.	§ cts.	§ cts.
Chambly Canal.....	637,056 76	43,944 33	681,001 09
St. Ours Lock .....	121,537 65	.....	121,537 65
Total.....	758,594 41	43,944 33	802,538 74

*Route from Lake Ontario to Georgian Bay.*

	Original Construction.	Enlargement.	Total.
	§ cts.	§ cts.	§ cts.
Trent Canal .....	7,873,501 09	.....	7,873,501 09
Total.....	7,873,501 09	.....	7,873,501 09

*Route from Atlantic Ocean to Bras d'Or Lakes.*

	Original Construction.	Enlargement.	Total.
	§ cts.	§ cts.	§ cts.
St. Peter's Canal—Cape Breton.....	248,762 84	399,784 30	648,547 14
Total.....	248,762 84	399,784 30	648,547 14

TABLE showing the dates of opening and closing of the canals for the season of 1909.

Name of Canal.	Navigation Opened 1909.	Navigation Closed 1909.
Lachine .....	May 1 .....	December 3.
Soulanges .....	" .....	" 4.
Grenville.....	" .....	November 30.
Carillon.....	" .....	" 30.
Chambly.....	" .....	" 30.
St. Anne's.....	April 30.....	" 30.
St. Ours .....	" 20.....	" 30.
Cornwall.....	May 3.....	December 6.
Williamsburg... { Farran's Point.....	" 1.....	" 8.
{ Rapide Plat.....	" 1.....	" 8.
{ Galops.....	" 1.....	" 8.
Murray.....	April 12 .....	" 7.
Welland.....	" 15.....	" 20.
Sault Ste. Marie.....	" 21.....	" 16.
Rideau... { At Ottawa.....	May 1.....	November 30.
{ At Kingston Mills.....	" 1.....	" 29.
{ Lake Simcoe to Fenelon Falls.....	" 1.....	" 1.
Trent... { Fenelon Falls to Lakefield.....	April 21.....	" 20.
{ Lakefield to Peterborough.....	May 10.....	" 15.
{ Peterborough to Healey Falls.....	April 17.....	" 27.
St. Peter's.....	" 12.....	January 11, 1910.

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## COMPARATIVE STATEMENT of Tons of Freight which passed through the canals in seasons of 1908 and 1909.

Name of Canal.	Season of 1908.	Season of 1909.	Number of trips of vessels.	
			Season of 1908.	Season of 1909.
	Tons.	Tons.		
Welland Canal.....	1,703,453	2,025,951	2,351	2,433
St. Lawrence Canals.....	2,009,102	2,410,629	8,025	9,271
Chambly Canal.....	503,276	752,117	3,594	4,725
Ottawa River Canals.....	258,527	336,939	1,882	2,181
Rideau Canal.....	89,640	91,774	7,981	2,236
St. Peter's Canal.....	72,015	79,850	1,380	1,439
Trent Canal.....	81,690	59,952	5,025	3,730
Murray Canal.....	25,901	102,291	998	957
Sault Ste. Marie Canal.....	12,759,216	27,861,245	5,293	6,331
Total.....	17,502,820	33,720,748	36,529	33,303





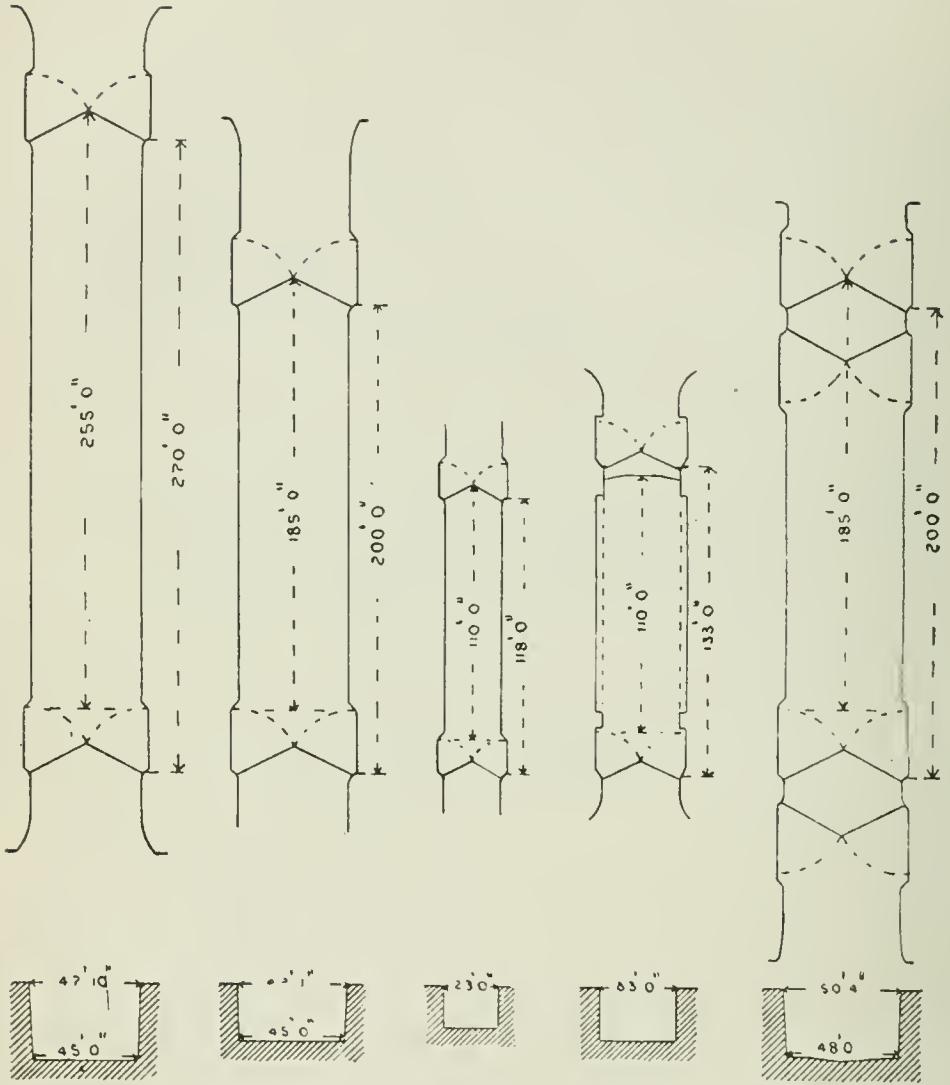
# CANALS

DIAGRAM SHOWING DIMENSIONS OF THE SMALLEST LOCK ON EACH  
CANAL. LENGTHS AND LOCATIONS OF THE DOMINION  
CANALS AND THE INTERMEDIATE WATERS

WITH

DIMENSIONS OF LOCKS.

Plans and Sections showing Dimensions of the Smallest Lock on each



Lachine

St Anne,  
St Ours,  
Carillon,  
& Grenville.

Chambly

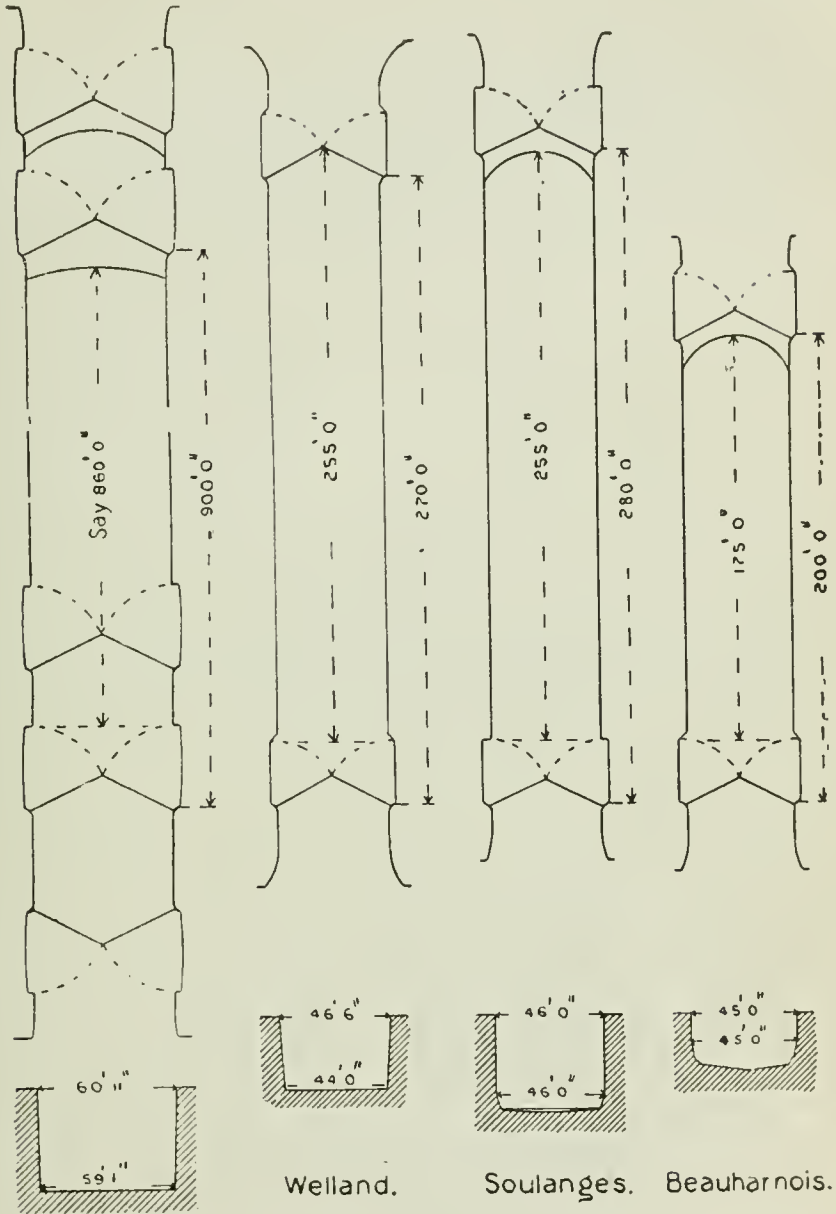
Rideau

St Peter's

There are no locks on the through route between Lake Superior and

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of the Canadian Canal Systems except the Trent Canal, which is uncompleted.

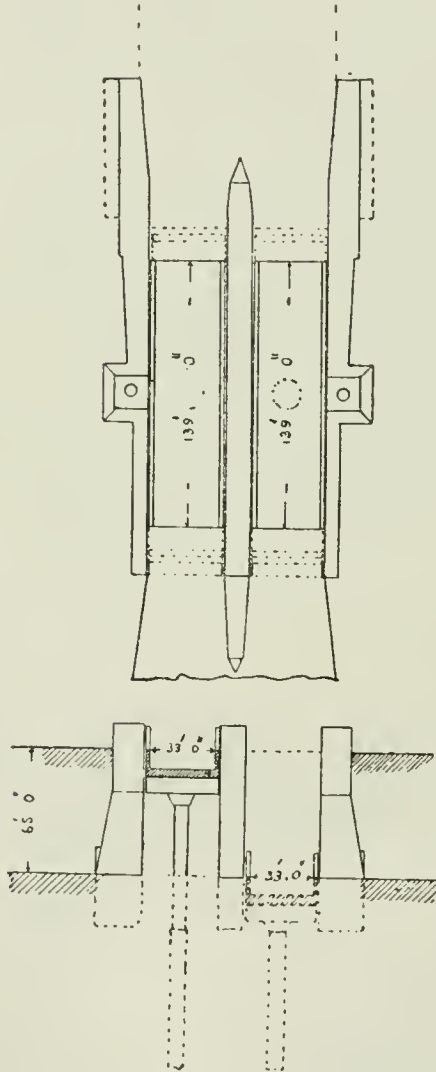


Sault Ste Marie.

Montreal of less dimension than those of the Welland Canal Locks.

# TRENT CANAL

Hydraulic Lift-Lock at Peterborough  
65 Feet Lift



## CANALS

The following statements give in concise form the essential features of the government canal works and the intermediate water navigation:—

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers are as follows:—

*First.—The through route between Montreal and Port Arthur or Fort William on the west shore of Lake Superior (14 feet minimum depth of water.)*

	Statute Miles.
1. Lachine Canal . . . . .	8½
Lake St. Louis and River St. Lawrence. . . . .	16
2. Soulanges Canal. . . . .	14
Lake St. Francis and River St. Lawrence. . . . .	33
3. Cornwall Canal. . . . .	11
River St. Lawrence . . . . .	5
4. Farran's Point Canal. . . . .	1¼
River St. Lawrence. . . . .	10
5. Rapide Plat Canal . . . . .	3¾
River St. Lawrence. . . . .	4
6. Galops Canal. . . . .	7¾
River St. Lawrence and Lake Ontario. . . . .	236
7. Welland Canal. . . . .	26¾
Lake Erie, Detroit River, Lake St. Clair, Lake Huron, &c. . . . .	580
8. Sault Ste. Marie Canal. . . . .	1¼
Lake Superior to Port Arthur or to Fort William. . . . .	273
Total. . . . .	1,230¼
To Duluth. . . . .	1,354
Chicago. . . . .	1,286

*Second—Ottawa to Lake Champlain.*

1. Grenville.      2. Carillon.      3. Ste. Anne's.      4. Chambly.      5. St. Ours Lock.

*Third.—Ottawa to Kingston and Perth.*

1. Rideau canal.

*Fourth.—Lake Ontario at Trenton to Lake Huron.*

1. Trent canal (not completed).

*Fifth.—Atlantic Ocean to the Bras d'Or Lakes, Cape Breton.*

1. St. Peter's Canal.

### 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, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, or Fort William on the west coast of Lake Superior, a distance of 2,233 statute miles. The distance to Duluth is 2,357 miles. The distance to Chicago, 2,289 miles.



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From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 1,003 statute miles. From Quebec to Montreal the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through Lake St. Peter, vessels drawing more than from 10 to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826 the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869 this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the Department of Marine and Fisheries. The channel has a depth of 30 feet at extreme low water, and a minimum width of 450 feet, extending to 600 feet at points of curvature. The channel is lighted and buoyed. A 35 foot deep channel was commenced in 1907.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here, the canal systems of the River St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where the tidal influence ceases, and Lake Superior, is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior, are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior, is 48. The Soulanges canal takes the place of the Beauharnois canal, abandoned for navigation purposes.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canals, situated on the United States side of the River St. Mary.

Improvements of the United States channels in St. Mary's river through Hay lake, east of the Sault Ste. Marie, have been carried on for several years past. The dredged areas now total 34 miles in length, with a minimum width of 300 feet, which is increased at angles and other critical points to 1,000 feet. The depth is 20 feet at the mean stage of water. In the year 1903 excavation was commenced to afford 21 feet at the lowest stage of water.

It is important to note that the enlargement of canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

#### LACHINE CANAL.

Length of canal. . . . .	8½ statute miles
Number of locks. . . . .	5
Dimensions of locks . . . . .	270 feet by 45 feet
Total rise or lockage. . . . .	45 feet
Depth of water on sills, at two locks. . . . .	18 "
Depth of water on sills, at three locks. . . . .	14 "
Average width of new canal. . . . .	150 "

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The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills. The two lower north locks, however, have been lengthened to 270 feet, and have 16½ feet of water on the sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bar the ascent of the River St. Lawrence. They are 986 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Length of canal . . . . .	14 statute miles
Number of locks—	
Lift. . . . .	4
Guard. . . . .	1
Dimensions of locks. . . . .	280 feet by 45 feet
Total rise or lockage. . . . .	84 feet
Depth of water on sills. . . . .	15 “
Breadth of canal at bottom. . . . .	100 “
Breadth of canal at water surface. . . . .	164 “

The canal extends from Cascade Point to Coteau Landing, overcoming the Cascades rapids, Cedar rapids and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges the distance is sixteen miles.

CORNWALL CANAL.

Length of canal . . . . .	11 statute miles
Number of locks . . . . .	6
Dimensions of locks. . . . .	270 feet by 45 feet
Total rise or lockage . . . . .	48 feet
Depth of water on sills. . . . .	14 “
Breadth of canal at bottom . . . . .	100 “
Breadth of canal at water surface. . . . .	164 “

The old lift locks, 200 feet by 50 feet, are also available with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through Lake St. Francis 33 miles, which is navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's Landing.

WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat and Galops canals are collectively known as the Williamsburg canals.

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## FARRAN'S POINT CANAL.

Length of canal . . . . .	1¼ mile
Number of locks . . . . .	1
New lock . . . . .	800 feet by 45 feet
Old lock . . . . .	200 "
Total rise or lockage . . . . .	3½ feet
Depth of water on sills of new lock . . . . .	14 "
Depth of water on sills of old lock . . . . .	9 "
Breadth of canal at bottom . . . . .	90 "
Breadth of canal at water surface . . . . .	154 "

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

## RAPIDE PLAT CANAL.

Length of canal . . . . .	3⅓ miles
Number of locks . . . . .	2
Dimensions of locks . . . . .	270 feet by 45 feet
Total rise or lockage . . . . .	11½ feet
Depth of water on sills . . . . .	14 "
Breadth of canal at bottom . . . . .	80 "
Breadth of canal at water surface . . . . .	152 "

The old lift-lock, 200 feet by 45, is also available, with nine feet of water on mitre sills.

From the head of Farran's Point canal to the foot of Rapide Plat canal, there is a navigable stretch of 10½ miles. The canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

## GALOPS CANAL.

Length of canal . . . . .	7⅓ miles			
Number of locks . . . . .	3			
Dimensions of locks, one of which is a guard-lock . . . . .	<table> <tr> <td>1-800 by 45</td> </tr> <tr> <td>1-270 by 45</td> </tr> <tr> <td>1-285 by 45</td> </tr> </table>	1-800 by 45	1-270 by 45	1-285 by 45
1-800 by 45				
1-270 by 45				
1-285 by 45				
Total rise or lockage . . . . .	15½ feet			
Depth of water on sills . . . . .	14 "			
Breadth of canal at bottom . . . . .	80 "			
Breadth of canal at surface of water . . . . .	144 "			

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4½ miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Port Cardinal and the Galops.

## MURRAY CANAL.

Length between eastern and western piers . . . . .	5½ miles
Breadth at bottom . . . . .	80 feet
Breadth at water surface . . . . .	120 "
Depth below lowest known lake level . . . . .	11 "
No locks.	

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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.

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) . . . . .		1						
Number of locks. } guard . . . . .	1	1						
	lift . . . . .	25						
Dimensions . . . . .	<table border="0"> <tr> <td rowspan="4" style="font-size: 3em; vertical-align: middle;">}</td> <td>1 (tidal) 230 x 45</td> <td rowspan="4" style="vertical-align: middle;">270 feet x 45 feet.</td> </tr> <tr> <td>1 lock 200 x 45</td> </tr> <tr> <td>1 lock 200 x 45</td> </tr> <tr> <td>24 locks 150 x 45</td> </tr> </table>		}	1 (tidal) 230 x 45	270 feet x 45 feet.	1 lock 200 x 45	1 lock 200 x 45	24 locks 150 x 45
}	1 (tidal) 230 x 45	270 feet x 45 feet.						
	1 lock 200 x 45							
	1 lock 200 x 45							
	24 locks 150 x 45							
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, via lock at Aqueduct . . . . .	300 "
Chippewa 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 feet 10 inches.

GRAND RIVER FEEDER.

Length of canal . . . . .	21 miles.			
Number of locks . . . . .	2			
Dimensions of locks . . . . .	<table border="0"> <tr> <td rowspan="2" style="font-size: 3em; vertical-align: middle;">}</td> <td>1 of 150 by 26½ ft.</td> </tr> <tr> <td>1 of 200 by 45 ft.</td> </tr> </table>	}	1 of 150 by 26½ ft.	1 of 200 by 45 ft.
}	1 of 150 by 26½ ft.			
	1 of 200 by 45 ft.			
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 feet by 45 feet.
Depth of water on sills . . . . .	7½ feet.
Total rise or lockage . . . . .	7 to 8 feet.

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 Allanburg, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

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From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

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 River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 274 miles, and to Duluth 397 miles.

SAULT STE. MARIE CANAL.

Length of canal, between the extreme ends of the entrance piers. . . . .	1 $\frac{1}{30}$ miles or 7,472 feet.
Number of locks. . . . .	1
Dimensions of locks. . . . .	900 feet by 60 feet at water level; width at lock bottom, 59 feet.
Depth of water on sills (at lowest known water level. . . . .)	19 feet 3 inches.
Total rise or lockage (mean). . . . .	19 feet.
Breadth of canal at bottom. . . . .	141 feet 8 inches.
Breadth at surface of water . . . . .	150 feet.

This canal has been constructed through St. Mary's island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior.

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 canals, to the city of Ottawa; thence by the River Rideau and the Rideau canal to Kingston, on Lake Ontario—a total distance of 245 $\frac{3}{8}$  miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are:—

OTTAWA RIVER CANALS.

The Ste. Anne's Lock.                  Carillon Canal.                  Grenville Canal.

RIDEAU CANAL.

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.	Inter- mediate Distance.	Total Distance from Montreal.
	Miles.	Miles.
The Lachine Canal. . . . .	8 $\frac{1}{2}$	
From Lachine to Ste. Anne's Lock . . . . .	15 $\frac{1}{2}$	23 $\frac{1}{2}$
Ste. Anne's Lock and piers. . . . .	$\frac{1}{8}$	23 $\frac{5}{8}$
Ste. Anne's Lock to Carillon Canal . . . . .	27	50 $\frac{5}{8}$
The Carillon Canal. . . . .	$\frac{3}{4}$	51 $\frac{1}{2}$
From Carillon to Grenville Canal. . . . .	6 $\frac{1}{4}$	57 $\frac{3}{4}$
The Grenville Canal . . . . .	5 $\frac{3}{4}$	63 $\frac{3}{4}$
From the Grenville Canal to entrance of Rideau Navigation. . . . .	56	119 $\frac{3}{4}$
Rideau Navigation ending at Kingston. . . . .	126 $\frac{1}{4}$	245 $\frac{3}{8}$



STE. ANNE'S LOCK.

	New Lock.	Old Lock.
Length of canal. . . . .	$\frac{1}{8}$ mile.	$\frac{1}{8}$ mile.
Number of locks. . . . .	1	1
Dimensions of locks. . . . .	200 x 45 feet.	190 x 45 feet.
Total rise or lockage. . . . .	3 feet.	3 feet.
Depth on sills. . . . .	9 "	6 "

This work, with guide piers above and below, surmounts the St. Anne's rapids between Ile Percé and the head of the Island of Montreal, at the outlet of that portion of the River Ottawa which forms the Lake of Two Mountains,  $23\frac{1}{2}$  miles from Montreal harbour.

THE CARILLON CANAL.

Length of canal. . . . .	$\frac{3}{4}$ mile.
Number of locks. . . . .	2
Dimensions of locks. . . . .	200 x 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 is a navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.

By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

Length of canal. . . . .	$5\frac{3}{4}$ miles.
Number of locks . . . . .	5
Dimensions of locks . . . . .	200 x 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 feet.

This canal, by which the Long Sault rapids are avoided, are about 56 miles below the city of Ottawa, up to which point the River Ottawa affords unimpeded navigation.

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 navigation . . . . .	126 $\frac{1}{4}$ miles.
Number of locks from Ottawa to Kingston. . . . .	{ 33 ascending. 14 descending.
Total lockage . . . . . 457 $\frac{1}{2}$	{ 292 $\frac{1}{4}$ rise and 165 $\frac{1}{4}$ fall. } at high water.
Dimensions of locks. . . . .	134 x 33 feet.
Depth of water on sills. . . . .	5 feet.
Navigation depth through the several reaches . . . . .	5 "
Breadth of canal reaches at bottom. . . . .	{ 54 feet in rock. 60 feet in earth.
Breadth of canal at surface of water. . . . .	80 feet in earth.



## PERTH BRANCH.

Length of canal . . . . .	7 miles.
Number of locks . . . . .	2
Dimensions of locks . . . . .	134 feet x 33 feet.
Total rise or lockage . . . . .	26 "
Depth of water on sills . . . . .	5 " 6 inches.
Length of dam . . . . .	200 "
Breadth of canal at surface of water . . . . .	80 "
Breadth of canal at bottom . . . . .	{ 40 " in rock. 60 " in clay.

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on Lake Rideau, and the town of Perth.

The summit level of the Rideau 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 Rideau river, 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 Wolf lake system.

3. The southwest descending level to Kingston, supplied by the Mud lake system, discharging into Lake Rideau.

The southwest 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 to Cranberry lake, which, discharging through Round Tail outlet, forms the River Cataraqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

## 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 at Chambly; thence, by the Chambly canal, to St. Johns, and down 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 is entered, and connection is obtained with the River Hudson, by which the city of New York is directly reached.

The following table shows the distances between Sorel and New York:—

Sections of Navigation.	Interme- diate Distance.	Total Distances.
	Miles.	Miles.
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 . . . . .	145	411

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ST. OURS LOCK AND DAM.

Length. . . . .	$\frac{1}{2}$ mile.
Number of locks. . . . .	1
Dimensions of lock. . . . .	200 feet by 45 feet.
Total rise or lockage. . . . .	5 feet.
Depth of water on sills. . . . .	7 "
Length of dam in western channel. . . . .	690 "

At St. Ours, 14 miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

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 lock No. 2 . . . . .	124 "	
Lift locks Nos. 3, 4, 5, 6 . . . . .	118 "	
Lift locks Nos. 7, 8, 9 combined. . . . .	125 "	
Total rise or lockage. . . . .	74 "	
Depth of water on sills. . . . .	7 "	
Breadth of canal at bottom. . . . .	36 "	
Breadth of canal at 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.

TRENT CANAL.

The term 'Trent canal' is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in the present condition, are efficient only for local use. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

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, as originally contemplated and modified, is as follows:—

Through the River Trent, Rice Lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, 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. The route from Lake Simcoe to Georgian Bay, Lake Huron has not yet been determined.

The full execution of the scheme, commenced by the Imperial government in 1837, was deferred. By certain works, however, below specified, sections of these waters have been made practicable for navigation, and the whole scheme is now being carried out. 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 180 miles from Trenton.

The following table gives the distance of navigable and unnavigable portions:—

1. From Trenton, on Bay of Quinte, to Rice lake, at present being improved to give 8 feet 4 inches on lock sills, and 9 feet in reaches. . . . . 57 miles.  
Of this distance, from Healy Falls to Hastings, a distance of about twenty miles is already navigable for 6 feet draught.
2. From lower end of Rice lake to Gamebridge on Lake Simcoe, navigable with a minimum depth of 6 feet. . . . . 121 miles.
3. Across Lake Simcoe to Narrows near Orillia, navigable with minimum depth of 6 feet. . . . . 15 miles.
4. Narrows to Washago, on Lake Couchiching, navigable with minimum depth of 6 feet. . . . . 10 miles.

From the main line of the canal in Sturgeon lake near Sturgeon point, approximately 144 miles from Trenton, a branch runs through Lindsay to Port Perry via the Scugog river and lake, a distance of about 36 miles. South of Lindsay navigation is limited to about 4 feet draught. A new concrete lock and dam are now under construction at Lindsay.

The all-river route from Trenton, on the Bay of Quinté, to Rice lake was fully decided upon by the government during the session of 1907, and the work of construction was begun that fall. The improvement is carried out on the principle of damming the river at suitable points by means of dams, and connecting the pools thus created by means of locks. The locks on this division will be 175 feet long, 33 feet wide, with 8 feet 4 inches of water on the sills. In the reaches there will be a minimum depth of 9 feet of water. For the purpose of construction, this division of 57 miles has been divided into seven sections, five of which are under contract. Rice lake is 359 feet above low water level of Lake Ontario, which height will probably be overcome by 18 locks.

The works by which the Trent navigation has been improved to date comprise short canals with locks at Hastings; Peterborough; Peterborough to Lakefield 7 locks, one being a hydraulic lift; Young's Point, Burleigh Falls, Lovesick, Buckhorn, Bobcaygeon, Fenelon Falls, Rosedale, and six locks between Balsam and Simcoe lakes, one being a hydraulic lift.

Also dams at Healy Falls, Hastings, Peterborough, Peterborough to Lakefield, 6; Young's Point, Burleigh, Lovesick, Buckhorn, Bobcaygeon, Fenelon Falls, Rosedale and three between Balsam and Simcoe lakes.

Bridges have also been built at many of the locks and at other places.

At Healy Falls, about 37 miles from Trenton, a timber dam maintains six feet navigation to Hastings, a distance of about 14 miles.

At Hastings is a masonry lock and a timber dam which maintain navigation on the Trent river, Rice lake and the Otonabee river to Peterborough, a distance of about 36 miles.

At Peterborough, 87 miles from Trenton, is a masonry lock and a concrete dam which maintain navigation through Little lake to lock No. 6 of the Peterborough-Lakefield Division, a distance of about three-quarters of a mile.

From Peterborough to Lakefield, navigation is maintained on the Otonabee river by a series of concrete locks and timber dams as follows:—

Leaving Little lake through lock No. 6, in a distance of about half a mile, the hydraulic lift lock is reached, where there is a lift of 65 feet into a reach which extends to lock No. 5, about five miles from Peterborough, the last mile only of this reach being in the river; from here to Lakefield, locks 5, 4, 3, 2 and 1, with their respective dams, give navigation to Lakefield, about ten miles from Peterborough, or 97 from Trenton, and thence on five miles further to Young's Point.

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At Young's Point, a masonry lock and timber dam maintains navigation through Clear and Stony lakes to Burleigh, a distance of about nine miles.

At Burleigh, a masonry lock of two lifts and timber dam maintains navigation through Lovesick lake, about two miles, to Lovesick.

At Lovesick, a masonry lock and timber dam maintains navigation through Deer bay for about five miles to Buckhorn.

At Buckhorn, a masonry lock and new concrete dam maintain navigation for about 16½ miles through Buckhorn and Pigeon lakes to Bobcaygeon, 135 miles from Trenton.

At Bobcaygeon, a masonry lock and two dams, one being recently rebuilt of concrete and the other a timber one, maintain navigation through Sturgeon lake and Fenelon river, a distance of about 14½ miles to Fenelon Falls.

At Fenelon Falls is a short canal, a masonry lock of two lifts and a timber dam which maintain navigation across Cameron lakes to Rosedale, a distance of about 3½ miles, to a new concrete lock of the same dimensions as those of the Ontario-Rice Lake Division. This new lock will be placed in commission in the spring of 1910.

At Rosedale, the new concrete lock, and the dam which will be built in the summer of 1910 will maintain navigation on Balsam lake, the summit level of the canal, which extends from Rosedale to the hydraulic lock at Kirkfield, a distance of twelve miles; half of this distance is through a canal connecting Balsam lake with the lock, which is about 165 miles from Trenton.

At Rosedale, there is at present an old wooden lock and dam which maintain navigation on the summit level, the route being about a mile longer than via the new lock.

At the Kirkfield hydraulic lock is a drop from the summit level of 50.44 feet. From this point to Gamebridge on Lake Simcoe, 178 miles from Trenton, the route consists of canal and river reaches maintained by damming the Talbot river. There are five new concrete locks numbered 1, 2, 3, 4 and 5, with concrete dams at Nos. 1, 2 and 3.

From Cooks bay on Lake Simcoe, 28½ miles from Gamebridge, on the main line, the Holland river is being improved for six feet navigation, so as to afford communication with Newmarket 13½ miles from the lake, or 220 miles from Trenton.

The following is a list of locks now in use, with their dimensions, in order of location, from Hastings to Gamebridge on Lake Simcoe.

	Length between Hollow Quoins.	Width.	Depth on Sill.	Lift.
	Ft.	Ft.	Ft.	Ft.
1 Lock at Hastings.....	134	33	6	9
1 " at Peterborough.....	134	33	6	9
1 " No. 6, Peterborough—Lakefield Division.....	142	33	6	12
1 " at Peterborough, hydraulic lift lock No. 1.....	140	33	6	65
1 " No. 5, Peterborough—Lakefield Division.....	142	33	6	14
1 " No. 4, " " " ".....	142	33	6	12
1 " No. 3, " " " ".....	142	33	6	12
1 " No. 2, " " " ".....	142	33	6	10
1 " No. 1, " " " ".....	142	33	6	16
1 " at Young's Point.....	134	33	6	6
2 " at Burleigh, each 11½ feet.....	{ Upper 134 Lower 150 }	33	6	23
1 " at Lovesick.....	134	33	6	4
1 " at Buckhorn.....	134	33	6	9
1 " at Bobcaygeon.....	134	33	6	7
2 " at Fenelon Falls, each 12 feet.....	{ Upper 134 Lower 150 }	33	6	24
1 " at Rosedale.....	175	33	8 4 in.	4
1 " at Kirkfield, hydraulic lift lock No. 2.....	140	33	6	50 41
1 " No. 1, Simcoe—Balsam Lake Division.....	142	33	6	21
1 " No. 2, " " " ".....	142	33	6	14
1 " No. 3, " " " ".....	142	33	6	14
1 " No. 4, " " " ".....	142	33	6	14
1 " No. 5, " " " ".....	142	33	6	11
24				
1 " at Lindsay, Scugog Branch.....	142	33	6	6.5

ST. PETER'S CANAL, CAPE BRETON.

- Length of canal . . . . . About 2,400 feet.
- Breadth at water line . . . . . 55 feet.
- Lock . . . . . 1 tidal lock, 4 pairs of gates.
- Dimensions . . . . . 200 feet by 48 feet.
- Depth of water on sills . . . . . 18 feet at lowest water.
- Depth through canal . . . . . 19 feet.
- 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.

PART IX

RAILWAY SUBSIDIES





## RAILWAY SUBSIDIES

The following are the several Railway Subsidy Acts passed since and including the year 1906, being the only Acts in force at the close of the fiscal year 1909-10 (March 31, 1910).

For previous Subsidy Acts, see annual report of 1908-09.

1906

### ACT, 6 EDWARD VII, CAP. 43, 1906.

*(Assented to 13th July, 1906.)*

**1.** The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any one case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

To the Manitoulin and North Shore Railway Company (or to the Canada Central Railway Company, with the consent of the Manitoulin and North Shore Railway Company, and subject to the approval of the Governor in Council), for the following lines of Railway:—

(a) From Little Current thence crossing the Canadian Pacific railway, at or near Stanley, and thence to Sudbury, not exceeding 64 miles.

(b) From a point on the said line of railway, between Little Current and Sudbury, westerly towards the Algoma Central and Hudson bay railway, not exceeding 100 miles; and

(c) From a point at or near Sudbury northerly, not exceeding 30 miles; the said subsidies being granted in lieu of the subsidies of 64 and 130 miles, granted by chapter 8 of 1900, section 2, item 6, as amended by section 5 of chapter 7 of 1901, and chapter 7 of 1901, and section 2, item 14, respectively.

To the Algoma Central and Hudson Bay Railway Company for a line of railway from Sault Ste. Marie to a point on the Canadian Pacific railway between White River and Dalton stations in the District of Algoma, not exceeding 200 miles, and for a line of railway from Michipicoten Harbour, Lake Superior, towards the main line of the Canadian Pacific railway not exceeding 25 miles; in lieu of the subsidies of 40, 50 and 135 miles granted by chapter 7 of 1899, section 2, item 23, chapter 8 of 1900, section 2, item 4 and chapter 7 of 1901, section 2, item 20, respectively.

To the Lotbinière and Megantic Railway Company to extend its railway southerly from a point at or near Lyster in Megantic county to or towards a point at or near Lime Ridge in the Township of Dudswell; in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 8, not exceeding 50 miles.

- For a line of railway from Lake Nominigue to La Livre, in lieu of subsidy granted by chapter 57 of 1903, section 2, item 44, not exceeding 35 miles.
- For a line of railway from a point on the Intercolonial railway at or near Dartmouth, in the County of Halifax, to Guysborough, in the County of Guysborough, with branch lines to a point on the Intercolonial railway at or near New Glasgow, in the county of Pictou, and also to Country Harbour, in the county of Guysborough, not exceeding in the whole 236 miles in lieu of subsidies of 116 and 120 miles granted by chapter 57 of 1903, section 2, items 19 and 63 respectively.
- For a line of railway from Wellington to Union Bay, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 68, not exceeding 55 miles.
- For a line of railway from a point at or near Sharbot lake or Bathrust Station, in the province of Ontario, or between those points via Lanark village to Carleton Place, in lieu of the subsidy granted by chapter 7 of 1901, section 2, item 17, not exceeding 41 miles.
- For a line of railway from Cape Tourmente towards Murray Bay, in lieu of the subsidy granted by chapter 5 of 1892, not exceeding 20 miles.
- To the Atlantic, Quebec and Western Railway Company, for a line of railway from Gaspé to a point at or near Causapsca on the Intercolonial railway and from that point to Edmundston, not exceeding 260 miles; and for a line of railway from Paspébie to Gaspé as near the shore as practicable, not exceeding 102 miles; in lieu of the subsidies granted by chapter 57 of 1903, section 2, item 51.
- To the Nipigon Railway Company, for the following lines of railway:—
- (a) From a point at or near Nipigon Station on the line of the Canadian Pacific railway to Nipigon lake, not exceeding 30 miles.
  - (b) From a point on Nipigon bay of Lake Superior to a point on the west of Lake Helen on the line of the Nipigon railway, not exceeding 3½ miles.
  - (c) From a point on the line of the Nipigon railway at or near the crossing of the Fraser river, to a point on Lake Jesse, by way of Cameron's Falls, not exceeding 1½ miles.
  - (d) From a point on the North Shore of Lake Nipigon northerly, not exceeding 45 miles:
- The said subsidies to the said lines being granted in lieu of the subsidies granted by chapter 34 of 1904, section 2, item 3, not exceeding in the whole 80 miles.
- For a line of railway from Quebec towards Seven Islands, including branches to Murray Bay and Baie St. Paul, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 48, not exceeding 200 miles.
- For a line of railway from Roberval westward towards James bay, in lieu of the subsidies granted by chapter 57. of 1903, section 2, items 11 and 52, not exceeding 100 miles.
- To the Quebec Central Railway Company for an extension of its line of railway from St. Francis to St. George not exceeding 9 miles; and for a line of railway from Scott Junction to the Quebec bridge, not exceeding 23 miles; in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 46.
- To the Western Alberta Railway Company for a line of railway from a point on the United States boundary, west of range 21, northwesterly towards Anthracite, in the province of Alberta, in lieu of the subsidy granted by chapter 34 of 1904, section 2, item 11, not exceeding 50 miles.
- To the Shediac and Coast Railway Company for a line of railway from Shediac to Shemogue and towards Cape Tormentine in Westmoreland county, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 17, not exceeding 38 miles.
- For a line of railway from St. Constant in the county of Laprairie and Napierville, through St. Edouard, St. Cyprien and Lacolle to a point at or near the International boundary line on the Delaware and Hudson railway (Grand Trunk) in

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- lieu of the 19 and 12 mile subsidies granted by chapter 7 of 1899, section 2, item 10 and chapter 4 of 1894 respectively, not exceeding 28 miles.
- To the Lake Superior, Long Lake and Albany Railway Company for a line of railway from Peninsula Harbour in a northerly direction, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 76, not exceeding 10 miles.
- For a line of railway from Owen Sound in the province of Ontario to Meaford, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 34, not exceeding 30 miles.
- To the Kingston, Smith's Falls and Ottawa Railway Company for a line of railway from Kingston to Ottawa, being a revote of the subsidy granted by chapter 4 of 1897, not exceeding 101 miles.
- To the Lotbinière and Megantic Railway Company, for a line of railway from a point on its line between Lyster and Lime Ridge, to a point at or near the bridge over the St. Lawrence at or near Quebec, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 45, not exceeding 30 miles.
- For a line of railway from a point on the Quebec and Lake St. John railway, near the River Jeannotte to La Tuque, on the St. Maurice river, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 57, not exceeding 35 miles.
- To the Halifax and South Western Railway Company, for a line of railway from a point at or near Halifax, to a point at or near Barrington Passage, (except that part east of Bridgewater which formerly formed part of the line of the Central railway, in lieu of the 68, 77 and 35 miles of subsidies granted by chapter 57 of 1903, section 2, item 23 (a) and (b), and item 75, respectively, not exceeding 185 miles.
- To the Bay of Quinté Railway Company, for a line of railway from a point at or near the village of Tweed, thence northwesterly to a point at or near the village of Bannoekburn, in the county of Hastings, being a revote in part of the subsidy granted by chapter 7 of 1899, section 2, item 45, and in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 37, not exceeding in all 20 miles.
- For a line of railway from a point at or near Baptiste, easterly to a point at or near Renfrew, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 32, not exceeding 75 miles.
- For a line of railway from the Station of Lac Bouchette, or from a point one mile east of the said station, on the Quebec and Lake St. John Railway, to St. André, in lieu of subsidy granted by chapter 57 of 1903, section 2, item 47, not exceeding 13 miles.
- For a line of railway from Debert Station, on the Intercolonial railway, to Debert coal mine, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 20, not exceeding  $4\frac{1}{2}$  miles.
- For a line of railway from a point at or near Toulon, to a point on the Icelandie river, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 27, not exceeding 35 miles.
- To the Ontario, Northern and Temagami Railway Company (formerly the Temagami Railway Company), for a line of railway from a point at or near Sturgeon Falls, in a northwesterly direction, to a point on the westerly shore of Lake Temagami, in the District of Nipissing, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 36, not exceeding 50 miles.
- To the Quebec and Lake St. John Railway Company, for a line of railway from Roberval to the Government wharf at Lake St. John, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 40, not exceeding one mile.
- For a line of railway from Truro northerly towards Brule, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 64, not exceeding 34 miles.
- To the Kootenay Central Railway Company, for a line of railway from Golden towards the International boundary line, via Windermere and Fort Steele, and



- crossing the Crow's Nest railway at or near Elko, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 6, not exceeding 186 miles.
- To the Brockville, Westport and Sault Ste. Marie Railway Company, the balance remaining unpaid of the subsidy granted by chapter 3 of 1889, not exceeding \$3,200 per mile, and also the balance remaining unpaid of the subsidy granted by chapter 2 of 1890, which was regranted by chapter 5 of 1892; the whole not exceeding \$86,800, being a revote of the subsidy granted by chapter 4 of 1894, and that the said subsidy or so much thereof as has heretofore been agreed upon by the terms of an agreement filed in the Department of Railways and Canals between said Brockville, Westport and Sault Ste. Marie Railway Company and the creditors of said railway company, to be paid over to the said creditors or the legal representatives of said creditors as mentioned in said agreement.
- For a line of railway from Jonquieres to La Baie des Ha Ha, in lieu of subsidy granted by chapter 57 of 1903, section 2, item 7, not exceeding 20 miles.
- For a line of railway from Ste. Rose via the east side of Lake Ainslie to or towards Orangedale on the Intercolonial railway, not exceeding 34 miles; and for a line of railway from a point on the Intercolonial railway at or near Mines Road station to the wharf at Caribou Cove not exceeding four miles; in lieu of the subsidy granted by chapter 57 of 1903, section 2, items 18 and 62.
- For a line of railway from a point at or near Wolfville on the Dominion Atlantic railway to the government Pier at the Basin of Minas, not exceeding one mile, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 25.
- To the Great Northern railway of Canada for a line of railway in extension of its railway from a point at or near Arundel to a point in the municipality of the United Townships of Preston and Hartwell, not exceeding 30 miles; and for a line of railway connecting its Montford and Gatiueau line with the main line at St. Jerome, not exceeding 22 miles; in lieu of the subsidies granted to the Montford and Gatiueau Colonization Railway Company by items 6 and 41 of section 2 of chapter 57 of 1903.
- To the Great Northern railway of Canada, for a line of railway from, at or near Garneau Junction to or towards the Quebec bridge, not exceeding 70 miles, in lieu of the subsidy granted by item 74 of section 2, of chapter 57 of 1903.
- For a line of railway from a point at or near St. Agathe des Monts Station towards the township of Howard, in the county of Argenteuil, passing near Lakes St. Joseph and Ste. Marie, in a southerly direction, not exceeding 15 miles; and for a line of railway between a point in the parish of St. Andrews, in the county of Argenteuil, and a point in the parish of St. Laurent, in the county of Jacques Cartier, passing through the parishes of St. Placide, St. Eustache and St. Martin, not exceeding 38 miles; in lieu of the subsidies granted by chapter 34 of 1904, items 8 and 9 of section 2, not exceeding in the whole 53 miles.
- To the Kettle River Valley Railway Company for a line of railway from Grand Forks to a point 50 miles up the North Fork of Kettle River, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 67, not exceeding 50 miles.
- To the Ottawa, Northern and Western Railway for a line of railway from Aylmer to a point of junction with the Interprovincial bridge approach in the city of Hull (except that portion thereof beginning at a point of junction with the line of the Hull Electric railway in the city of Hull and terminating at a point on the main line of the Canadian Pacific railway at the east end of its Hull station yard) not exceeding nine miles, in lieu of the subsidy granted by item 12 of section 2 of chapter 7, of 1899, and by the first portion of item 13 of section 2 of chapter 57 of 1903.
- To the Toronto, Lindsay and Pembroke Railway Company, for a line of railway from Golden lake to Bancroft, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 3, not exceeding 51 miles.

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- To the Interprovincial and James Bay Railway Company, for a line of railway from the Lake Temiskaming at the present terminus of the Canadian Pacific railway in a northerly direction, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 42, not exceeding 50 miles.
- For a line of railway from Waltham station to Ferguson Point, in the county of Pontiac, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 43, not exceeding 20 miles.
- To the Matane and Gaspé Railway Company, for a line of railway from a point at or near St. Octave, on the Intercolonial railway, to Matane, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 54, not exceeding 30 miles.
- For a line of railway from the village of Haliburton, via the village of Whitney, towards the town of Mattawa, Ontario, in lieu of the subsidies granted by chapter 7 of 1899, section 2, item 25, and chapter 8 of 1900, section 2, item 9, not exceeding 60 miles.
- For a line of railway from Dawson to Stewart river, passing at or near Grand Forks, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 71, not exceeding 84 miles.

2. That unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway, nor the cost of terminals, nor the cost of right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of the Department of Railways and Canals, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

3. That the subsidies to be authorized towards the construction of any railway shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided herein, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

- (a) upon the completion of the work subsidized; or
- (b) by instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or
- (c) upon the progress estimates on the certificate of the Chief Engineer of the Department of Railways and Canals, that, in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars; or
- (d) with respect to (b) and (c), part one way, part the other.

4. That the subsidies to be authorized to be granted to companies named shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council 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, 1906, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the company and the said Minister, which



contract the Minister, with the approval of the Governor in Council is hereby empowered to make. The location also of such subsidized lines shall be subject to the approval of the Governor in Council.

5. That the granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Board of Railway Commissioners for Canada may at all times provide and secure to other companies such running powers, traffic arrangements and other rights, as will afford to all railways connecting with the railways so subsidized, reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the said Board shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways so subsidized: Provided always that any decision of the said Board made under this section may be at any time varied, changed, or rescinded by the Governor in Council as he deems just and proper.

6. That every company so receiving a subsidy, its successors and assigns, and any person or company controlling or operating the railway or portion of railway so subsidized, shall each year furnish to the Government of Canada, transportation for men, supplies, materials and mails, over the portion of the lines in respect of which it has received such subsidy, and whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the Department of the Government for which such service is being performed, and the company performing it, and in case of disagreement, then at such rates as are approved by the Board of Railway Commissioners for Canada; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy so received by the company.

7. That as respects all railways for which subsidies are granted, the company at any time owning or operating any of the railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers, showing the cost of constructing the railway or bridge, the cost of operating it, and the earnings thereof.

8. That the Governor in Council may make it a condition of the grant of the subsidies herein provided, that the company shall lay its road with new steel rails, made in Canada, if they are procurable in Canada of suitable quality, upon terms as favourable as other rails can be obtained, of which the Minister of Railways and Canals shall be the judge.

9. That whenever a contract has been duly entered into with a company for the construction of any line of railway so subsidized, the Minister of Railways and Canals, at the request of the company, and upon the report of the Chief Engineer of the Department of Railways and Canals, and his certificate that he has made careful examination of the surveys, plans and profiles of the whole line so contracted for, and has duly considered the physical characteristics of the country to be traversed and the means of transport available for construction, naming the reasonable and probable cost of construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the Chief Engineer, and providing that the company shall be entitled to be paid, as the minimum, the ordinary subsidy of \$3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said \$3,200 per mile, if any; and the balance, forty per cent, shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the Governor in Council upon the recommendation of the Minister of Railways and Canals and upon the report and certificate of the said Chief Engineer, entitles the company thereto; Provided always:—

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(a) that the estimated cost, as certified, is not less on the average, than \$18,000 per mile for the whole mileage subsidized;

(b) that no payment shall be made except upon a certificate of the Chief Engineer that the work is done up to the standard specified in the company's contract;

(c) that in no case shall the subsidy exceed the sum of \$6,400 per mile.

1907

## ACT 6-7 EDWARD VII., CHAP. 40.

*(Assented to April 27, 1907.)*

1. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway, not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

1. To the Central Ontario Railway, for an extension of its railway from a point at or near Baneroff to a point on the Canada Atlantic railway at or near Whitney, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 4; not exceeding 40 miles.

2. For a line of railway from Woodstock to the International Boundary, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 15; not exceeding 26 miles.

3. For a line of railway from a point on the Canadiau Pacific railway at or near Welsford or Westfield, or between the said two points, to Gagetown, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 16; not exceeding 30 miles.

4. For a line of railway from Liverpool to Milton, Nova Scotia, in lieu of part of the subsidy granted by chapter 57 of 1903, section 2, item 23 (*d*); not exceeding 7 miles.

5. For a line of railway from Milton to Caledonia, Nova Scotia, in lieu of part of the subsidy granted by chapter 57 of 1903, section 2, item 23 (*d*); not exceeding 22 miles.

6. For a line of railway from Cheticamp to a point on the line already built between Broad Cove and Point Tupper, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 24; not exceeding 37 miles.

7. For a line of railway from a point on the Dominion Atlantic railway to the Government pier or wharf at Canning, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 25; not exceeding 1 mile.

8. To the Nicola, Kamloops and Similkameen Coal and Railway Company, for a line of railway from a point at or near Spence's Bridge, on the Canadian Pacific railway, to Nicola lake, in lieu of the subsidy granted by chapter 57 of 1903 section 2 item 26; not exceeding 47 miles.

9. To the Edmonton, Yukon and Pacific Railway Company, for a line of railway from the town of Strathcona to Edmonton and thence westerly towards Yellow Head Pass, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 28, not exceeding 50 miles.

10. For a line of railway from Fredericton to Woodstock, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 29, not exceeding 59 miles.

11. For a line of railway from Hawkesbury, Ontario, to South Indian, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 30; not exceeding 35 miles.

12. To the Tilsonburg, Lake Erie and Pacific Railway Company, for a line of railway from Woodstock northerly to a point on the Grand Trunk railway at Berlin, or from Ingersoll to Stratford, or to any point on the Grand Trunk railway between these places, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 31; not exceeding 35 miles.

13. To the Canadian Northern Ontario Railway Company, for a line of railway from Toronto, via the east side of Lake Simcoe, to a point at, near or beyond Sudbury, through Parry Sound, in lieu of the subsidy granted to the James Bay Railway Company by chapter 57 of 1903, section 2, item 39; not exceeding 265 miles.

14. For a branch line from a point at or near the intersection of the Canadian Pacific railway and the Canadian Northern Quebec railway (formerly the Great Northern railway) between St. Philippe d'Argenteuil and Lachute, thence in a northerly direction passing through the village of Brownsburg, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 49; not exceeding 4.2 miles.

15. To the Orford Mountain Railway Company, for the following lines of railway, namely:—from Bolton Line to Mansonville, 7.54 miles; from Mansonville to the International Boundary, 3.12 miles; from Windsor Mills to Brompton Falls, 8 miles; from Melbourne Road Crossing to Melbourne village, 3.50 miles; and from a point on its main line of railway to the south end of Bonella lake, 5 miles; in lieu of the subsidies granted by chapter 57 of 1903, section 2, item 50, but not exceeding in the whole 27 miles.

16. To the Canadian Northern Quebec Railway Company, for a line of railway from a point on its main line at or near L'Epiphanie, passing by way of the parish of St. Jacques de l'Achigan, to the village of Rawdon, in lieu of the subsidy granted to the Chateauguay and Northern Railway Company by chapter 57 of 1903, section 2, item 55; not exceeding 16 miles.

17. To the York and Carleton Railway Company, for a line of railway from its present terminus westerly, in lieu of subsidy granted by chapter 57 of 1903, section 2, item 61; not exceeding 5 miles.

18. To the Midway and Vernon Railway Company, for a line of railway from Midway to Vernon, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 69; not exceeding 150 miles.

19. For a line of railway from a point at or near the north end of Lake Megantic, thence along the said lake to a point on the International Boundary at or near Rivière Morte, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 78; not exceeding 19 miles.

20. For a line of railway from Wellington to or towards Union bay by way of Alberni, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 6; not exceeding 55 miles.

21. For a line of railway from Ste. Rose (or from Chimney Corner Coal Mines to a point at or near Chimney Corner Cove), thence via the east side of Lake Ainslie to or towards a point on the Intercolonial railway at or near Orangedale, not exceeding 34 miles; and for a line of railway from a point on the Intercolonial railway between Orangedale and Point Tupper, to Caribou Cove, or Inhabitants bay or river, not exceeding 4 miles; in lieu of the subsidies granted by chapter 43 of 1906, section 1, item 34.

22. To the Klondike Mines Railway Company, for the following lines of railway, namely:—

(a) for a line of railway from Dawson to a point at or near Sulphur Spring, not exceeding 31 miles;

(b) for a line of railway from a point at or near Sulphur Spring to a point at or near the divide between Dominion and Flat creeks, not exceeding 45 miles; and



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(c) for a line of railway from a point at or near the said divide to or towards the Stewart river, not exceeding 8 miles;

the whole in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 46.

23. For a line of railway from St. Peter's to Louisbourg, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 65; not exceeding 50 miles.

24. For a line of railway from Grandique Ferry to Arichat, Nova Scotia, being a revote of the subsidy granted by chapter 7 of 1901, section 2, item 15; not exceeding 8 miles.

25. For a line of railway from Connors, at the terminus of the Temiscouta railway, to a point on the boundary line between New Brunswick and Quebec at the foot of Beau lake, being a revote of part of the subsidy granted by chapter 7 of 1901, section 2, item 2; not exceeding 18 miles.

2. The Governor in Council may grant, towards the construction and completion of a railway bridge and approaches over the Nicolet river at Nicolet, in lieu of the subsidy granted by chapter 57 of 1903, section 3, item 1, a subsidy of \$15,000.

3. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge, up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway, not the cost of terminals, nor the cost of right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of the Department of Railways and Canals, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of construction of such railway.

4. The subsidies hereby authorized towards the construction of any railway or bridge shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

(a) Upon the completion of the work subsidized; or

(b) By instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed sections bears to that of the whole work undertaken; or

(c) Upon the progress estimates on the certificate of the Chief Engineer of the Department of Railways and Canals that, in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars; or

(d) With respect to (b) and (c), part one way, part the other.

5. The subsidies hereinbefore authorized to be granted to companies named shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railways and bridge respectively; all the lines and the bridge 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, 1907, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the Company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make. The location also of such subsidized lines and bridge shall be subject to the approval of the Governor in Council.

6. The granting of such subsidies and the receipt thereof by the respective companies shall be subject to the condition that the Board of Railway Commissioners for Canada may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with the railways and bridge so subsidized reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the said Board shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways and bridge hereby subsidized: Provided always that any decision of the said Board made under this section may be at any time varied, changed or rescinded by the Governor in Council, as he deems just and proper.

7. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, materials and mails over the portion of the lines in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the Government for which such service is being performed, and the company performing it, and, in case of disagreement, then at such rates as are approved by the Board of Railway Commissioners for Canada; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of subsidy received by the company under this Act.

8. As respects all railways and the bridge for which subsidies are granted by this Act, the company at any time owning or operating any of the railways or the bridge shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway or bridge, the cost of operating it, and the earnings thereof.

9. The Governor in Council may make it a condition of the grant of the subsidies herein provided that the company shall lay the railway with new steel rails and fastenings made in Canada and shall purchase all materials and supplies required for the construction of the railway and bridge, and the rolling stock for the first equipment of the railway, from Canadian producers, if such rails, fastenings, materials, supplies and equipment are procurable in Canada of suitable quality and upon terms as favourable as elsewhere, of which the Minister of Railways and Canals shall be the judge.

10. Whenever a contract has been duly entered into with a company for the construction of any line of railway hereby subsidized, the Minister of Railways and Canals, at the request of the company, and upon the report of the Chief Engineer of the Department of Railways and Canals, and his certificate that he has made careful examination of the surveys, plans and profile of the whole line so contracted for, and has duly considered the physical characteristics of the country to be traversed and the means of transport available for construction, naming the reasonable and probable cost of such construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the Chief Engineer, and providing that the company shall be entitled to be paid, as the minimum, the ordinary subsidy of \$3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said \$3,200 per mile, if any; and the balance, forty per cent, shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the Governor in Council upon the recommendation of the Minister of Railways and Canals, and upon the report and certificate of the said Chief Engineer, entitles the company thereto: Provided always—

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(a) that the estimated cost, as certified, is not less on the average than \$18,000 per mile for the whole mileage subsidized;

(b) that no payment shall be made except upon a certificate of the Chief Engineer that the work done is up to the standard specified in the company's contract;

(c) that in no case shall the subsidy exceed the sum of \$6,400 per mile.

1908

**ACT 7-8 EDWARD VII., CAP. 63, 1908.**

*(Assented to 20th July, 1908.)*

1. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile of the mileage subsidized, and towards the construction of each of the said lines of railway, not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

To the Kettle River Valley Railway Company, for a line of railway from a point at or near Grand Forks to a point fifty miles up the North Fork and East or West Fork of the North Fork of Kettle river, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 39; not exceeding 50 miles.

For a line of railway from Owen Sound, in the province of Ontario, to Meaford, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 18; not exceeding 30 miles.

For a line of railway from Sharbot lake or Bathurst station, in the province of Ontario, or between these points, via Lanark village, to Carleton Place, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 7; not exceeding 41 miles.

To the Nipigon Railway Company, for the following lines of railway:—

(a) from a point at or near Nipigon Station on the line of the Canadian Pacific railway to Nipigon lake; not exceeding 30 miles;

(b) from a point on Nipigon bay of Lake Superior to a point on the west of Lake Helen on the line of the Nipigon railway; not exceeding 3½ miles;

(c) from a point on the line of the Nipigon railway at or near the crossing of the Fraser river to a point on Lake Jesse, by way of Cameron's Falls; not exceeding 1½ miles;

(d) from a point on the north shore of Lake Nipigon northerly; not exceeding 45 miles.

The said subsidies to the said lines being granted in lieu of the subsidies granted by chapter 43 of 1906, section 1, item 10; not exceeding in all 80 miles.

To the Manitoulin and North Shore Railway Company (or to the Canada Central Railway Company with the consent of the Manitoulin and North Shore Railway Company, and subject to the approval of the Governor in Council), for the following lines of railway:—

(a) from a point on the said line of railway, between Little Current and Sudbury, westerly towards the Algoma Central and Hudson Bay railway; not exceeding 100 miles;



(b) from Little Current thence crossing the Canadian Pacific railway, at or near Stanley, and thence to Sudbury; not exceeding 64 miles.

(c) from a point at or near Sudbury, northerly, not exceeding 30 miles; the said subsidies being granted in lieu of the subsidies granted by chapter 43 of 1906, section 1, item 1; not exceeding in all 194 miles.

To the Ontario, Northern and Timagami Railway Company for a line of railway from a point at or near Sturgeon Falls, in a northwesterly direction, to a point on the westerly shore of Lake Timagami, in the district of Nipissing, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 28; not exceeding 50 miles.

For a line of railway from a point at or near Baptiste, easterly to a point at or near Renfrew, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 24; not exceeding 75 miles.

To the Bracebridge and Trading Lake Railway Company, for a railway in Bracebridge, in Mnskoka, to a point at or near Baysville, Ontario, in lieu of the subsidy granted by chapter 34 of 1904, section 2, item 1, for 15 miles; not exceeding 16 miles.

To the Quebec and Lake St. John Railway Company, for a line of railway from Roberval westward towards James Bay, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 12; not exceeding 100 miles.

To the Matane and Gaspé Railway Company, for a line of railway from a point at or near Ste. Flavie, on the Intercolonial railway, to Matane, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 44, for 30 miles; not exceeding 38 miles.

To the Canadian Northern Quebec Railway Company, for a line of railway from a point at or near Arundel to a point in the municipality of the united townships of Preston and Hartwell, not exceeding 30 miles; and for a line of railway connecting its Montfort and Gatineau line with the main line at St. Jerome, not exceeding 15.2 miles; in lieu of the subsidies granted to the Great Northern railway of Canada by chapter 43 of 1906, section 1, item 36, not exceeding in all 45.2 miles.

To the Canadian Northern Quebec Railway Company, for a line of railway from, or from near, Garneau Junction to Quebec, with a branch to or towards the Quebec bridge, in lieu of the subsidy granted to the Great Northern railway of Canada by chapter 43 of 1906, section 1, item 37, for 70 miles; not exceeding 83 miles.

To the Atlantic, Quebec and Western Railway Company, for a line of railway from a point at or near Causapascal, on the Intercolonial railway, to Edmundston, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 9, for a line between the points above mentioned; not exceeding 160 miles.

For a line of railway from Yamaska to a point in the County of Lotbinière, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 12, not exceeding 70 miles; and for a line of railway from Mount Johnson to St. Gregoire Station, in lieu of the subsidy granted to the United Counties Railway Company by chapter 7 of 1899, section 2, item 16, for one mile, not exceeding  $1\frac{1}{2}$  miles; and not exceeding in all  $71\frac{1}{2}$  miles.

To the International Railway Company of New Brunswick for a line of railway from the western end of the twenty miles of its railway, as already constructed from Campbellton, to a point on the St. John river between Grand Falls and Edmundston, in lieu of the subsidies granted by chapter 57 of 1903, section 2, items 14 and 59 respectively; not exceeding 90 miles.

For a line of railway from Brazil lake, on the Dominion Atlantic railway, to Kemptville, Nova Scotia, in lieu of the subsidy granted by chapter 8 of 1900, section 2, item 30; not exceeding 11 miles.

To the Inverness Railway and Coal Company, for a line of railway from Cheticamp to a point on the line already built between Broad Cove and Point Tupper, in lieu

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- of the subsidy granted by chapter 57, of 1903, section 2, item 24, for 37 miles; not exceeding 37 miles.
- To the Margaree Coal and Railway Company, for a line of railway from a point at or near Orangedale, on the Intercolonial railway, thence via the east side of Lake Ainslie and Ste. Rosa, to Chimney Corner Cove, not exceeding 46 miles; and from a point on the Interecolonial railway between Orangedale and Point Tupper to Caribou Cove on Inhabitant's bay or river, not exceeding 4 miles; in lieu of the subsidy granted by chapter 40 of 1907, section 1, item 21, for 38 miles; not exceeding in all 50 miles.
- To the Lotbinière and Megantic Railway Company, for a line of railway to extend its railway southerly from a point at or near Lyster, in Megantic county, to or towards a point at or near Lime Ridge, in the township of Dudswell, not exceeding 50 miles; and for a line of railway from a point on its line in the township of Inverness, to a point at or near the bridge over the St. Lawrence at or near Quebec, not exceeding 30 miles; in lieu of the subsidies granted by chapter 43 of 1906, section 1, items 3 and 20, respectively; not exceeding in all 80 miles.
- To the Cape Breton Railway Company, Limited, for a line of railway from Port Hawkesbury or Point Tupper, on the Strait of Canso, Nova Scotia, to St. Peter's, in lieu of the subsidy granted by chapter 7, of 1899, section 2, item 6, for 30 miles; not exceeding 31 miles.
- For a line of railway from a point on the Interecolonial railway at or near Dartmouth, in the county of Halifax, to a point at or near Deans Settlement, in the county of Halifax, in lieu of the subsidy granted by chapter 43, of 1906, section 1, item 5; not exceeding 80 miles.
- For a line of railway from a point at or near Deans Settlement, in the county of Halifax, to a point at or near Melrose, in the county of Guysborough, in lieu in part of the subsidy granted by chapter 43, of 1906, section 1, item 5; not exceeding 52 miles.
- For a line of railway from a point at or near New Glasgow, in the county of Pictou, to a point at or near Melrose, in the county of Guysborough, and from the said point at or near Melrose to Guysborough, in the county of Guysborough, with branch line to Country Harbour in the county of Guysborough, in lieu in part of the subsidy granted by chapter 43, of 1906, section 1, item 5; not exceeding in all 116 miles.
- To the Ha Ha Bay Railway Company, for a line of railway from a point at or near Jonquières village to Baie de Ha Ha via Laterrières village, in lieu of the subsidy granted by chapter 43, of 1906, section 1, item 33, for 20 miles; not exceeding 24 miles.
- To the Quebec and New Brunswick Railway Company, for a line of railway from Chaudière Junction to a point at or near the International Boundary, in lieu of the subsidy granted by chapter 7 of 1901, section 2, item 2, for 45 miles; not exceeding 62 miles.
- For a line of railway from a point at or near Ste. Agathe des Monts Station towards the township of Howard, in the county of Argenteuil, passing near Lake St. Joseph and St. Mary in a southerly direction, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 38; not exceeding 45 miles.
- For a line of railway from Tusket Wedge to a point on the Halifax Southwestern railway at or near Riverdale Station; not exceeding 8 miles.
- To the Halifax and Southwestern Railway Company, for a line of railway from Lunenburg to Bridgewater, via upper Lahave; not exceeding 12 miles.
- To the Erie, London and Tilsonburg Railway Company, for a line of railway from Port Burwell to London; not exceeding 35 miles.
- For a line of railway from a point at or near Centreville to Aylesford, or Kingston or Middleton, on the line of the Dominion Atlantic railway; not exceeding 35 miles.

- For a line of railway from a point on the Canadian Pacific railway at or near Plaster Rock to Riley Brook; not exceeding 28 miles.
- To the North Shore Railway Company, Limited (formerly the Beersville Coal and Railway Company), for a line of railway extending its present line from Beersville to Brown's Landing, not exceeding 7 miles; and for a branch line of railway from its main line to Mount Carlyle, not exceeding  $2\frac{1}{2}$  miles; not exceeding in all  $9\frac{1}{2}$  miles.
- To the York and Carleton Railway Company, for a line of railway from its present terminus to a point on the National Transcontinental railway; not exceeding 9 miles.
- To the Vancouver and Lulu Island Railway Company, for a line of railway from Eburn, on its main line, to New Westminster; not exceeding 9.65 miles.
- To the Esquimalt and Nanaimo Railway Company, for a line of railway from a point near French creek to the village of Sandwich, not exceeding 41 miles; and for a line of railway from the village of Sandwich to Campbell river, not exceeding 38 miles; not exceeding in all 79 miles.
- For a line of railway from MacLeod, via Cardston, towards a point on the Intercolonial Boundary west of range 21; not exceeding 45 miles.
- To the Southern Central Pacific Railway Company for a line of railway from a point at or near Cowley, in Alberta, to a point on Highwood river; not exceeding 50 miles.
- For a line of railway from a point at or near the town of Red Deer to a point on the North Saskatchewan river at or near Rocky Mountain House; not exceeding 70 miles.
- To the Canadian Pacific Railway Company, for a line of railway from Winnipeg Beach northerly to Gimli, not exceeding  $9\frac{1}{2}$  miles; and for a line from Gimli to Riverton, not exceeding 25 miles; not exceeding in all  $34\frac{1}{2}$  miles.
- To the Canadian Pacific Railway Company, for a line of railway from Moose Jaw; in a northwesterly direction; not exceeding 123 miles.
- To the Eastern Townships Railway Company, for a line of railway from the Intercolonial railway at St. Leonard's Junction to Dudswell; not exceeding 36 miles.
- To the Quebec, Montreal and Southern Railway Company, for a line of railway from Noyan Junction to the international boundary, not exceeding 8 miles; and for a line of railway from St. Lambert to St. Constant, not exceeding 15 miles; not exceeding in all 23 miles.
- To the Quebec and Lake St. John Railway Company, for the following lines of railway:—
- (a) from Valcartier Station to St. Catherine; not exceeding 3.8 miles.
  - (b) from Valcartier Station towards Gosford; not exceeding  $5\frac{1}{2}$  miles;
  - (c) from the end of the 35th mile of the branch to La Tuque, on the River St. Maurice, to La Tuque Falls; not exceeding 5 miles.
  - (d) from La Tuque Falls to the mouth of the River Croche, not exceeding 5 miles;
  - (e) from a point on La Tuque branch to the steamboat landing near La Tuque; not exceeding 1.6 miles;
- not exceeding in all 20.9 miles.
- To the Quebec and Lake St. John Railway Company, for a line of railway from Herbertville to St. Joseph d'Alma; not exceeding 10 miles.
- To the St. Maurice Valley Railway Company, for a line of railway from Three Rivers to Grand Mere; not exceeding 28 miles.
- For a line of railway from a point on the main line of the Great Northern railway at or near St. Jerome to Charlemagne (Bout de l'Île); not exceeding 22 miles.
- To the North Eastern Railway Company, for a line of railway from a point east of Lake Temiskaming, at or near Villemarie, easterly; not exceeding 25 miles.



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- To the Canadian Northern Quebec Railway Company, for a line of railway from Montreal to Hawkesbury; not exceeding 65 miles.
- For a line of railway from Montreal to a point on the National Transcontinental railway; not exceeding 200 miles.
- To the Quebec Central Railway Company, for an extension of its line of railway from St. George to or towards St. Justine; not exceeding 30 miles.
- To the Maritime Coal, Railway and Power Company, for a line of railway from Chignecto to a point on the Northumberland Straits, not exceeding 25 miles; and from Joggins Mines to a point on the Bay of Fundy, not exceeding 1 mile; not exceeding in all 26 miles.
- For a line of railway from St. Peters, in the County of Richmond, by the south shore of Bras d'Or lake to Sydney; not exceeding 60 miles.
- To the Nipissing Central Railway Company, for a line of railway from a point on the Temiskaming and Northern Ontario railway, at or near the town of New Liskeard, to a point in the township of Guigues, in the province of Quebec; not exceeding 13 miles.
- To the Vancouver Island and Eastern Railway Company, for a line of railway from a point on the Esquimalt and Nanaimo railway, near Campbell river, towards Fort George, on the line of the Grand Trunk Pacific railway; not exceeding 100 miles.
- To the Vancouver, Westminster and Yukon Railway Company, for a line of railway from Vancouver towards Fort George, on the line of the Grand Trunk Pacific railway; not exceeding 100 miles.
- For a line of railway around Death Rapid, British Columbia; not exceeding 4 miles.
- To the Pacific Northern and Omineca Railway Company, for a line of railway from Kittimat to the Telkwa river; not exceeding 110 miles.
- For a line of railway from Nicola to a point at or near Penticton; not exceeding 100 miles.
- For a line of railway from Carmi to Penticton; not exceeding 50 miles.
- To the St. Mary and Western Ontario Railway Company, for a line of railway from Woodstock to Exeter; not exceeding 45 miles.
- To the Algoma Central and Hudson Bay Railway Company, for a line of railway from a point on the Canadian Pacific railway northward towards the National Transcontinental railway; not exceeding 50 miles.
- To the Grand Trunk Pacific Railway Company, for branch lines of railway from the line of the National Transcontinental railway to Port Arthur and Fort William; not exceeding 220 miles.
- To the Lac Seul, Rat Portage and Keewatin Railway Company, for a line of railway from a point at or near Kenora to the line of the National Transcontinental railway; not exceeding 18 miles.
- To the Burk's Falls and French River Railway Company, for a line of railway from Burk's Falls to French river; not exceeding 85 miles.
- To the Thessalon and Northern Railway Company, for a line of railway from Thessalon, northerly; not exceeding 4 miles.
- To the Canadian Northern Ontario Railway Company, for a line of railway from Sudbury Junction to Hutton Mines; not exceeding 30 miles.
- To the Esquimalt and Nanaimo Railway Company, for a line of railway from Cowichan bay to Cowichan lake; not exceeding 24 miles.
- To the Canadian Northern Quebec Railway Company, for a line of railway from Hawkesbury to Ottawa; not exceeding 60 miles.
- For the following lines of railway:—
- (a) from Westfield to St. John, not exceeding 14 miles;
- (b) from Gagetown to Fredericton, not exceeding 40 miles;
- (c) from a point between Centreville and Woodstock to a point at or near Grand Falls, not exceeding 55 miles.

To the Little Nation River Railway Company, for a line of railway from Papineauville on the Canadian Pacific railway towards Lake Nominigue; not exceeding 30 miles.

To the L'Avenir and Melbourne Railway Company, for a line of railway from Melbourne to Drummondville; not exceeding 28 miles.

To the Quebec and Lake St. John Railway Company, for a line of railway from Chicoutimi south or southeast; not exceeding 5 miles.

**2.** The Governor in Council may grant the subsidies hereinafter mentioned towards the construction and completion of the bridges also hereinafter mentioned, that is to say:—

Towards the construction and completion of a railway bridge and approaches over the Nicolet river at Nicolet, in lieu of the subsidy granted by chapter 40 of 1907, section 2, \$15,000.

To the Canadian Pacific Railway Company (lessees of the Calgary and Edmonton Railway Company), towards the construction and completion of a bridge over the Saskatchewan river connecting Strathcona and Edmonton. 15 per cent upon the amount expended thereon; not exceeding \$100,000.

To the Quebec, Montreal and Southern Railway Company, towards the construction and completion of the following railway bridges:—

(a) bridge across the Gently river, \$15,000;

(b) bridge across the Becancour river, \$30,000;

(c) bridge across the Richelieu river, \$30,000;

To the Atlantic, Quebec and Western Railway Company, towards the construction and completion of the 26 railway bridges on its line of railway from Paspebiac to Gaspé, payable upon the completion of the said line of railway between the said points, \$250,000.

To the Interprovincial Railway Bridge Company of New Brunswick, towards the construction and completion of a railway bridge over the Restigouche river from Campbellton to Mission Point, not exceeding \$160,000.

To the Vancouver, Westminster and Yukon Railway Company, towards the construction and completion of a railway across Burrard Inlet.

**3.** In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge, up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway, nor the cost of terminals, nor the cost of right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of the Department of Railways and Canals, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

**4.** The subsidies hereby authorized towards the construction of any railway or bridge shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

(a) Upon the completion of the work subsidized; or

(b) By instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or

(c) Upon the progress estimates on the certificate of the Chief Engineer of the Department of Railways and Canals that in his opinion, having regard to the whole

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work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars; or

(d) With respect to (b) and (c), part one way, part the other.

5. The subsidies hereinbefore authorized to be granted to companies named shall if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railway and bridges respectively; all the lines and the bridge 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, 1908, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the Company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make. The location also of such subsidized lines and bridges shall be subject to the approval of the Governor in Council.

6. The granting of such subsidies and the receipt thereof by the respective companies shall be subject to the condition that the Board of Railway Commissioners for Canada may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with the railway and bridges so subsidized reasonable and proper facilities in exercising such running power, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the said Board shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways and bridges hereby subsidized; Provided always that any decision of the said Board made under this section may be at any time varied, changed or rescinded by the Governor in Council, as he deems just and proper.

7. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation of men, supplies, materials and mails over the portion of the lines in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the Government for which such service is being performed, and the company performing it, and, in case of disagreement, then at such rates as are approved by the Board of Railway Commissioners for Canada; and in or towards payment of such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy received by the company under this Act.

8. As respects all railways and bridges for which subsidies are granted by this Act, the company at any time owning or operating any of the railways or bridges shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway or bridge, the cost of operating it, and the earnings thereof.

9. The Governor in Council may make it a condition of the grant of the subsidies herein provide that the company shall lay the railway with new steel rails and fastenings made in Canada and shall purchase all materials and supplies required for the construction of the railways and bridges, and the rolling stock for the first equipment of the railway, from Canadian producers, if such rails, fastenings, materials, supplies and equipment are procurable in Canada of suitable quality and upon terms as favourable as elsewhere, of which the Minister of Railways and Canals shall be the judge.



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**10.** Whenever a contract has been duly entered into with a company for the construction of any line of railway hereby subsidized, the Minister of Railways and Canals, at the request of the Company, and upon the report of the Chief Engineer of the Department of Railways and Canals, and his certificate that he has made careful examination of the surveys, plans and profile of the whole line so contracted for, and has duly considered the physical characteristics of the country to be traversed and the means of construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the Chief Engineer, and providing that the company shall be credited to be paid, as the minimum, the ordinary subsidy of \$3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said \$3,200 per mile, if any; and the balance, forty per cent, shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the Governor in Council upon the recommendation of the Minister of Railways and Canals, and upon the report and certificate of the said Chief Engineer, entitles the company thereto: Provided always—

(a) that the estimated cost, as certified, is not less on the average than \$18,000 per mile for the whole mileage subsidized;

(b) that no payment shall be made except upon a certificate of the Chief Engineer that the work done is up to the standard specified in the company's contract;

(c) that in no cases shall the subsidy exceed the sum of \$6,400 per mile.

1909

## ACT 8-9 EDWARD VII., CHAP. 35.

*(Assented to May 19, 1909).*

1. Paragraph 6 of section 2 of chapter 63 of the statutes of 1908 is amended by adding at the end thereof the figures '\$200,000.'

1910

## ACT 9-10 EDWARD VII., CHAP. 51.

*(Assented to May 4, 1910).*

**1.** The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway, not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

1. For a line of railway from Tusket Wedge to a point on the Halifax and South-western railway at or near Riverdale station, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 27: not exceeding 8 miles.

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2. To the Halifax and Southwestern Railway Company, for a line of railway from Lunenburg to Bridgewater via Upper La Have, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 28; not exceeding 12 miles.

3. To the Inverness Railway and Coal Company, for a line of railway from Cheticamp to a point on the line already built between Broad Cove and Point Tupper, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 17; not exceeding 37 miles.

4. To the Margaree Coal and Railway Company, for a line of railway from a point at or near Orangedale, on the Intercolonial railway, thence by the east side of Lake Ainslie and Ste. Rosa, to Chimney Corner Cove, not exceeding 46 miles; and for a line of railway from a point on the Intercolonial railway between Orangedale and Point Tupper to Caribou Cove on Inhabitants bay or river, not exceeding 4 miles; in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 18; not exceeding in all 50 miles.

5. For a line of railway from a point on the Dominion Atlantic railway to the Government pier or wharf at Canning, in lieu of the subsidy granted by chapter 40 of 1907, section 1, item 7, not exceeding 1 mile.

6. For a line of railway from Brazil lake, on the Dominion Atlantic railway to Kemptville, Nova Scotia, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 16; not exceeding 11 miles.

7. To the Dominion Atlantic Railway Company, for a line of railway from Centreville on the Dominion Atlantic railway, westerly to Weston, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 30; not exceeding 15 miles.

8. For a line of railway from a point on the Intercolonial railway at or near Dartmouth, in the county of Halifax, to a point at or near Deans Settlement, in the county of Halifax, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 21; not exceeding 80 miles.

9. For a line of railway from a point at or near Deans settlement, in the county of Halifax, to a point at or near Melrose, in the county of Guysborough, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 22; not exceeding 52 miles.

10. For a line of railway from a point at or near New Glasgow, in the county of Pictou, to a point at or near Melrose, in the county of Guysborough, and from the said point at or near Melrose to Guysborough, in the county of Guysborough, with a branch line to Country Harbour, in the county of Guysborough, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 23; not exceeding in all 116 miles.

11. To the International Railway Company of New Brunswick, for  $3\frac{1}{2}$  miles of its railway, being the distance which the subsidy granted by chapter 63 of 1908, section 1, item 15, is short of covering.

12. For a line of railway from Grand Falls to St. John, New Brunswick, in lieu of the subsidies granted by chapter 40 of 1907, section 1, items 2, 3 and 10, respectively, and in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 69; not exceeding 228 miles.

13. For a line of railway from Connors, at the terminus of the Temiscouta railway to a point on the boundary line between New Brunswick and Quebec, at the foot of Beau lake, in lieu of the subsidy granted by chapter 40 of 1907, section 1, item 25; not exceeding 18 miles.

14. To the York and Carleton Railway Company, for a line of railway from its present terminus to a point on the National Transcontinental railway, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 33; not exceeding 9 miles.

15. For a line of railway from a point on the Canadian Pacific railway at or near Plaster Rock to Riley Rock, in lieu of the subsidy granted by chapter 63, of 1908, section 1, item 31; not exceeding 28 miles.

16. To the Atlantic, Quebec and Western Railway Company, for a line of railway from Paspébiac to Gaspé, as near the shore as practicable, in lieu of the subsidy granted

by chapter 43 of 1906, section 1, item 9, for a line between the points above mentioned; not exceeding 102 miles.

17. To the Canadian Northern Quebec Railway Company, for a line of railway from a point at or near Arundel to a point in the municipality of the united townships of Preston and Hartwell, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 11, for a line of railway between the points above mentioned; not exceeding 30 miles.

18. For a line of railway from Roberval westward towards James Bay, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 9; not exceeding 100 miles.

19. To the Quebec and Lake St. John Railway Company, for the following lines of railway:—

(a) from Valcartier station to St. Catherine, not exceeding 3.8 miles;

(b) from Valcartier station towards Gosford, not exceeding 5½ miles;

(c) from the end of the 35th mile of the branch to La Tuque, on the River St. Maurice, to La Tuque Falls, not exceeding 5 miles.

(d) from La Tuque Falls to the mouth of the River Croche, not exceeding 5 miles;

(e) from a point on the La Tuque branch to the steamboat landing near La Tuque, not exceeding 1.6 miles;

(f) from Herbertville to St. Joseph d'Alma; not exceeding 10 miles;

(g) from Chicoutimi south or southeast; not exceeding 5 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 63 of 1908, section 1, items 43, 44 and 72, respectively; not exceeding 35.9 miles.

20. To the Quebec and New Brunswick Railway Company, for a line of railway from Chaudière Junction to a point at or near the International Boundary, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 25, not exceeding 62 miles.

21. To the Eastern Townships Railway Company, for a line of railway from the Intercolonial railway at St. Leonard's Junction to Dudswell, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 41; not exceeding 36 miles.

22. To the L'Avenir and Melbourne Railway Company, for a line of railway from Melbourne to Drummondville, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 71; not exceeding 28 miles.

23. To the Lotbinière and Megantic Railway Company, for a line of railway to extend its railway southerly from a point at or near Lyster, in Megantic county, to or towards a point at or near Lime Ridge, in the township of Dudswell, not exceeding 50 miles; and for a line of railway from a point on its line in the township of Iuverness, to a point at or near the bridge over the St. Lawrence river at or near Quebec; not exceeding 30 miles; in lieu of the subsidies granted by chapter 63 of 1908, section 1, item 19; not exceeding in all 80 miles.

24. For a line of railway from Joliette to or near Lake Mauuan, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 9, not exceeding 60 miles.

25. For a line of railway from St. Joachim towards Seven Islands, including branches to Murray Bay and Baie St. Paul, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 11; not exceeding 170 miles.

26. For a line of railway from a point at or near Ste. Agathe des Monts station towards the township of Howard, in the county of Argenteuil, passing near Lake St. Joseph and St. Mary, in a southerly direction, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 26; not exceeding 15 miles.

27. To the Ha Ha Bay Railway Company, for a line of railway from a point at or near Janquières village to Baie des Ha Ha via Laterrière village, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 24; not exceeding 24 miles.

28. To the St. Mary's and Western Ontario Railway Company, for a line of railway from Embro to Exeter, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 60; not exceeding 36 miles.

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29. To the Manitoulin and North Shore Railway Company for the following lines of railway:—

- (a) from a point on the said company's line of railway between Little Current and Sudbury, westerly towards Algoma Central and Hudson Bay railway; not exceeding 76 miles;
- (b) from Little Current thence crossing the Canadian Pacific railway, at or near Stanley, and thence to Sudbury; not exceeding 88 miles;
- (c) from a point at or near Sudbury, northerly, not exceeding 30 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 63 of 1908, section 1, item 51; not exceeding in all 194 miles.

30. To the Algoma Central and Hudson Bay Railway Company for the following lines of railway:—

- (a) from Sault Ste. Marie to a point on the Canadian Pacific railway between White river and Dalton stations in the district of Algoma, not exceeding 200 miles;
- (b) from Michipicoten Harbour, Lake Superior, towards the main line of the Canadian Pacific railway, not exceeding 25 miles;
- (c) from a point on the Canadian Pacific railway, northerly, towards the National Transcontinental railway, not exceeding 50 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 43 of 1906, section 1, item 2, and chapter 63 of 1908, section 1, item 61; not exceeding in all 275 miles.

31. To the Bracebridge and Trading Lake Railway Company, for a line of railway from Bracebridge, in Muskoka, to a point at or near Baysville, Ontario, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 8; not exceeding 16 miles.

32. To the Lac Seul, Rat Portage and Keewatin Railway Company, for a line of railway from a point at or near Kenora to the National Transcontinental railway, in lieu of subsidy granted by chapter 63 of 1908, section 1, item 63 for 18 miles; not exceeding 22 miles.

33. To the Canadian Northern Quebec Railway Company, for a line of railway from Montreal to Hawkesbury, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 48; not exceeding 65 miles.

34. To the Nipigon Railway Company for the following lines of railway:—

- (a) from a point at or near Nipigon station on the line of the Canadian Pacific railway to Nipigon lake; not exceeding 30 miles;
- (b) from a point on Nipigon bay of Lake Superior to a point on the west of Lake Helen on the line of the Nipigon railway; not exceeding  $3\frac{1}{2}$  miles;
- (c) from a point on the line of the Nipigon railway at or near the crossing of the French river to a point on Lake Jesse, by way of Cameron's Falls; not exceeding  $1\frac{1}{2}$  miles.
- (d) from a point on the north shore of Lake Nipigon, northerly; not exceeding 45 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 63 of 1908, section 1, item 4; not exceeding in all 80 miles.

35. To the Ontario, Northern and Timagami Railway Company, for a line of railway from a point at or near Sturgeon Falls, in a northwesterly direction, to a point on the westerly shore of Lake Timagami, in the district of Nipissing, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 6; not exceeding 50 miles.

36. For a line of railway from Sharbot lake or Bathurst station, in the province of Ontario, or between these points, via Lanark village, to Carleton Place, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 3; not exceeding 41 miles.

37. To the Erie, London and Tillsonburg Railway Company, for a line of railway from Port Burwell to London, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 29; not exceeding 35 miles.



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38. To the Toronto, Lindsay and Pembroke Railway Company, for a line of railway from Golden lake to Bancroft, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 41; not exceeding 51 miles.

39. To the Kingston, Smith's Falls and Ottawa Railway Company, for a line of railway from Kingston to Ottawa, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 19; not exceeding 101 miles.

40. To the Pacific Northern and Omineca Railway Company, for a line of railway from Edmonton, northwesterly, to or towards the Peace river, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 51; not exceeding 110 miles.

41. To the Southern Central Pacific Railway Company, for the following lines of railway:—

(a) from a point two miles west of Pincher station on the Crow's Nest Pass branch of the Canadian Pacific railway, northeasterly; not exceeding 10 miles;

(b) from a point two miles west of Pincher station on the Crow's Nest Pass branch of the Canadian Pacific railway, southwesterly; not exceeding 40 miles;

the said subsidies being granted in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 37; not exceeding in all 50 miles.

42. To the Kettle River Valley Railway Company, for the following lines of railway:—

(a) from Midway to a junction near Merritt with the Nicola, Kamloops and Similkameen railway; not exceeding 250 miles;

(b) from a point on the company's line of railway near Coldwater river to a point on the Fraser river; not exceeding 50 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 40 of 1907, section 1, item 18, and chapter 63 of 1908, section 1, items 58 and 59, respectively; not exceeding in all 300 miles.

43. To the Kootenay Central Railway Company, for a line of railway from Golden towards the International Boundary via Windermere and Fort Steele, thence crossing the Crow's Nest Pass railway, at or near Elko; in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 31; not exceeding 186 miles.

44. To the Esquimalt and Nanaimo Railway Company, for a line of railway from a point on its main line of railway, at or near Duncan's to Cowichan lake, in lieu of the subsidy granted by chapter 63, of 1908, section 1, item 67; not exceeding 24 miles.

45. For a line of railway from Montreal to a point on the National Transcontinental railway, in lieu of subsidy granted by chapter 63 of 1908, section 1, item 49; not exceeding 200 miles.

46. To the Little Nation River Railway Company, for a line of railway from Papineauville, on the Canadian Pacific railway, towards Lake Nominig, in lieu of subsidy granted by chapter 63 of 1908, section 1, item 70; not exceeding 30 miles.

2. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway nor the cost of terminals, nor the cost of right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the chief engineer of the Department of Railways and Canals, certifying that he has made, or caused to be made, an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of construction of such railway.

## SESSIONAL PAPER No. 20

3. The subsidies hereby authorized towards the construction of any railway shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

(a) Upon completion of the work subsidized; or,

(b) By instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or,

(c) Upon the progress estimates on the certificate of the chief engineer of the Department of Railways and Canals that in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars; or,

(d) With respect to (b) and (c), part one way, part the other.

4. The subsidies hereinbefore authorized to be granted to companies named shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council 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, 1910, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make. The location also of such subsidized lines shall be subject to the approval of the Governor in Council.

5. The granting of such subsidies and the receipt thereof by the respective companies shall be subject to the condition that the Board of Railway Commissioners for Canada may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with the railway so subsidized reasonable and proper facilities in exercising such running power, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the said Board shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways hereby subsidized: Provided always that any decision of the said Board made under this section may be at any time varied, changed or rescinded by the Governor in Council, as he deems just and proper.

6. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, materials and mails over the portion of the lines in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the government for which such service is being performed and the company performing it, and, in case of disagreement, then at such rates as are approved by the Board of Railway Commissioners for Canada; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy received by the company under this Act.

7. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed



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by him, all books, accounts and vouchers showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

8. The Governor in Council may make it a condition of the grant of the subsidies herein provided that the company shall lay the railway with new steel rails and fastenings made in Canada and shall purchase all materials and supplies required for the construction of the railway, and the rolling stock for the first equipment of the railway, from Canadian producers, if such rails, fastenings, materials, supplies and equipment are procurable in Canada of suitable quality and upon terms as favourable as elsewhere, of which the Minister of Railways and Canals shall be the judge.

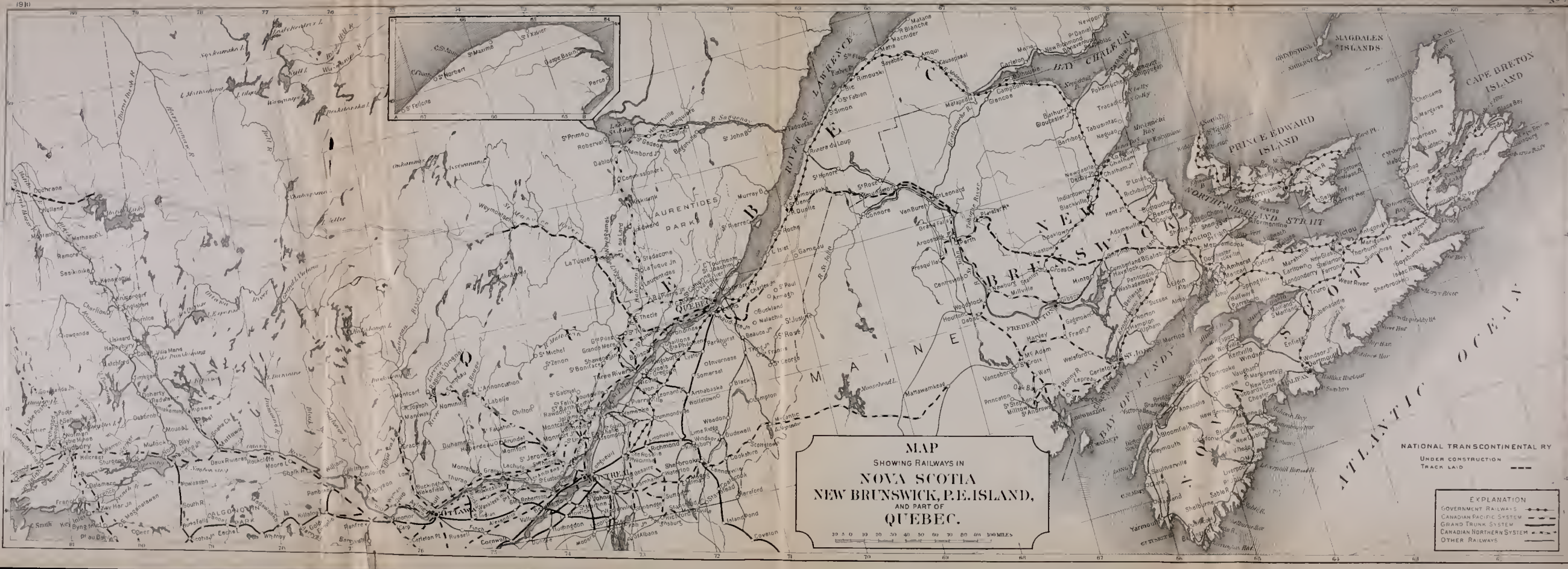
9. Whenever a contract has been duly entered into with a company for the construction of any line of railway hereby subsidized, the Minister of Railways and Canals, at the request of the company, and upon the report of the chief engineer of the Department of Railways and Canals, and his certificate that he has made careful examination of the surveys, plans and profile of the whole line so contracted for, and has duly considered the physical characteristics of the country to be traversed and the means of transport available for construction, naming the reasonable and probable cost of such construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the chief engineer, and providing that the company shall be entitled to be paid, as the minimum, the ordinary subsidy of \$3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said \$3,200 per mile, if any; and the balance, forty per cent, shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the Governor in Council upon the recommendation of the Minister of Railways and Canals, and upon the report and certificate of the said chief engineer, entitles the company thereto: Provided always—

(a) that the estimated cost, as certified, is not less on the average than \$18,000 per mile for the whole mileage subsidized;

(b) that no payment shall be made except upon a certificate of the chief engineer that the work done is up to the standard specified in the company's contract;

(c) that in no case shall the subsidy exceed the sum of \$6,400 per mile.





MAP  
 SHOWING RAILWAYS IN  
 NOVA SCOTIA  
 NEW BRUNSWICK, P.E. ISLAND,  
 AND PART OF  
 QUEBEC.

10 0 0 20 30 40 50 60 70 80 90 100 MILES

NATIONAL TRANSCONTINENTAL RY  
 UNDER CONSTRUCTION  
 TRACK LAID

EXPLANATION	
—	GOVERNMENT RAILWAYS
—+—+—+—+—+—+—	CANADIAN PACIFIC SYSTEM
—/—/—/—/—/—/—/—	GRAND TRUNK SYSTEM
— — — — — — — —	CANADIAN NORTHERN SYSTEM
- - - - -	OTHER RAILWAYS





MAP  
SHOWING RAILWAYS  
IN THE NORTHERN PARTS OF  
**BRITISH COLUMBIA**  
AND  
**ALBERTA**  
Scale of Miles  
0 10 20 30 40 50 60 70 80 90 100

**EXPLANATION**

- CANADIAN PACIFIC SYSTEM ———
- CANADIAN NORTHERN SYSTEM - - - -
- GRAND TRUNK PACIFIC SYSTEM - · - · -
- OTHER RAILWAYS ———
- G T P Ry Under construction - - - -









**EXPLANATION**

- CANADIAN PACIFIC SYSTEM ———
- CANADIAN NORTHERN SYSTEM - - - - -
- GRAND TRUNK PACIFIC ———
- OTHER RAILWAYS ———

**MAP**  
 SHOWING RAILWAYS  
 IN THE SOUTHERN PARTS OF  
**BRITISH COLUMBIA**  
 AND  
**ALBERTA.**

Scale of Miles  
 0 10 20 30 40 50 60 70 80 90 100





# MAP SHOWING RAILWAYS IN MANITOBA, AND PART OF SASKATCHEWAN

Scale of Miles  
0 10 20 30 40 50 60 70 80 90 100

EXPLANATION

	CANADIAN PACIFIC SYSTEM
	CANADIAN NORTHERN SYSTEM
	GRAND TRUNK PACIFIC SYSTEM
	OTHER RAILWAYS









**MAP**  
 SHOWING RAILWAYS  
 IN PARTS OF  
**ONTARIO AND QUEBEC**  
 Scale of Miles  
 0 10 20 30 40 50 60 70 80 90 100

**EXPLANATION**  
 CANADIAN PACIFIC SYSTEM - - -  
 GRAND TRUNK SYSTEM ———  
 CANADIAN NORTHERN SYSTEM ····  
 OTHER RAILWAYS ———

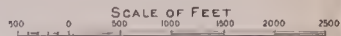




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# DOMINION OF CANADA MAP SHOWING CANADIAN SHIP CANAL

ALSO  
ST. MARY'S FALLS CANAL MICH, U.S.A.

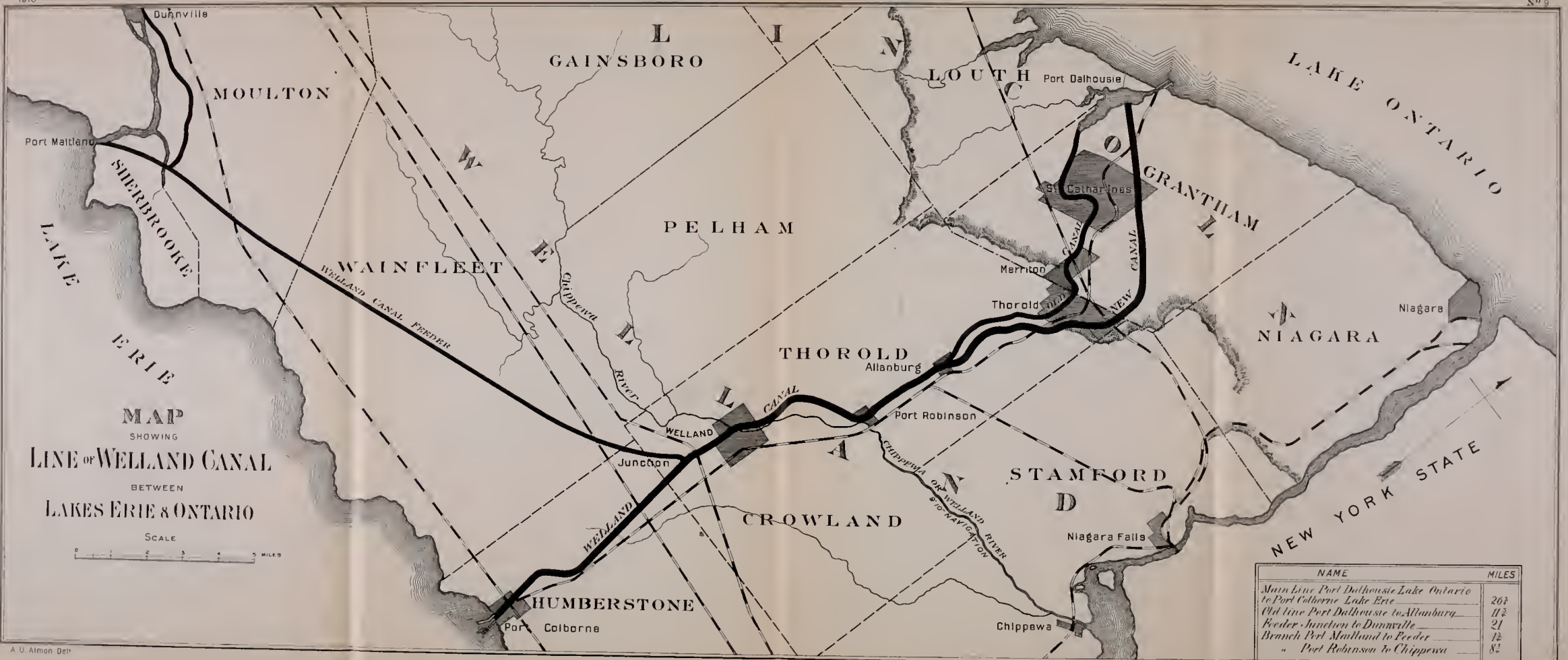


CANADIAN SHIP CANAL	
Length of canal between the extreme ends of the entrance piers	7007 ft
Number of locks	1
Dimensions of lock	300 ft by 60 ft
Depth of water on sills (at lowest known water level)	20 ft 3 ins.
Total rise or lockage	18 ft
Breadth of canal at bottom	141 ft @ base
Breadth at surface of water	150 ft

To Lake Superior







MAP  
SHOWING  
LINE OF WELLAND CANAL  
BETWEEN  
LAKES ERIE & ONTARIO

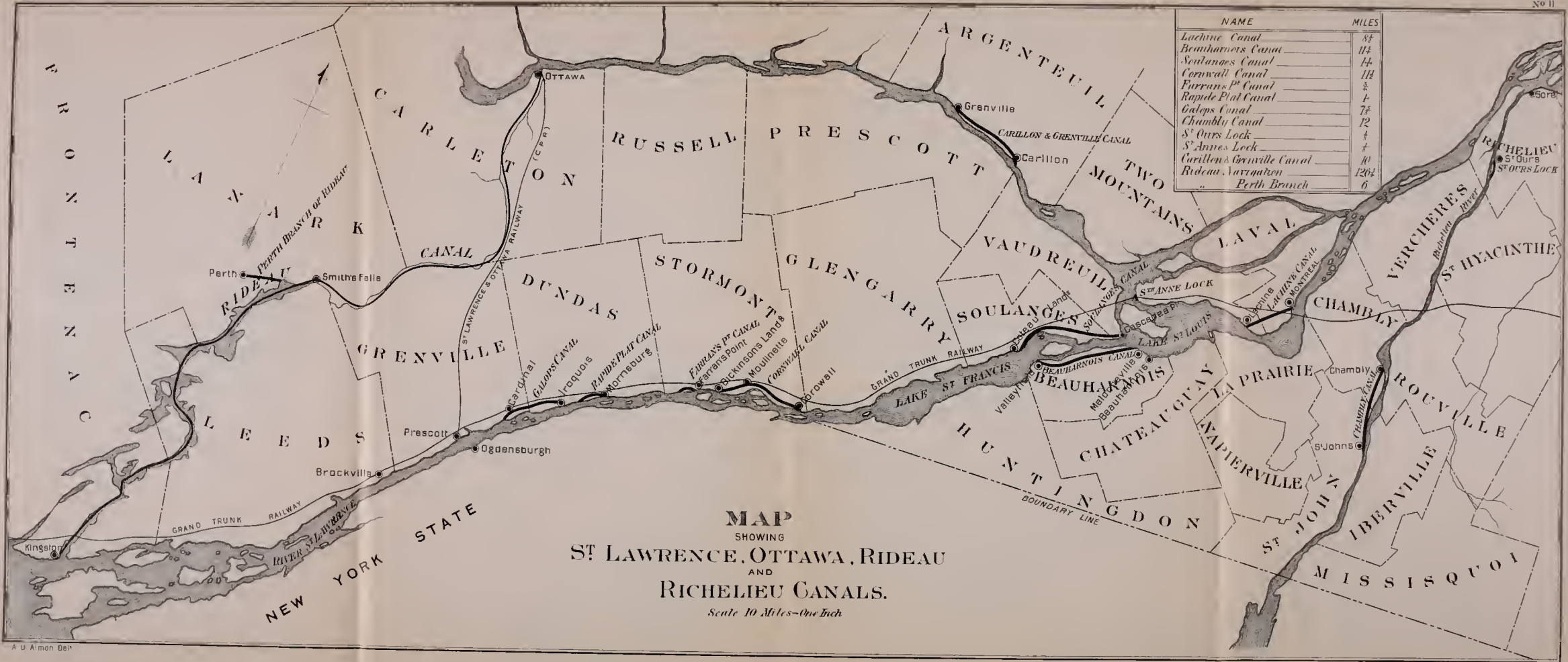


NAME	MILES
Main Line Port Dalhousie Lake Ontario to Port Colborne Lake Erie	26 1/2
Old Line Port Dalhousie to Allanburg	11 1/2
Feeder Junction to Dunnville	21
Branch Port Maitland to Feeder	1 1/2
" Port Robinson to Chippewa	8 1/2

A. U. Atton Det.







NAME	MILES
Lachine Canal	13 1/2
Beauharnois Canal	11 1/2
Vercheres Canal	14
Corwall Canal	11 1/2
Ferran's Pt Canal	3
Rapide Plat Canal	1
Gallops Canal	7 1/2
Chamblay Canal	12
S <sup>t</sup> Ours Lock	1
S <sup>t</sup> Anne's Lock	1
Carillon & Grenville Canal	10
Rideau Navigation	120 1/2
Perth Branch	6

MAP  
SHOWING  
ST. LAWRENCE, OTTAWA, RIDEAU  
AND  
RICHELIEU CANALS.

Scale 10 Miles—One Inch

A. U. Almon Des.







**EXPLANATION**

CANADIAN PACIFIC SYSTEM	—
CANADIAN NORTHERN SYSTEM	—
GRAND TRUNK PACIFIC	—
OTHER RAILWAYS	—
UNDER CONSTRUCTION	- - -
TRACK LAID	—

**MAP**  
 SHOWING RAILWAYS  
 IN PARTS OF  
**ONTARIO AND MANITOBA**  
 Scale of Miles  
 0 5 10 20 30 40 50 60 70 80 90 100





**MAP**  
SHOWING  
**TRENT NAVIGATION AND MURRAY CANAL**

Scale 10 Miles = Inch

MURRAY CANAL Length 5 1/2 Miles.

# ANNUAL REPORT

OF THE

RAILWAYS AND CANALS FOR 1910

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Company Deputy Minister's Report

parts of British Columbia and Alberta.

parts of British Columbia and Alberta.

and part of Saskatchewan.

Ontario and Manitoba.

Ontario and Quebec.

New Brunswick, Prince Edward Island and parts of Quebec.

and also St. Mary's Falls Canal, Mich., U.S.A.

between Lake Erie and Ontario.

Murray Canal.

St. Lawrence, Rideau and Richelieu Canals.

308,71  
C121,2  
(1911, v. 12. Maps).

# ANNUAL REPORT

OF THE

## Department of Railways and Canals for 1910

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### Maps to accompany Deputy Minister's Report

1. General map of the Dominion.
2. Map showing Railways in the northern parts of British Columbia and Alberta.
3. Map showing Railways in the southern parts of British Columbia and Alberta.
4. Map showing Railways in Manitoba and part of Saskatchewan.
5. Map showing Railways in parts of Ontario and Manitoba.
6. Map showing Railways in parts of Ontario and Quebec.
7. Map showing Railways in Nova Scotia, New Brunswick, Prince Edward Island and parts of Quebec.
8. Map showing Canadian Ship Canal and also St. Mary's Falls Canal, Mich., U.S.A.
9. Map showing Line of Welland Canal between Lake Erie and Ontario.
10. Map showing Trent Navigation and Murray Canal.
11. Map showing the St. Lawrence, Ottawa, Rideau and Richelieu Canals.









DEPARTMENT OF RAILWAYS AND CANALS

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# CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1909

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY

1910



*To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., &c., Governor General of Canada.*

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency the report on Canal Statistics for the year ended December 31, 1909.

GEO. P. GRAHAM,  
*Minister of Railways and Canals.*



To the Honourable GEORGE P. GRAHAM,  
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Comptroller of Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1909.

I have the honour to be, Sir,

Your obedient servant,

A. W. CAMPBELL,  
*Deputy Minister of Railways and Canals.*





OFFICE OF THE COMPTROLLER OF STATISTICS,  
February 7, 1910.

A. W. CAMPBELL, Esq.,  
Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit to you herewith Canal Statistics for the year ended December 31, 1909.

At the commencement of the season of navigation a new form of ship's report was adopted. This schedule presents the advantages of being considerably shorter than that which had for many years been in use, and of conforming closely with the classification of commodities in force on the railways of both Canada and the United States.

The traffic of the canals in 1909 amounted to 33,720,748 tons, representing an increase of 16,217,928 tons over 1908, or 92.6 per cent.

Of the total volume of business, 27,976,399 tons were classified as down, or east-bound; while 5,744,349 were entered as up, or westbound. There was for the year an increase of 14,739,171 tons in the former, and of 1,478,757 tons in the latter.

The net increase of 16,217,928 tons for the year 1909 was divided among the various canals as follows:—

	1908.	1909.	Increase.
Sault Ste. Marie.....	12,759,216	27,861,245	15,102,029
Welland.....	1,703,453	2,025,951	322,498
St. Lawrence.....	2,009,102	2,410,629	401,527
Chambly.....	503,276	752,117	248,841
St. Peter's.....	72,015	79,850	7,835
Murray.....	25,901	102,291	76,390
Ottawa.....	258,527	336,939	78,412
Rideau.....	89,640	91,774	2,134
Trent.....	81,690	59,952	.....

The aggregate of business through the canals of Canada during the year 1909 may be better comprehended by a comparison with the results for the preceding nine years. The figures are as follow:—

1900 .....	5,013,693 tons.
1901.....	5,665,259 "
1902.....	7,513,197 "
1903.....	9,203,817 "
1904.....	8,256,236 "
1905.....	9,371,744 "
1906.....	10,523,185 "
1907.....	20,543,639 "
1908.....	17,502,820 "
1909.....	33,720,748 "

Following is a comprehensive table, showing both the volume and direction of freight traffic for a series of years:—

STATEMENT of total Freight passed through the Canals for the following years:—

Years.	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.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
1887	336,648	1,154,424	138,692	202,563	151,805	192,528	86,374	457,482	713,519	2,006,997	2,720,516
1888	355,165	1,146,260	138,127	174,289	214,407	223,429	81,611	428,357	789,310	1,972,287	2,761,587
1889	384,777	1,196,306	122,295	198,497	267,224	300,193	81,243	603,311	855,529	2,258,367	3,113,896
1890	369,593	1,137,011	141,368	133,188	246,813	320,324	58,709	533,021	789,505	2,123,542	2,902,596
1891	370,120	1,155,247	103,814	123,193	248,188	307,498	56,747	543,259	772,869	2,129,657	2,902,596
1892	327,560	1,322,137	173,538	135,787	241,034	302,983	47,396	481,391	780,528	2,242,298	3,031,736
1893	351,706	1,344,822	214,076	141,602	247,329	385,769	54,912	806,773	898,023	2,678,966	3,546,489
1894	299,155	1,140,606	204,175	89,614	231,172	363,107	46,020	780,522	780,522	2,162,193	2,942,715
1895	264,824	1,076,046	286,191	91,177	362,637	608,778	62,285	590,140	475,937	2,360,141	3,346,078
1896	293,353	1,619,668	259,659	100,519	1,197,245	3,536,054	117,585	867,040	1,867,792	6,123,281	7,991,073
1897	275,587	1,713,274	268,700	187,960	669,142	1,369,314	108,787	968,263	1,322,246	7,238,751	8,560,907
1898	263,989	1,819,887	187,253	98,967	829,508	2,425,121	81,615	912,135	1,362,365	5,256,110	6,618,475
1899	296,208	1,833,412	266,364	115,133	732,030	2,129,988	125,678	727,111	1,420,280	4,805,614	6,225,924
1900	312,201	1,632,915	270,033	81,711	568,197	1,330,915	105,155	763,665	1,255,586	3,758,107	5,013,693
1901	529,085	1,686,094	268,449	201,231	597,204	3,000,636	177,715	682,065	1,294,173	4,371,086	5,665,259
1902	618,150	2,391,366	342,484	208,412	693,337	3,179,816	373,456	562,229	2,315,117	5,969,829	7,513,197
1903	606,737	2,047,499	430,174	276,578	693,784	3,138,903	483,793	851,053	2,302,203	6,888,700	9,293,817
1904	736,376	2,232,514	541,365	347,089	991,508	3,183,895	577,528	1,137,146	3,439,770	6,920,617	9,371,744
1905	1,238,929	2,355,855	627,094	234,919	1,991,959	3,595,256	482,239	997,385	3,859,770	7,183,415	10,523,185
1906	1,034,733	3,162,158	891,692	236,138	1,991,959	11,060,878	849,369	1,356,712	4,737,753	15,805,886	20,543,689
1907	1,028,246	3,292,422	560,736	278,721	1,701,310	8,218,866	972,300	1,417,219	4,265,592	13,237,228	17,502,820
1908	1,674,283	3,439,225	1,060,715	647,894	1,983,522	22,385,236	1,023,829	1,544,054	5,744,349	27,976,389	33,720,748

\* Sault Ste. Marie canal opened in August, 1895.

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STATEMENT of the Tonnage of Canadian and United States Vessels for the following years:—

CANADIAN VESSELS.

Years.	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.		Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up & down.		
											Up.	Down.	
1887	1,201,529	1,194,665	162,554	36,277	1,071	65	30,778	221,015	1,395,932	1,452,020	2,847,952	18,991	
1888	1,113,290	1,120,774	158,209	34,368	1,252	.....	22,353	189,876	1,295,304	1,345,018	2,640,322	17,661	
1889	1,285,374	1,207,892	188,131	39,371	976	802	20,271	252,565	1,494,952	1,500,630	2,995,582	19,393	
1890	1,314,127	1,250,999	229,478	32,909	929	351	14,003	296,676	1,558,537	1,580,935	3,139,472	20,655	
1891	1,356,518	1,287,168	201,758	28,642	560	292	16,350	244,176	1,575,176	1,590,278	3,165,454	19,246	
1892	1,517,249	1,460,505	177,136	29,184	1,466	394	14,659	201,374	1,710,510	1,691,455	3,401,965	21,177	
1893	1,548,094	1,422,826	170,186	26,787	1,172	10	17,037	248,442	1,736,489	1,697,565	3,434,054	20,737	
1894	1,319,792	1,260,307	217,635	19,296	2,177	5	6,394	222,696	1,545,998	1,502,906	3,048,904	19,027	
1895	1,258,848	1,165,683	253,693	13,383	.....	.....	5,899	285,553	1,518,440	1,464,619	2,983,059	17,136	
1896	1,547,757	1,420,342	290,292	5,234	137	.....	4,115	271,809	1,752,321	1,697,385	3,449,706	20,972	
1897	1,629,192	1,482,951	215,785	11,378	.....	.....	3,533	297,898	1,848,510	1,792,227	3,640,737	21,465	
1898	1,704,661	1,609,255	215,393	4,927	499	518	6,805	255,927	1,927,358	1,870,627	3,797,985	21,509	
1899	1,865,643	1,774,789	242,817	32,456	925	3,691	42,290	345,980	2,151,675	2,156,896	4,308,571	23,579	
1900	1,767,293	1,681,340	265,926	14,922	2,909	64	38,015	358,781	2,074,143	2,055,107	4,129,250	21,755	
1901	1,615,952	1,587,221	279,007	82,541	3,300	2,908	97,332	312,003	1,995,591	1,984,673	3,980,264	20,860	
1902	1,914,167	1,840,787	241,356	97,492	1,874	2,164	101,335	286,520	2,258,732	2,226,963	4,485,695	22,198	
1903	2,061,258	2,088,969	340,383	143,614	7,018	3,082	188,896	379,612	2,597,555	2,615,277	5,212,832	23,767	
1904	1,838,260	1,907,886	299,245	159,740	5,175	4,223	237,910	319,661	2,380,590	2,391,510	4,772,100	21,851	
1905	2,039,097	2,031,766	312,773	188,138	11,820	3,191	262,401	322,005	2,646,091	2,545,100	5,191,191	23,726	
1906	2,271,776	2,264,476	292,705	155,295	24,420	5,506	202,276	309,597	2,791,177	2,735,144	5,526,321	25,498	
1907	2,591,948	2,661,317	337,822	129,246	9,153	7,233	238,172	383,922	3,147,045	3,181,816	6,328,861	28,883	
1908	2,726,776	2,748,139	297,315	137,327	5,037	7,844	348,944	398,337	3,309,104	3,381,685	6,780,789	29,040	
1909	3,385,187	2,992,403	300,320	217,989	82,591	111,236	257,945	513,907	3,976,045	3,835,535	7,811,578	22,507	

STATEMENT of the Tonnage of Canadian and United States Vessels, for the following years :  
UNITED STATES VESSELS.

YEARS.	FROM CANADIAN CANADIAN PORTS.		FROM UNITED STATES TO UNITED STATES PORTS.		FROM UNITED STATES TO CANADIAN PORTS.		TONS.		TOTAL TONS.	Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
1887	16,265	17,925	38,857	56,708	143,730	140,562	52,733	98,849	566,680	3,883
1888	14,304	26,801	42,425	50,047	177,714	156,095	49,778	114,613	634,777	3,921
1889	21,125	26,449	55,996	50,732	253,988	206,567	56,249	169,442	830,648	4,542
1890	10,390	16,345	38,136	36,397	248,418	234,728	39,697	97,266	721,397	3,361
1891	10,357	23,851	70,665	27,427	283,913	238,818	31,083	146,602	836,116	3,602
1892	12,023	29,405	88,221	22,763	280,315	229,437	37,037	172,591	874,795	3,928
1893	10,752	34,303	214,047	33,741	351,991	282,734	50,994	397,740	1,286,295	4,585
1894	18,528	30,201	139,720	20,830	302,362	280,788	37,406	192,992	1,012,811	4,131
1895	8,838	24,768	138,554	17,712	292,240	216,542	32,295	185,730	886,679	4,427
1896	11,496	14,093	195,228	21,953	357,295	292,339	40,116	290,370	1,228,126	4,650
1897	14,665	18,367	269,430	17,648	338,938	277,345	26,341	347,638	1,310,463	4,675
1898	12,142	9,541	233,524	32,880	308,878	305,461	32,331	336,004	1,270,764	4,264
1899	17,217	18,044	172,897	30,092	1,605,887	1,156,563	51,902	234,336	3,285,733	6,101
1900	13,316	17,824	157,689	30,443	1,208,725	744,276	45,741	190,971	2,408,985	5,502
1901	11,587	18,706	177,169	28,124	922,464	1,014,707	51,885	224,622	2,482,274	5,634
1902	13,622	37,871	187,826	70,611	1,756,948	1,654,672	128,257	241,662	4,086,439	6,433
1903	14,014	24,168	265,208	65,247	1,736,187	1,689,414	103,401	335,836	4,236,475	6,635
1904	10,122	16,890	275,721	30,993	1,464,316	1,475,085	68,981	1,848,249	3,675,905	6,253
1905	19,743	19,434	364,685	81,876	2,350,494	1,701,704	101,536	456,459	2,959,483	7,085
1906	34,306	19,324	366,239	78,561	2,738,623	1,928,131	119,675	118,436	5,685,315	7,319
1907	57,349	72,018	304,591	442,473	4,739,053	5,376,069	203,769	623,911	11,694,834	9,328
1908	32,705	124,120	442,473	124,120	2,975,624	4,142,392	218,835	536,163	8,521,139	7,489
1909	263,562	169,467	442,176	290,292	4,178,378	10,429,314	243,750	621,903	16,459,322	9,996



## SESSIONAL PAPER No. 20a

It will be observed that while 9,996 United States vessels carried 16,459,322 tons through the canals of Canada in 1909, it required 22,507 Canadian vessels to carry 7,811,578 tons. The explanation is found in the fact that the business of American vessels is confined almost wholly to the lakes, where large cargoes prevail, while many craft of small capacity pass through the canals east of the Welland. The record of trade for the past five years, however, would seem to warrant the conclusion that an increase is steadily taking place in the tonnage of Canadian vessels.

The statement following brings the capital expenditure on the Canals of the Dominion down to March 31, 1909. It must be understood, however, that the total shown is apart from the outlay by the Imperial Government on the Carillon and Grenville Canal, as to which the records were lost in the destruction by fire of the Ordnance Office, Montreal, in 1852. The details are as follow :—

Canal.	Construction.		Enlargement.		Total.		
	§	cts.	§	cts.	§	cts.	
St. Peter's.....	648,547	14			648,547	14	
Lachine.....	2,589,532	85	9,570,566	95	12,160,099	80	
Beauharnois.....	1,636,690	26			1,636,690	26	
St. Lawrence River and Canals.....	18,442	85	3,415,023	38	3,433,466	23	
Lake St. Louis.....			298,176	11	298,176	11	
Lake St. Francis.....			75,906	71	75,906	71	
Cornwall.....	1,945,624	73	5,289,052	87	7,234,677	60	
Williamsburg	{	Farran's Point.....		877,090	57	10,485,611	69
		Galops.....		6,118,927	32		
		Rapid Plat.....		2,158,242	06		
		Williamsburg.....	1,320,655	54	10,696		
Welland.....	7,693,824	03	20,644,791	99	28,338,616	02	
Ste. Anne's.....	134,456	51	1,035,759	12	1,170,215	63	
*Carillon and Grenville.....	63,053	64	4,119,039	32	4,182,092	96	
Culbute.....	382,776	46			382,776	46	
Rideau.....	4,085,889	21			4,085,889	21	
Saint Ours.....	121,537	65			121,537	65	
Chambly.....	637,214	66	13,307	12	650,521	68	
Murray.....	1,248,946	71			1,248,946	71	
Trent.....	6,873,501	09			6,873,501	09	
Tay.....	489,599	23			489,599	23	
Saut Ste. Marie.....	4,821,723	47			4,821,723	47	
Soulanges.....	6,973,113	38			6,973,113	38	
Total.....	41,685,129	41	53,626,579	62	94,311,859	03	

Details of tonnage by canals and commodities will be found in the tables subjoined.

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

J. L. PAYNE,  
*Comptroller of Statistics.*





## CANAL STATISTICS FOR SEASON OF NAVIGATION, 1909.

## GRAIN PASSED DOWN WELLAND.

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 twenty-eight years is as follows :—

QUANTITY PASSED DOWN TO MONTREAL.		To Ports in Ontario.	Quantity from U.S. Ports to U.S. Ports.
	Tons.	Tons.	Tons.
1882	180,694		63,881
1883	186,814	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	288,513	16,899	245,932
1891	295,509	6,805	202,710
1892	261,954	8,942	201,540
1893	501,806	25,555	222,958
1894	273,651	16,699	203,979
1895	231,491	32,096	133,823
1896	461,049	73,386	160,372
1897	560,254	53,257	157,756
1898	519,532	31,279	144,612
1899	332,746	40,197	68,011
1900	244,661	17,525	84,589
1901	151,566	13,732	83,370
1902	208,215	22,787	81,164
1903	351,936	29,062	111,828
1904	198,246	23,711	102,523
1905	341,431	42,061	129,270
1906	404,935	33,351	176,119
1907	635,573	42,032	163,295
1908	756,141	38,142	135,172
1909	652,742	40,238	129,587

\* Of the quantity of grain passed down to Montreal there were transhipped at Ogdensburg, in 1891, 17,817 tons ; in 1892, 4,341 tons ; in 1893, 71,445 tons ; in 1894, 23,030 tons ; in 1895, 18,987 tons ; in 1896, 77,355 tons ; in 1897, 89,659 tons ; in 1898, 40,257 tons ; in 1899, 48,828 tons ; in 1900, 38,403 tons ; in 1901, 17,387 tons ; in 1902, 34,060 tons ; in 1903, 40,641 tons ; none in 1904, 1905, 1906, 1907 nor 1908.

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 244,661 tons in 1900 to 652,742 tons in 1909, and the quantity passed down the Welland Canal from United States ports to United States, has increased from 84,589 to 129,587 tons the same years.

The quantity of barley, buckwheat, corn, oats, pease, rye and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific Railways for a period of 13 years, is reported as follows :—

	Tons.
For 1897.....	228,611
1898.....	293,391
1899.....	209,170
1900.....	229,624
1901.....	227,700
1902.....	263,861
1903.....	253,959
1904.....	154,625
1905.....	148,377
1906.....	386,963
1907.....	383,735
1908.....	285,262
1909.....	.....

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 1897.....	604,200
1898.....	575,097
1899.....	372,291
1900.....	295,928
1901.....	203,316
1902.....	242,225
1903.....	400,057
1904.....	220,076
1905.....	375,630
1906.....	449,673
1907.....	684,697
1908.....	776,374
1909.....	652,742

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 SEA BOARD BY COMPETING ROUTES.

The quantity of grain and pease passed down the whole length of the St. Lawrence Canal to Montreal, is as follows :—

	Tons.
For 1908.....	756,141
1909.....	652,742
Showing a decrease of.....	103,399

The quantity of grain and pease carried to Montreal via Canadian Pacific and Grand Trunk Railways is reported as follows :—

	Tons.
For 1908.....	285,262
1909.....	.....
Showing a decrease of.....	.....

SESSIONAL PAPER No. 20a

## TRANSHIPMENT OF GRAIN.

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

In Canadian vessels there were in—

	Tons.
1895, 123 cargoes, with an aggregate quantity of.....	136,617
1896, 196 " " .....	227,912
1897, 180 " " .....	229,265
1898, 166 " " .....	224,021
1899, 162 " " .....	221,306
1900, 325 " " .....	183,200
1901, 112 " " .....	132,558
1902, 131 " " .....	175,514
1903, 170 " " .....	218,840
1904, 115 " " .....	174,121
1905, 167 " " .....	239,418
1906, 205 " " .....	344,605
1907, 255 " " .....	427,813
1908, 355 " " .....	598,941
1909, " " .....	550,276

In the United States vessels there were in—

	Tons.
1894, 84 cargoes, with an aggregate quantity of .....	106,236
1895, 56 " " .....	73,987
1896, 158 " " .....	217,978
1897, 197 " " .....	285,847
1898, 339 " " .....	464,852
1899, 167 " " .....	205,571
1900, 259 " " .....	163,575
1901, 135 " " .....	123,229
1902, 135 " " .....	136,652
1903, 219 " " .....	273,986
1904, 118 " " .....	150,359
1905, 235 " " .....	273,344
1906, 178 " " .....	269,800
1907, 263 " " .....	413,087
1908, 271 " " .....	330,514
1909, " " .....	272,291

One hundred and sixty-two Canadian and 49 American vessels took cargoes of 343,733 tons through to Montreal intact in 1908; 87 Canadian and 9 American of 135,582 in 1907; 74 Canadian and 10 American of 108,734 tons in 1906; 96 Canadian and 18 American of 180,206 in 1905; 56 Canadian and 16 American of 116,095 tons in 1904; 56 Canadian and 18 American of 99,582 tons in 1903; 19 Canadian and 17 American of 34,804 tons in 1902; 23 Canadian and 2 American of 17,303 tons in 1901, 15 of 7,924 tons in 1900, 2 of 558 tons in 1899, 7 of 2,426 in 1898, 7 of 2,324 in 1897, 3 of 1,176 in 1896, 4 of 1,344 tons in 1905, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 924 tons, and 3 in 1891 of 1,441 tons. Three vessels lightened a portion of their cargoes in 1901, 9 in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891; 222 vessels discharged the whole of their cargoes at Kingston in 1901, 540 in 1900, 316 in 1899, 473 in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.

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The quantity of grain transhipped at Port Colborne in 1909 and the four previous years was as follows:—

Articles.	1905.	1906.	1907.	1908.	1909.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat .....	679,840	1,009,474	1,428,300	1,106,244	2,686,963
Corn.....	104,027	110,629	112,036		
Rye.....					
Oats.....		29,118	30,824	23,945	
Barley.....		2,103		56,544	22,216
Flax Seed .....			39,040	49,628	8,202

## WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1909 was 2,025,951 tons; of this quantity 49,911 tons was way or local freight.

There were 1,383,862 tons of freight passed eastward, and 642,089 passed westward.

*East and West bound Through Freight.*

The total quantity of through freight passed through the whole length of the Welland Canal during the season of 1909 was 1,976,040.

Of this quantity 1,335,023 tons were east bound and 641,017 west bound freight.

Of the east bound through freight, Canadian vessels carried 926,901 tons and United States vessels carried 408,122 tons; and of the west bound through freight Canadian vessels carried 320,793 tons and United States vessels carried 320,224 tons, or a total of 1,247,694 tons for Canadian and 728,346 tons for American vessels.

## ST. LAWRENCE CANALS

The total quantity of freight passed through these canals during 1909 was 2,410,629 tons; of this quantity 1,564,584 tons passed eastward and 846,045 passed westward.

*East and West bound Through Freight.*

The total quantity of through freight was 1,727,564 tons; of this quantity 1,209,979 tons were east bound and 517,585 tons were west bound.

*Way Freight.*

Of the total quantity of (way) or local freight 354,750 tons were east bound and 328,315 tons west bound freight.

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## THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC.

The total quantity of through freights passed eastward from Lake Erie and westward from Montreal through the Welland and St. Lawrence canals, during fifteen years, was as follows :—

	Eastward, to Montreal. Tons.	Westward, from Montreal. Tons.
1895.....	266,659	10,555
1896.....	480,077	10,050
1897.....	584,246	4,542
1898.....	538,108	4,436
1899.....	354,933	5,991
1900.....	288,251	6,217
1901.....	184,420	13,714
1902.....	250,475	25,289
1903.....	390,786	100,699
1904.....	278,328	71,512
1905.....	448,704	72,482
1906.....	554,231	96,791
1907.....	789,167	1,281
1908.....	864,926	3,472
1909.....	925,005	191,510

## THROUGH FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

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

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1895.....	255,259	214,520	469,779
1896.....	385,695	267,518	653,213
1897.....	353,863	210,831	564,694
1898.....	277,023	210,516	487,539
1899.....	225,491	135,038	360,529
1900.....	218,969	99,560	318,529
1901.....	190,476	83,543	274,019
1902.....	224,110	44,919	269,029
1903.....	221,074	149,151	370,225
1904.....	165,337	87,144	252,481
1905.....	190,547	112,549	303,096
1906.....	237,226	84,205	321,431
1907.....	218,997	177,660	396,657
1908.....	209,518	239,136	448,654
1909.....	196,838	248,581	445,419

The total quantity of freight pass through the Welland Canal from United States ports to United States ports shows a decrease of 3,235 tons as compared with the previous year ; and a decrease of 24,380 tons as compared with 1895.



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The following statement shows the aggregate number of vessels and the total quantity of freight passed through the Welland Canal, and the quantity passed between United States ports during the years 1867 to 1909 inclusive.

Fiscal Year.	Aggregate	Total quantity	Quantity
	number of Vessels.	transported on the Welland Canal.	passed from United States ports to United States ports.
	No.	Tons.	Tons.
1867.....	5,405	933,260	458,386
1868.....	6,157	1,161,821	641,711
1869.....	6,069	1,231,903	688,700
1870.....	7,356	1,311,956	747,567
1871.....	7,729	1,478,122	772,756
<i>Season of navigation.</i>			
1872.....	6,063	1,333,104	606,627
1873.....	6,425	1,506,484	656,298
1874.....	5,814	1,389,173	748,557
1875.....	4,242	1,038,050	477,809
1876.....	4,789	1,099,810	488,815
1877.....	5,129	1,175,398	493,841
1878.....	4,429	968,758	373,738
1879.....	3,960	865,664	284,043
1880.....	4,104	819,934	179,605
1881.....	3,332	686,506	194,173
1882.....	3,334	790,643	282,806
1883.....	3,267	1,005,156	432,611
1884.....	3,138	837,811	407,079
1885.....	2,738	784,928	384,509
1886.....	3,589	980,135	464,478
1887.....	2,785	777,918	340,501
1888.....	2,647	878,800	434,753
1889.....	2,975	1,085,273	563,584
1890.....	2,843	1,016,165	533,957
1891.....	2,594	975,013	553,800
1892.....	2,615	955,554	541,065
1893.....	2,843	1,294,823	631,667
1894.....	2,412	1,008,221	592,267
1895.....	2,222	869,595	469,779
1896.....	2,766	1,279,987	653,213
1897.....	2,725	1,274,292	564,694
1898.....	2,384	1,149,077	487,539
1899.....	2,202	789,770	360,529
1900.....	2,399	719,360	318,529
1901.....	1,547	620,209	274,019
1902.....	1,568	665,387	269,029
1903.....	1,787	1,002,919	370,225
1904.....	1,433	811,371	252,481
1905.....	1,595	1,092,050	305,096
1906.....	1,536	1,201,967	321,431
1907.....	1,982	1,614,132	396,743
1908.....	2,351	1,703,453	448,654
1909.....	2,433	2,025,951	445,419

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The total quantity of freight passed through the several divisions of the Canadian Canal system during the season of 1909 is as follows :

	Farm Stock.	Forest Produce of Wood.	Manufac- tures.	Produce of Mines.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland. ....	1,129	186,614	506,489	410,982	920,737	2,025,951
St. Lawrence .....	12,877	509,157	472,656	642,209	773,730	2,410,629
Chambly. ....	430	599,330	9,560	122,835	19,962	752,117
Ottawa. ....	3,735	232,025	64,153	31,305	5,721	336,939
Rideau. ....	1,730	26,727	42,642	17,036	3,639	91,774
St. Peters. ....	3,047	8,423	7,626	45,140	15,614	79,850
Murray. ....	600	655	50,085	50,083	828	102,291
Trent Valley. ....	189	55,086	1,880	1,832	965	59,952
Sault Ste. Marie .....	474	71,129	710,360	23,969,481	3,109,801	27,861,245

The total quantity of freight moved on the Welland Canal was 2,025,951 tons, of which 920,737 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 2,410,629 tons, of which 773,730 were agricultural products, and 472,656 tons were manufactures.

On the Ottawa canals the total quantity of freight moved was 336,939 tons ; of this quantity 232,035 tons were the produce of the forest.

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## COMPARATIVE STATEMENT of the Commerce through the United States, St. Mary's Falls Canals and Canadian Sault Ste. Marie Canal, for the Seasons of 1908 and 1909.

	Traffic for 1909.		Total traffic for		Increase.	Decrease.
	United States canal.	Canadian canal.	Season 1909.	Season 1908.	Amount.	Amount.
Vessels..... Number	12,803	6,331	19,134	15,184	3,950	.....
Lockages..... "	8,525	5,046	13,571	10,685	2,886	.....
Tonnage registered..... Net Tons	28,939,463	17,839,674	46,779,137	31,126,386	15,652,751	.....
" freight..... "	30,132,374	27,861,245	57,993,619	41,416,513	16,577,106	.....
Passengers..... Number	27,736	32,810	60,546	53,306	7,240	.....
Coal (hard)..... Net Tons	1,060,753	361,918	1,422,671	1,362,435	60,236	.....
" (soft)..... "	6,150,540	2,435,781	8,586,321	8,545,923	40,398	.....
Flour..... Barrels	4,580,833	2,522,700	7,103,533	5,614,650	1,488,883	.....
Wheat..... Bushels	38,438,716	74,401,000	112,839,716	106,698,934	6,140,782	.....
Grain (excluding wheat). "	17,990,396	29,503,240	47,493,636	43,452,705	4,040,931	.....
Manufactured & pig iron. Net Tons	363,459	209,433	572,892	308,179	264,713	.....
Salt..... Barrels	419,977	201,114	651,091	549,254	101,837	.....
Copper..... Net Tons	118,889	8,323	127,212	101,329	25,883	.....
Iron ore..... "	18,866,499	21,156,915	40,023,414	24,637,001	15,386,413	.....
Lumber..... ft. B.M.	517,694,000	34,309,300	552,003,300	457,165,355	94,837,945	.....
Silver ore..... Net Tons	.....	.....	.....	.....	.....	.....
Building stone..... "	1,784	.....	1,784	11,589	.....	9,805
Unclassified freight..... "	599,564	532,022	1,131,586	823,597	307,989	.....

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The United States canal was open to navigation during the season of—

1889.....	234 days	1900.....	238 days
1890.....	228 "	1901.....	230 "
1891.....	225 "	1902.....	256 "
1892.....	233 "	1903.....	249 "
1893.....	219 "	1904.....	223 "
1894.....	234 "	1905.....	245 "
1895.....	231 "	1906.....	249 "
1896.....	232 "	1907.....	233 "
1897.....	234 "	1908.....	231 "
1898.....	241 "	1909.....	236 "
1899.....	231 "		

The Canadian canal was open to navigation during the season of—

1895.....	87 days	1903.....	256 days
1896.....	218 "	1904.....	241 "
1897.....	238 "	1905.....	255 "
1898.....	243 "	1906.....	253 "
1899.....	239 "	1907.....	238 "
1900.....	238 "	1908.....	235 "
1901.....	246 "	1909.....	240 "
1902.....	264 "		

The average number of vessels passing per day through the two canals for the season of 1909 was over eighty-one.

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A—TABLE showing the total tonnage of the undermentioned articles moved Up and Down

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	169,196	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
1893 .....	15,235	258,392	441,092	18,599	31,283	3,671	36,981
1894 .....	33,628	270,993	169,233	28,353	27,962	567	60,673
1895 .....	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896 .....	42,425	320,563	320,444	11,368	28,178	9,405	56,591
1897 .....	9,065	324,743	390,615	14,173	25,161	8,483	44,674
1898 .....	5,578	207,647	437,861	12,286	17,502	16,127	23,182
1899 .....	11,625	197,732	204,004	2,907	24,057	923	18,460
1900 .....	10,968	137,800	163,509	4,035	41,055	3,538	14,815
1901 .....	18,978	151,586	67,756	7,119	28,485	2,961	14,024
1902 .....	22,282	225,171	67,647	7,418	11,232	4,079	12,963
1903 .....	25,998	259,031	210,758	14,656	7,911	4,904	13,994
1904 .....	35,049	165,138	116,444	27,171	16,582	.....	13,184
1905 .....	38,512	254,458	180,921	55,432	36,072	1,711	9,883
1906 .....	18,294	326,798	211,805	31,446	49,306	1,784	10,739
1907 .....	22,739	488,565	271,693	13,240	73,369	2,270	22,683
1908 .....	23,209	732,131	127,402	31,172	33,423	6,667	21,668
1909 .....	38,763	590,196	140,902	23,151	75,135	33	30,221

\* Fiscal. † Apples, meal of all kinds, pease, potatoes.

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through the Welland Canal, during a period of thirty-nine years, ended Dec. 31, 1909.

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	46,806	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	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	43,387
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	30,300	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	34,139	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	93	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	7,953	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245
805,253	6	2,075	374	8,139	233,096	.....	243,690
591,409	.....	3,072	159	977	203,608	.....	207,816
486,421	185	6,245	54	2,819	158,866	1,140	169,309
788,974	1,192	6,332	82	3,264	223,445	1,158	235,473
816,914	7,206	17,012	227	590	176,226	.....	201,261
720,183	1,444	11,722	799	734	162,336	13,433	190,468
459,688	567	6,361	1,282	1,318	97,732	26,125	133,385
375,720	.....	8,190	533	4,800	47,392	58,400	119,315
290,909	83	6,094	327	8,773	49,480	99,487	164,244
350,792	64	7,488	.....	15,201	64,014	22,480	109,247
537,252	488	5,407	2,554	45,846	147,884	18,323	220,502
373,568	11,381	9,957	1,093	4,164	113,525	39,683	179,803
576,989	2,651	10,912	226	4,221	172,642	22,381	213,033
650,172	3,747	8,493	100	16,204	147,587	5,862	181,993
894,559	961	4,923	246	18,761	267,212	25,040	317,143
975,672	.....	35,726	429	.....	316,921	18,004	371,080
898,401	.....	87,025	.....	.....	377,681	33,301	498,007



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B.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal during a series of thirty-nine years, ended December 31, 1909.

## 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	693	7,594	64	2,300	524,889
1873.....	30,660	345,720	180,042	643	1,188	3	3,557	563,813
1874.....	24,017	406,157	181,128	377	5,953	.....	3,301	620,933
1875.....	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876.....	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877.....	13,588	248,894	169,185	10,216	2,810	2,405	1,833	448,931
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	.....	1,628	248,310
1886.....	19,418	146,151	218,897	.....	4,891	.....	14,581	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	28,356	1,918	18,273	530,759
1890.....	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,983
1891.....	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,058
1892.....	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709
1893.....	15,232	257,203	441,092	18,461	31,283	3,671	36,981	803,923
1894.....	33,628	270,514	169,233	28,353	27,962	.....	60,587	590,277
1895.....	43,895	202,636	164,894	8,689	18,236	.....	46,435	484,785
1896.....	42,159	319,388	320,444	11,368	28,178	8,970	54,031	784,538
1897.....	9,025	322,993	390,615	14,173	25,127	8,483	44,651	815,067
1898.....	5,578	206,313	437,849	12,286	17,491	16,127	23,170	718,814
1899.....	11,625	197,732	204,004	2,424	23,541	923	18,440	458,689
1900.....	10,968	137,800	163,509	3,449	40,256	3,538	14,802	374,322
1901.....	18,937	151,325	67,756	7,119	28,281	2,961	14,021	290,400
1902.....	22,282	223,499	67,647	7,418	11,223	4,079	12,912	349,060
1903.....	25,997	257,370	210,758	14,656	7,911	4,904	13,982	535,578
1904.....	35,046	164,515	116,444	27,171	16,582	.....	13,157	372,915
1905.....	38,512	247,599	180,921	55,432	36,072	1,711	9,882	570,129
1906.....	18,227	326,789	111,243	31,446	49,306	1,411	10,739	549,161
1907.....	22,689	488,565	271,693	13,240	73,369	2,270	22,683	894,509
1908.....	23,187	730,751	127,402	31,172	33,423	6,667	21,668	974,270
1909.....	38,763	590,074	140,902	23,151	75,135	33	30,206	898,264

\* Fiscal. † Apples, meal all kinds, pease, potatoes.

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C.—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 thirty-nine years, ended December 31, 1909.

YEARS.	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	33,912	235,962		
1872	10,482	124,695	89,761	1,391	7,400	.....	608	234,337	24,040	13,239	49,843	95,741	59,401	224,264		
1873	10,805	127,727	101,329	1,920	1,188	3	392	243,366	4,659	8,826	40,507	170,242	62,942	292,176		
1874	8,280	299,053	125,627	.....	5,948	.....	5,368	374,226	5,742	8,941	22,888	203,673	19,651	240,895		
1875	1,881	113,832	54,188	2,641	2,946	500	1,920	177,908	14	4,123	12,931	192,767	34,616	241,451		
1876	5,187	96,247	58,138	.....	1,905	525	403	162,403	.....	5,531	29,395	167,110	25,808	227,844		
1877	3,342	107,396	63,260	1,603	2,314	258	413	180,586	8,976	8,688	8,336	172,868	41,107	239,975		
1878	1,316	65,542	60,026	859	277	.....	341	128,361	10,713	3,892	13,535	150,583	13,535	178,723		
1879	159	53,791	33,401	464	296	.....	11	48,580	2,405	3,648	6,318	118,573	17,797	148,741		
1880	.....	16,122	1,551	.....	296	.....	.....	48,580	4,743	3,515	371	63,945	18,380	92,954		
1881	107	34,320	30,081	524	.....	.....	10	65,285	1,313	3,570	.....	83,898	6,464	97,205		
1882	2,041	30,227	32,433	337	.....	684	14	64,002	4,076	4,076	.....	158,552	14,533	177,161		
1883	1,715	54,382	66,128	735	731	.....	8,579	132,496	1,209	6,901	8	196,462	24,891	226,471		
1884	1,715	40,956	53,707	.....	9,874	.....	8,170	114,422	698	539	.....	210,790	15,100	227,187		
1885	124	53,235	63,229	732	882	.....	1	118,203	.....	1,594	.....	198,416	13,029	215,030		
1886	7,591	53,258	94,048	.....	4,790	.....	13,291	172,888	156	5,328	1	189,964	11,364	206,815		
1887	11,780	37,678	83,431	1,732	12,050	.....	10,859	137,530	15	4,406	.....	87,780	627	87,828		
1888	8,563	39,939	102,974	2	26,510	179	11,508	189,825	63	1,601	56	173,259	2,309	177,288		
1889	5,017	39,229	147,045	.....	27,492	.....	17,225	236,208	.....	1,587	.....	227,476	1,204	231,163		
1890	9,204	180,842	6,519	6,519	27,030	.....	20,497	275,619	.....	504	208	162,231	1,620	184,563		
1891	6,802	32,097	127,494	8,113	52,823	.....	26,115	253,444	.....	292	705	186,372	1,773	189,342		
1892	11,018	26,950	131,222	6,433	36,935	.....	31,992	244,550	.....	576	2	183,895	.....	184,473		
1893	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389	.....	344	.....	206,827	.....	207,171		
1894	17,745	53,846	105,329	28,995	27,621	.....	60,402	198,358	.....	297	.....	188,521	.....	188,818		
1895	10,169	100,512	7,904	7,904	17,020	.....	46,316	299,802	181	246	.....	149,490	.....	149,917		
1896	16,224	34,878	175,094	11,128	16,137	490	46,456	300,407	.....	146	.....	207,348	.....	207,494		
1897	7,237	28,919	169,057	14,173	14,969	.....	41,887	276,242	.....	965	.....	163,143	.....	164,123		
1898	4,212	11,268	150,967	6,909	12,732	1,197	22,671	269,656	.....	339	.....	156,814	.....	157,927		
1899	6,118	12,926	81,777	2,424	19,526	923	18,198	141,892	.....	4	.....	88,931	.....	91,481		
1900	7,966	18,771	60,545	2,402	39,706	2,149	14,243	145,787	.....	553	.....	46,024	.....	46,977		
1901	17,165	33,557	55,531	7,119	26,344	.....	14,016	143,732	.....	953	.....	46,702	.....	48,970		
1902	13,765	32,639	63,111	7,418	10,006	.....	12,675	182,634	83	80	105	12,911	.....	13,125		
1903	6,082	15,439	108,917	11,433	6,112	4,174	13,568	165,725	459	214	.....	113,072	.....	113,535		
1904	8,556	14,629	60,964	16,621	16,497	.....	13,079	129,986	.....	1	.....	63,882	.....	63,882		
1905	24,054	15,483	93,622	9,197	10,892	.....	9,482	162,930	.....	1	.....	73,464	.....	73,465		
1906	15,215	13,410	135,240	9,266	11,323	.....	10,678	195,132	.....	169	.....	33,523	.....	33,692		
1907	18,898	21,892	124,474	9,261	11,323	2	22,001	194,820	.....	30	.....	110,347	.....	114,320		
1908	17,694	24,651	39,830	7,118	2,070	2	21,333	172,738	.....	.....	.....	158,351	.....	158,351		
1909	15,452	17,940	100,967	4,224	.....	.....	22,683	161,266	.....	5	.....	131,131	.....	132,467		

\*Apples, meal all kinds, pease, potatoes.

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels entering the Canal at Port Colborne, during the season of Navigation in 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908 and 1909.

ARTICLES.	CANADIAN VESSELS.				AMERICAN VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	126,398	104	59,532	354	355,702	195	108,720	869	650,352
1898.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	95,567		36,157		54,934		18,355		205,013	
Corn.....	56,538		30,455		284,059		66,761		437,813	
Barley.....					9,465		2,821		12,286	
Oats.....					17,329				17,329	
Pease.....	260				45				305	
Rye.....	3,564		1,480		9,135		1,948		16,127	
Coal.....	575		1,916		759		2,620		5,870	
Miscellaneous merchandise..	19,385		4,104		47,271		8,758		79,518	
Shingles, woodenware, &c. . .	2		9						11	
Sawed lumber..... Ft. B.M	4,910,669		1,641,783		16,220,972		24,484,283		47,257,707	
Square timber..... Cub. ft.	825,545		1,183,821				388,410		2,397,776	
Firewood..... Cords.										
Staves..... No.	249								249	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	191	100,242	129	75,777	201	212,027	78	36,962	599	425,008
1899.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	91,901		80,928		16,250		7,244		196,323	
Corn.....	28,015		18,905		138,834		18,250		204,004	
Barley.....					2,424				2,424	
Oats.....	1,537				21,646				23,203	
Pease.....										
Rye.....					923				923	
Coal.....	435		6,736				3,398		10,569	
Miscellaneous merchandise..	25,203		18,651		49,522		1,567		94,943	
Shingles, woodenware, &c. . .	485		916				100		1,501	
Sawed lumber..... Ft. B.M	2,977,748		772,739		14,855,338		19,949,079		37,654,904	
Square timber..... Cub. ft.	322,138		585,780		20,802		328,806		1,257,526	
Firewood..... Cords.			9						9	
Staves..... No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	305,113
1900.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	67,694		43,157		23,066		2,130		136,047	
Corn.....	39,597		31,248		78,701		13,963		163,509	
Barley.....					2,402		1,047		3,449	
Oats.....					39,706		407		40,113	
Pease.....	115				4				119	
Rye.....	1,389				2,149				3,538	
Coal.....	723		637		433		559		2,352	
Miscellaneous merchandise..	53,649		31,536		43,344		3,564		132,093	
Shingles, woodenware, &c. . .	1,078								1,078	
Sawed lumber..... Ft. B.M	6,847,279		5,344,258		14,984,483		18,770,405		45,946,425	
Square timber..... Cub. ft.	439,827		355,951		11,583		198,420		1,005,781	
Firewood..... Cords.	126		255						381	
Staves..... No.	1,000								1,000	

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D.—STATEMENT showing the Quantity of Through 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.
	197	103,802	114	59,022	163	182,497	48	22,319	522	367,640
1901.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat .....		57,641		58,973		31,955		1,241		149,810
Corn .....		7,350		4,689		53,717				67,756
Barley .....						7,119				7,119
Oats .....		944				27,197				28,141
Pease .....										2,961
Rye .....		2,961								2,961
Coal .....		1,960		362		357				2,679
Miscellaneous merchandise ..		71,300		32,312		12,874		7,469		123,955
Shingles, woodenware, &c. ...		18								18
Sawed lumber..... Ft. B.M.		6,533,423		4,060,231		11,089,806		13,092,940		34,776,420
Square timber..... Cub. ft.		362,441		204,682		9,384		149,531		726,038
Firewood..... Cords.		165		264						429
Staves..... No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	196	90,791	122	73,958	191	201,339	52	22,097	561	388,185
1902.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat .....		82,954		85,973		52,889				221,816
Corn .....		148		1,388		66,111				67,647
Barley .....						7,418				7,418
Oats .....		1,200		43		9,963				11,206
Pease .....										4,079
Rye .....		3,808				271				4,079
Coal .....		3,977		25,732		13,497		8,332		51,538
Miscellaneous merchandise ..		33,111		8,723		38,351		1,594		81,779
Shingles, woodenware, &c. ...		47		28		4				79
Sawed lumber..... Ft. B.M.		13,218,960		3,256,187		23,437,287		19,540,426		61,452,860
Square timber..... Cub. ft.		370,718		557,689				115,000		1,043,407
Firewood..... Cords.		56		40						96
Staves..... No.				14,000						14,000
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	329	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat .....		149,378		38,473		60,514		6,305		254,670
Corn .....		21,356		4,682		174,588		10,132		210,758
Barley .....		2,580		667		11,409				14,656
Oats .....		306		1,335		6,112				7,753
Pease .....		63				22				85
Rye .....						4,904				4,904
Coal .....		389		12,991		8,133		8,496		30,009
Miscellaneous merchandise ..		39,563		3,367		41,584		2,000		86,514
Shingles, woodenware, &c. ...				54						54
Sawed lumber..... Ft. B.M.		12,841,552		1,625,855		17,871,652		14,733,677		47,072,736
Square lumber..... Cub. ft.		572,000		660,000				84,200		1,316,200
Firewood..... Cords.				210		9				219
Staves..... No.				641,000						641,000



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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &amp;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.
	228	157,539	55	39,375	205	187,748	42	15,918	530	490,580
1904.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	116,794		33,302		14,269				164,365	
Corn.....	12,768		7,814		95,862				116,444	
Barley.....	2,619		824		23,728				27,171	
Oats.....					16,261				16,261	
Pease.....					3				3	
Rye.....	1,925		7,187		17,133		7,668		33,913	
Coal.....	34,907				1,925				36,832	
Miscellaneous merchandise..	29,567				60,548				90,115	
Shingles, woodenware, &c..										
Sawed lumber..... Ft. B.M.	15,077,382		854,811		32,754,541		9,572,655		58,259,380	
Square timber..... Cub. ft.	944,508		744,000				149,000		1,837,508	
Firewood..... Corps.					717				717	
Staves..... No.	634,000								634,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	252	182,373	91	48,692	319	286,656	64	29,120	726	546,841
1905.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	188,706		18,575		28,757		2,512		238,550	
Corn.....	6,385		6,636		163,374		4,526		180,921	
Barley.....	6,870		1,451		47,111				55,432	
Oats.....	8,225		2,570		21,535		3,742		36,072	
Pease.....					76				76	
Rye.....					1,711				1,711	
Coal.....	18,756		35,324		28,330		8,678		91,088	
Iron ore.....	14,358		8,023						22,381	
Merchandise.....	29,375		7,485		74,975		3,126		114,961	
Shingles, woodenware, &c..			2,748,941		2,325				2,325	
Sawed lumber..... Ft. B.M.	2,867,147				38,290,831		12,479,698		54,589,200	
Square timber..... Cub. ft.	355,000		951,524						538,000	
Firewood..... Cords.			183,000		900				900	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	328	238,690	121	66,355	305	310,622	43	15,758	797	631,425
1906.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	250,493		34,355		35,578				320,436	
Corn.....	8,177				202,250		1,378		49,306	
Barley.....	8,546		5,046		17,854				31,446	
Oats.....	21,900		16,083		11,323				49,306	
Pease.....					11				11	
Rye.....			5		1,406				1,411	
Coal.....	30,455		47,242		24,190		9,356		111,243	
Iron ore.....	5,862								5,862	
Merchandise.....	35,383		7,009		110,263		50		152,705	
Shingles, woodenware, &c..	16		37		851				904	
Sawed lumber..... Ft. B.M.	3,471,514		235,624		25,711,196		10,769,755		40,188,089	
Square timber..... Cub. ft.	375,000		200,000						575,000	
Firewood..... Cords.	110		18		1,093				1,221	
Staves..... No.					300,000				300,000	

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Concluded.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	375	290,509	148	81,070	408	397,616	76	36,921	1,007	806,116
1907.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat .....	294,298		50,808		130,818		4,429		480,303	
Corn .....	6,713		514		259,895		4,571		271,693	
Barley .....	8,726		468		4,046				13,240	
Oats .....	49,689		16,647		7,033				73,369	
Pease .....					25				25	
Rye .....					2,270				2,270	
Coal .....	31,506		47,373		50,183		14,493		143,555	
Iron ore .....	12,040		8,950						20,990	
Merchandise .....	21,545		9,436		5,231		6,235		42,447	
Shingles, woodenware, &c. ....					2,222				2,222	
Sawed lumber..... Ft. B.M.					14,395,124		11,201,446		25,596,570	
Square timber .....	558,090		323,000						881,090	
Firewood..... Cords.					660				660	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	567	432,623	149	64,034	428	319,030	36	19,866	1180	835,553
1908.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat .....	505,151		39,001		183,101		3,498		730,751	
Corn .....	2,405				124,997				127,402	
Barley .....	19,775		1,133		10,264				31,172	
Oats .....	30,091		643		2,689				33,423	
Pease .....					40				40	
Rye .....	742				5,925				6,667	
Coal .....	39,733		42,656		57,448		8,344		148,181	
Merchandise .....	26,815		14,783		14,410		13,686		69,694	
Firewood..... Cords.			70		1,173				1,243	
Sawed lumber..... Ft. B.M.					17,572,070		6,578,545		24,150,615	
Square timber..... Cub. ft.	221,500		313,000						534,300	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	555	486,406	136	71,034	323	324,576	26	17,317	1040	899,333
1909.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat .....	415,208		34,903		133,172				583,283	
Corn .....	6,694				134,208				140,902	
Barley .....	17,943		360		4,848				23,151	
Oats .....	70,392		4,743						75,135	
Pease .....					63				63	
Rye .....	33								33	
Coal .....	160,475		53,681		21,097		630		235,883	
Merchandise .....	52,994		14,782		12,232		16,498		96,506	
Sawed lumber..... Ft. B.M.					31,643		10,214		41,857	
Square timber..... Cub. ft.	3,450		7,840		125		1,475		12,800	



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## WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

## WELLAND CANAL—WEST BOUND FREIGHT.

THE total quantity of Through Freight passed Up the Welland Canal in Canadian and United States Vessels during the Season of Navigation in 1909 is as follows:—

Summary.	Tons.	Tons.
In Canadian steam vessels.....	302,704	
"    sail    ".....	18,089	
Total quantity in Canadian vessels.....		320,793
In United States steam vessels.....	312,276	
"    sail    ".....	7,948	
Total in United States vessels.....		320,224
Grand total freight passed Up the Welland Canal in Canadian and United States vessels.....		641,017

STATEMENT of the Quantity of Through Freight passed Up and Down the Welland Canal during the Season of Navigation in 1909.

Summary.	Tons.	Tons.
In Canadian steam vessels up.....	302,704	
"    "    down.....	802,515	
Total in Canadian steam vessels.....		1,105,219
In Canadian sail vessels up.....	18,089	
"    "    down.....	124,386	
Total in Canadian sail vessels.....		142,475
Total quantity in Canadian vessels.....		1,247,694
In United States steam vessels up.....	312,276	
"    "    down.....	379,305	
Total in United States steam vessels.....		691,581
In United States sail vessels up.....	7,948	
"    "    down.....	28,817	
Total in United States sail vessels.....		36,765
Total quantity in United States vessels.....		728,346
Total in Canadian and United States vessels.....		1,976,040
	Down or East Bound.	Up or West Bound.
In Canadian vessels.....	926,901	320,793
In United States vessels.....	408,122	320,224
Total.....	1,325,023	641,017



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F.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence Canals, to Montreal, &c.—*Continued.*

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Con.</i>													
Crockery.....	1			1	5		3	6	43	6			
Furniture.....	53	75	16	6	1		15	3	21	11	4		
Glass, all kinds.....	9	56	159			54	240		820				
Molasses.....			1				19		61			3	
Nails.....	112	1,141	7,143	15,647	14,987	12,091	14,619	12,848	20,700	19,995	22,111	30,002	31,149
Oil.....					17		5		53		101		
Paint.....							4						
Pitch and tar.....							20						
Rags.....													
Rosin.....									59	72	15		
Soda ash.....					4				2,019				173
Sugar.....					112			87	53				
Tin.....									204				
Tobacco.....			96	16									
White lead.....				74	32			766	635	614	1,224	1,056	525
Whisky, beer and other spirits.....	46	866	518	92	2,420	419	582	713	851	466	2,294	2,126	10,418
Merchandise not enumerated.....	1,226												
Total, class 4.....	1,580	2,215	7,969	15,798	19,366	12,577	15,569	14,456	25,572	21,164	25,749	34,730	42,265
<i>Class 5.</i>													
Barrels, empty.....			1	182	66	15							
Hoops.....	257												
Sawed lumber.....	478	3,065	924	15,760	2,635	1,085		394	3,957	100			
Staves, pipe and barrel.....	4,716									2,400			
" West India and pipe.....													
Timber, square, in vessels.....								1,514	1,200	1,500	4,180		900
" in rafts.....	1,207	329	26			17							
Woodenware.....													
Total, class 5.....	6,658	3,394	951	15,942	3,295	1,117		1,938	5,217	4,000	4,180		900
<i>Special Class.</i>													
Coal.....									29,351			42,075	175,115
Iron ore.....									3,837		70,489		1,824
Stone, all kinds.....						15,976		17,362				1,272	
Total, special class.....									33,188		70,489	43,367	176,939
Grand total.....	584,246	538,108	354,485	28,231	184,420	250,475	398,427	275,278	448,704	554,231	789,167	869,398	439,055

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G.—STATEMENT showing the Quantity of Freight passed Westward from Montreal through the whole length of the St. Lawrence and Welland Canal to Lake Erie, during the Seasons of Navigation in 1897, 1898, 1899, 1900, 1901, 1902, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907 and 1909.

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>												
Bricks.....	70	70	24	49	196	22	80	115	132			
Brimstone.....					5		23	12			556	
Cement and water lime.....	837	946	997	1,931	2,916	178	3,924	39	181	88	13	400
Clay, lime and sand.....	4	114	8	4	2	1	181				100	
Cotton, raw.....							23					
Fish.....	10	9	10	8	8	4	8	4			39	
Gypsum.....			1									
Iron, railway.....				74	748	11,735	39,641	283	126	7,259	4,119	
" pig.....	6		3	3		558	273		312	680	7,655	7,231
" all other.....	559	699	1,318	1,428	4,950	2,904	5,845	3,782	3,633	8,235	6,987	
Salt.....	25	35	48	48	75	4	87	99	150	17		
Steel.....		19	18		3	11	332	58	192	111	2,561	35,153
Stone for cutting.....	62							41				
Flour.....					16							
Hay.....											30	255
Meals.....							17					
Oats.....												
Potatoes.....												
Seeds, all kinds.....												
Tobacco, raw.....	121	56	121	218	302	58	325	164	35	17		
Agricultural products not enumerated, vegetables.....	4					1	2					
Hides and skins.....					1	1						127
Horses.....						16	6					
Lard and lard oil.....		1										
Meats other than pork.....		2				11					20	1
Pork.....							1	25			15	
Wool.....												
All other articles not enumerated.....												
Total, class 3.....	1,698	2,031	2,500	3,764	9,222	15,520	50,768	4,647	4,934	16,457	22,076	43,039
<i>Class 4.</i>												
Agricultural implements.....												5
Ashes, pot and pearl.....	1											
Crockery and earthenware.....	4	33	3	5			32	291	155	294	456	
Dye woods, &c.....								2			2	

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G.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, &c.—Continued.

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Con.</i>												
Furniture.....	2						1		2	1		
Glass, all kinds.....	799	150	299	456	612	1,384	1,207	1,671	1,641	2,519	3,534	
Manilla.....								34	93	37	15	
Marble.....										35		
Molasses.....	129	229	518	20	675	1,292	2,878	2,009	3,061	4,011	3,331	
Nails.....	12	15	21	74	83	14	16	1,418	120	148	155	
Oil, in barrels.....	20	35	2	12	69	97	158	292	367	412	295	1
Pitch and tar.....	20	37	6	21	27	27	58	139	5	239		
Rags.....			14			1	29		15		50	
Resin.....			15								25	
Soda ash.....	249	88	108	69	169	201	264	387	28	310	37	
Stone, wrought.....	25	31									5	
Sugar.....	311	566	1,596	430	810	1,314	204	52	1,168	1,153	6,046	40
Tin.....	339	237	159	117	338	506	209	362	928	1,365	1,173	
Turpentine.....					1	2	1				1	
White lead.....	5		1	4	11	37	80	82	80	304	283	
Whiting.....	104	93	89	39	49	61	22	33	158	93	16	
Whisky, beer, &c.....	93	98	178	295	131	182	452	432	384	483	1,040	220
Merchandise not enumerated.....	711	793	482	744	1,516	1,049	3,674	6,200	15,360	11,707	16,498	21,359
Total, class 4.....	2,844	2,405	3,491	2,447	4,492	6,169	9,294	13,379	23,566	23,116	33,049	21,620
<i>Class 5.</i>												
Barrels, empty.....												
Firewood in vessels.....												
Pulpwood.....						3,600	40,626	40,425	43,982	54,906	2,337	
Lumber, sawn, in vessels.....										2,307	101,989	122,867
Railway ties in vessels.....							611					3,984
Woodenware.....												5
Total, class 5.....						3,600	40,637	40,425	43,982	57,218	104,326	126,851
<i>Special Class.</i>												
Coal.....												
Iron ore.....												
Total, special class.....								10,200				
Grand total.....	4,542	4,436	5,991	6,211	13,714	25,289	100,699	71,512	72,482	96,791	159,451	191,510



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## H.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1897 to 1909 inclusive.

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>													
Bricks .....	845	300		18									
Cement and water line .....													
Fish .....	965	770									20		
Iron, railway .....		324	1,008	714		30			1	27	30		
" all other .....		2,951	13,522	3,110	105					2	509	9,086	
Stone for cutting .....													
Apples .....													
Barley .....	14,173	6,909	2,421	2,462	7,119	7,418	11,433	16,621	9,197	9,266	2,812	7,148	4,224
Corn .....	163,057	156,667	81,777	66,545	53,531	66,111	108,917	60,964	93,622	135,240	124,474	99,830	100,997
Flour .....	7,237	4,212	6,118	7,966	17,168	13,785	6,082	8,556	24,054	15,215	18,898	17,694	
Hay, pressed .....	301								200				
Meal, all kinds .....	41,644	22,626	18,198	14,214	14,016	12,675	13,546	13,076	9,606	10,668	21,976	21,353	
Marble .....									87				
Nails .....									1				
Oil cake .....				2,705	1,302	110	740	16,497	228		114		
Oats .....	14,969	12,729	19,526	39,706	26,344	19,006	6,112	3	10,892	11,323	4,741	2,070	
Pease .....		45		4			22		76	11	25	40	63
Potatoes .....		1,197		2,149			4,174						
Rye .....		200					1,594			756			15,452
Flax seed .....		44	11			10	27		43	3	17		
Seeds, all kinds .....	299												
Tobacco .....													
Wheat .....	28,919	11,268	12,926	18,771	23,557	32,639	15,436	14,269	15,483	13,410	21,892	24,631	17,940
Agricultural products, vegetables .....				6			1			1	7		22,629
Hides and skins, &c. .....	23			10								21	315
Horses .....	3			4			2			22	86		
Lard and lard oil, &c. .....	1,444	3,671	864	1,588	1,680	2,413							
Meats, other than pork .....				17									
Pork .....	243	1,271	343	17	970	632	152	379	273	268	429	190	
Sheep .....		359	201	631	119								
Tallow .....		89	130										
Wool .....	197				3	752	482	134	21	89	30		157
Total, class 3 .....	280,319	219,434	198,720	147,947	146,581	146,581	168,720	130,499	163,784	196,301	196,062	182,085	161,738
<i>Class 4.</i>													
Agricultural implements .....						399		396	552	494			254
Crockery and earthenware .....													
Furniture .....		2			3	17							



H.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the season of Navigation from 1897 to 1909 inclusive.—*Concluded.*

Articles.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Con.</i>													
Marble					4								
Molasses			8	57									
Nails			11								3		
Oil, in barrels	198	119	367	17	22	1,594	2,000	1			8	15	
Paint		3	2	36				17	42	1	1		
Rags			1				4		4				
Soda ash													
Stone, wrought	31			154	448	280		53	53	840	26,075		1,196
Sugar									7				
White lead											21		
Whiting		34	168	1	1						30		
Whisky, beer and all other spirits	3,591	3,828	6,219	7,889	3,327	1,928	2,010	1,554	2,008	2,324	41,621	1,857	5,866
Merchandise	3,820	3,986	6,783	8,164	3,805	4,218	4,017	2,021	2,655	3,660	67,768	1,875	7,316
Total, class 4													
<i>Class 5.</i>													
Empty barrels				5	282				3	2	1		
Firewood, in vessels						4		717	2,700	3,609	1,980	3,569	
Lumber, sawn, in vessels	68,280	52,844	57,695	55,128	38,085	72,806	48,337	30,194	15,726	27,791	14,314	21,571	24,357
Masts and spars, in vessels	403							154					
Hop poles								652	2,248		2,151	478	
Railway ties, in vessels									62	53	70		
Shingles									12	1,500			
Split posts													
Staves, salt barrels													125
Timber, square, in vessels	1,040												2,932
Woodenware, &c.	1												
Total, class 5	69,724	52,844	57,695	55,133	38,367	72,810	48,337	31,717	20,751	32,865	18,516	25,558	27,384
<i>Special class.</i>													
Coal		759	2,293	992	357	501		1,100	3,346	4,400	110,347		400
Stone, not suitable for cutting													
Kryolite											2,734		
Iron ore											1,316		
Total, special class		759	2,293	992	357	501		1,100	3,346	4,400	114,397		400
Grand total	353,863	277,023	225,491	218,969	190,476	224,110	221,074	165,337	190,547	237,226	396,743	209,518	196,838

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L—STATEMENT of the quantity of Grain Transhipped to the following Ports for the season of 1909.

Ports.	Wheat.	Oats.	Barley.	Corn.	Other Grain.	Total.	Total.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Tons.</i>
Kingston.....	7,998,834	1,015,470	569,708	251,035	190,868	10,025,733	282,696
Prescott.....	70,800	82,118	.....	.....	26,200	179,118	4,175
Ogdensburg.....	.....	.....	.....	68,143	.....	68,143	1,908
Total Bushels....	8,069,634	1,097,588	569,708	319,178	216,886	10,272,994	.....
Total Tons.....	242,089	18,658	13,673	8,937	5,422	.....	288,779

M.—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1909 inclusive, 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.
	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1885.....	.....	.....	193,442	4,974	10,321	31,350	240,087
1886.....	.....	.....	184,564	5,400	22,187	49,724	261,875
1887.....	.....	.....	81,617	1,163	26,775	25,968	135,523
1888.....	.....	.....	172,381	878	17,365	27,183	217,807
1889.....	.....	.....	226,352	1,124	12,036	25,931	265,443
1890.....	80	.....	116,616	615	17,280	22,781	202,372
1891.....	.....	.....	185,190	1,382	17,374	20,698	224,644
1892.....	.....	.....	183,244	651	12,991	15,330	211,616
1893.....	.....	.....	204,704	2,123	8,325	17,944	233,096
1894.....	.....	.....	187,794	727	1,269	13,947	203,737
1895.....	4	.....	148,887	603	1,565	7,807	158,866
1896.....	20	210	206,093	1,255	4,127	11,740	223,445
1897.....	.....	4	165,143	.....	1,277	9,799	176,223
1898.....	.....	.....	156,055	759	986	4,536	162,336
1899.....	.....	.....	86,638	2,293	525	8,276	97,732
1900.....	8	.....	45,032	992	.....	1,360	47,392
1901.....	.....	.....	46,345	357	456	2,322	49,480
1902.....	.....	.....	12,410	501	65	51,037	64,013
1903.....	3	.....	113,076	.....	4,796	30,009	147,884
1904.....	2,919	.....	62,782	1,100	3,711	32,813	103,325
1905.....	.....	.....	70,118	3,346	11,436	37,742	172,642
1906.....	60	.....	29,123	4,400	7,161	106,843	147,587
1907.....	2,857	.....	110,347	.....	10,453	143,555	267,212
1908.....	4,401	.....	158,351	.....	5,988	148,181	316,921
1909.....	.....	.....	130,731	400	11,067	235,483	377,681

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N.—STATEMENT showing the quantity of Coal passed though the whole length of the St. Lawrence Canal during the seasons of 1885 to 1909 inclusive.

Years.	Quantity passed up.	Quantity passed down to Montreal.	Total Quantity passed up and down.
	Tons.	Tons.	Tons.
1885.....	5,035	122,829	127,864
1886.....	3,301	118,802	122,103
1887.....	7,579	121,618	129,197
1888.....	8,341	123,050	131,391
1889.....	5,360	124,290	129,650
1890.....	6,538	135,168	141,706
1891.....	7,951	141,701	149,652
1892.....	7,543	157,134	164,677
1893.....	2,285	147,139	149,424
1894.....	16,213	169,552	185,765
1895.....	.....	165,151	165,151
1896.....	689	161,551	162,240
1897.....	40	164,963	165,003
1898.....	400	175,609	176,009
1899.....	448	201,546	201,994
1900.....	10	280,169	280,179
1901.....	2,765	298,245	301,010
1902.....	9,231	95,702	104,933
1903.....	30	290,548	290,578
1904.....	9,670	320,973	330,643
1905.....	8,518	345,589	354,107
1906.....	6,989	313,080	320,069
1907.....	1,281	406,978	408,259
1908.....	23,939	448,140	472,079
1909.....	13,543	469,695	483,238

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O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &amp;c.

## RECAPITULATION.

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 Lake Ontario.
1898.	Tons.	Tons.	Tons.
Barley.....	3,960	1,417	6,909
Corn.....	310,498	13,338	116,317
Oats.....	3,975	625	12,729
Pease.....	260	.....	45
Rye.....	16,133	39	.....
Wheat.....	184,706	15,860	8,612
Total grain.....	†519,532	31,279	144,612
Other articles.....	19,773	79,614	114,259
Total.....	539,305	110,893	258,871
1899.			
Barley.....	568	.....	1,828
Corn.....	150,999	16,594	43,854
Oats.....	10,250	1	13,139
Pease.....	.....	.....	.....
Rye.....	923	.....	.....
Wheat.....	169,978	24,602	9,190
Total grain.....	† 332,736	40,197	68,011
Other articles.....	21,739	68,671	104,727
Total.....	354,485	108,958	172,732
1900.			
Barley.....	1,288	563	1,598
Corn.....	109,358	9,844	44,406
Oats.....	8,925	348	30,840
Pease.....	115	.....	4
Rye.....	3,078	160	300
Wheat.....	121,896	6,610	7,541
Total grain.....	**244,661	17,525	84,589
Other articles.....	43,670	95,680	93,287
Total.....	288,231	113,205	177,876
1901.			
Barley.....	.....	.....	.....
Corn.....	14,319	4,828	49,609
Oats.....	1,584	853	25,704
Pease.....	.....	.....	.....
Rye.....	2,961	.....	.....
Wheat.....	132,702	8,051	9,057
Total grain.....	†151,566	13,732	83,370
Other articles.....	32,854	128,614	91,799
Total.....	184,420	142,346	175,169

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O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*RECAPITULATION—*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 on Lake Ontario.
1902.	Tons.	Tons.	Tons.
Barley.....			7,418
Corn.....	1,719	10,335	55,583
Oats.....	1,412		9,764 *
Pease.....			
Rye.....	4,079		
Wheat.....	200,975	12,452	8,389
Total grain.....	208,215	22,787	81,165
Other articles.....	42,260	32,946	179,914
Total.....	250,475	55,733	261,078
1903.			
Barley.....	2,206	1,017	11,433
Corn.....	116,223	13,846	80,689
Oats.....	2,438		5,315
Pease.....	63		22
Rye.....	4,200		644
Wheat.....	226,746	14,199	13,725
Total grain.....	351,936	29,062	111,828
Other articles.....	38,850	82,298	101,621
Total.....	390,786	111,360	213,449
1904.			
Barley.....	9,697	853	16,621
Corn.....	53,021	3,950	57,473
Oats.....			16,497
Pease.....			3
Rye.....			
Wheat.....	133,528	18,908	11,929
Total grain.....	198,246	23,711	102,523
Other articles.....	77,031	80,092	138,475
Total.....	375,277	103,803	240,998
1905.			
Barley.....	43,607	2,628	9,197
Corn.....	84,204	3,095	93,622
Oats.....	21,404	3,776	16,892
Pease.....			76
Rye.....	1,711		
Wheat.....	190,505	32,562	15,483
Total grain.....	**341,431	42,061	129,270
Other articles.....	107,273	123,225	104,747
Total.....	448,704	165,286	234,017

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O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &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 Lake Ontario.
1906.	Tons.	Tons.	Tons.
Barley.....	21,196	984	9,266
Corn.....	55,559	15,688	140,558
Oats.....	37,164	819	11,323
Pease.....	.....	11	.....
Rye.....	1,405	6	.....
Wheat.....	**289,611	15,843	14,972
Total grain.....	404,935	33,351	176,119
Other articles.....	118,224	176,277	59,884
Total.....	523,159	209,628	236,003
1907.			
Barley.....	9,936	492	2,812
Corn.....	106,299	31,901	133,493
Oats.....	67,063	1,565	4,741
Pease.....	.....	.....	25
Rye.....	2,266	2	2
Wheat.....	*450,609	8,072	22,222
Total grain.....	635,573	42,032	163,295
Other articles.....	153,594	126,423	93,127
Total.....	789,167	168,455	256,422
1908.			
Barley.....	24,318	3,546	3,308
Corn.....	10,454	11,489	105,459
Oats.....	28,081	3,272	2,070
Pease.....	.....	.....	40
Rye.....	6,662	3	2
Wheat.....	†686,626	19,832	24,293
Total grain.....	756,141	38,142	135,172
Other articles.....	168,785	162,378	91,875
Total.....	864,926	200,520	227,047
1909.			
Barley.....	19,143	.....	4,008
Corn.....	17,137	22,798	100,967
Oats.....	65,624	2,872	6,639
Pease.....	30	.....	33
Rye.....	33	.....	.....
Wheat.....	550,775	14,568	17,940
Total grain.....	652,742	40,238	129,587
Other articles.....	272,263	113,970	126,223
Total.....	925,005	154,208	255,810



TABLE 1.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation in 1908 and 1909.

Canals.	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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
1908.														
Sault Ste. Marie.....	378,198	1,486,689	17,940	230,333	1,464,421	8,008,121	955,288	218,226	2,815,847	9,943,369	12,759,216	2,092,231	10,666,985	
Welland.....	128,077	571,961	35,370	15,278	230,136	209,518	8,377	495,736	410,360	1,292,433	1,703,453	775,245	927,208	
St. Lawrence.....	434,966	839,881	140,162	198	733	1,227	8,635	583,340	584,456	1,424,646	2,009,102	1,261,651	747,451	
Chambly.....	4,160	10,730	364,774	.....	.....	.....	.....	368,934	134,342	503,276	.....	379,674	123,602	
St. Peter's.....	22,420	49,595	.....	.....	.....	.....	.....	22,420	49,595	72,015	.....	72,015	.....	
Murray.....	6,717	5,380	492	6	.....	.....	.....	13,306	7,269	18,692	25,901	12,595	13,306	
Ottawa.....	2,358	296,623	.....	28,855	.....	.....	.....	691	2,358	256,169	258,527	258,527	.....	
Rideau.....	39,570	31,713	1,998	4,051	.....	.....	.....	12,308	41,568	48,072	89,640	77,519	12,121	
Trent.....	11,840	69,850	.....	.....	.....	.....	.....	11,840	69,850	.....	81,690	81,690	.....	
Grand total.....	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820	5,012,147	12,490,673	
1909.														
Sault Ste. Marie.....	641,601	1,597,940	46,011	512,293	1,736,801	22,188,388	1,000,300	167,881	3,424,743	24,436,592	27,861,245	3,366,495	24,494,750	
Welland.....	217,737	618,718	164,304	16,469	248,581	196,838	11,467	551,837	642,089	1,383,862	2,025,951	1,050,241	975,710	
St. Lawrence.....	533,568	932,104	242,954	36,547	140	.....	3,759	661,557	780,421	1,630,208	2,410,629	1,710,797	639,832	
Chambly.....	5,480	11,475	606,466	.....	.....	.....	.....	128,936	611,946	140,171	753,117	623,421	128,696	
St. Peter's.....	27,169	52,052	.....	.....	.....	.....	629	.....	27,798	52,052	79,850	79,150	700	
Murray.....	72,034	7,244	406	.....	.....	.....	672	21,335	73,112	29,179	102,291	79,254	23,037	
Ottawa.....	49,131	240,156	150	42,333	.....	.....	5,175	336,939	54,456	282,483	336,939	331,104	5,835	
Rideau.....	44,152	33,033	394	252	.....	.....	1,827	12,148	46,341	45,433	91,774	77,643	14,131	
Trent.....	17,819	42,133	.....	.....	.....	.....	.....	.....	17,819	42,133	59,952	59,952	.....	
Grand total.....	1,608,659	3,504,849	1,060,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	5,678,725	28,012,023	33,720,748	7,378,657	26,342,691	

TABLES 2.—Statement showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the Season of Navigation in 1909.

Vessels.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Tons.		Total Tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
<b>CANADIAN VESSELS.</b>												
<i>Steam and Sail.</i>												
Sault Ste. Marie.....	2,597	1,096,320	1,012,874	98,486	213,062	81,423	111,236	252,281	123,254	1,528,510	1,460,426	2,988,936
Welland.....	1,724	435,367	380,371	152,354	1,452	1,168	.....	4,648	210,614	593,537	592,437	1,185,974
St. Lawrence.....	8,135	1,230,168	1,072,416	21,896	.....	.....	.....	.....	152,497	1,252,064	1,224,913	2,476,977
Chambly.....	670	32,721	34,194	16,075	.....	.....	.....	.....	14,545	48,796	48,789	97,585
Ottawa.....	1,935	181,226	179,934	157	3,399	.....	.....	766	502	182,149	183,885	365,934
Rideau.....	2,202	73,919	72,876	3,067	76	.....	.....	70	4,259	77,066	77,211	154,267
St. Peter's.....	1,428	50,694	51,729	.....	.....	.....	.....	.....	.....	50,694	51,729	102,423
Trent Valley.....	3,730	85,722	88,206	.....	.....	.....	.....	.....	.....	85,722	88,206	173,928
Murray.....	886	149,050	99,803	8,285	.....	.....	.....	.....	8,235	157,515	108,039	265,554
Total Canadian.....	22,507	3,335,187	2,992,403	300,320	217,989	82,591	111,236	257,945	513,907	3,976,043	3,835,535	7,811,578
<b>UNITED STATES VESSELS.</b>												
Sault Ste. Marie.....	3,734	144,118	83,507	55,615	180,573	3,902,156	10,228,083	197,837	58,249	4,209,726	10,551,012	14,850,738
Welland.....	709	859	1,139	61,457	6,902	207,395	200,005	4,911	135,216	334,622	343,952	677,884
St. Lawrence.....	1,135	115,486	20,956	120,844	40	8,789	306	93	222,118	245,212	244,020	489,232
Chambly.....	4,055	.....	1,876	203,865	.....	.....	.....	.....	203,278	293,865	207,154	411,019
Ottawa.....	246	2,649	.....	.....	12,581	.....	.....	9,389	.....	12,038	12,581	24,619
Rideau.....	34	198	1,022	10	49	.....	.....	712	13	920	1,134	2,054
St. Peter's.....	11	293	628	.....	.....	.....	.....	282	.....	575	628	1,203
Trent Valley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murray.....	71	289	279	385	7	38	20	536	1,029	1,238	1,335	2,573
Total United States.....	9,996	263,892	109,407	442,176	206,202	4,178,378	10,429,614	213,750	621,903	5,008,196	11,361,126	16,459,322
Grand Total Canadian and U. S.....	32,503	3,599,079	3,101,810	742,496	418,191	4,260,969	10,540,850	471,695	1,135,810	9,074,239	15,196,661	24,270,900

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TABLE 3.—STATEMENT showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
<b>SAULT STE. MARIE CANAL.</b>					
Canadian Vessels, steam.....	2,531	1,082,810	993,102	98,486	209,156
" " sail.....	66	13,510	19,772		3,906
Total Canadian.....	2,597	1,096,320	1,012,874	98,486	213,062
United States Vessels, steam.....	3,679	136,221	83,127	55,615	176,566
" " sail.....	53	7,897	380		4,007
Total United States.....	3,734	144,118	83,507	55,615	180,573
Grand total, Sault Ste. Marie Canal.....	6,331	1,240,438	1,096,381	154,101	393,635
<b>WELLAND CANAL.</b>					
Canadian Vessels, steam.....	1,150	375,866	325,428	114,631	1,452
" " sail.....	574	59,505	54,943	37,723	
Total Canadian.....	1,724	435,367	380,371	152,354	1,452
United States Vessels, steam.....	652		1,079	48,401	4,653
" " sail.....	57	859	60	13,056	2,249
Total United States.....	709	859	1,139	61,457	6,902
Grand total, Welland Canal.....	2,433	436,226	381,510	213,811	8,354
<b>ST. LAWRENCE CANALS.</b>					
Canadian Vessels, steam.....	4,046	723,100	603,171	14,281	
" " sail.....	4,089	507,068	469,245	7,615	
Total Canadian.....	8,135	1,230,168	1,072,416	21,896	
United States Vessels, steam.....	634	75,339	2,922	87,618	40
" " sail.....	502	40,147	18,034	33,226	
Total United States.....	1,136	115,486	20,956	120,844	40
Grand total, St. Lawrence Canals.....	9,271	1,345,654	1,093,372	142,740	40
<b>CHAMBLY CANAL.</b>					
Canadian Vessels, steam.....	278	28,511	28,536	135	
" " sail.....	392	4,210	5,658	15,940	
Total Canadian.....	670	32,721	34,194	16,075	
United States Vessels, steam.....					
" " sail.....	4,055		1,876	203,865	
Total United States.....	4,055		1,876	203,865	
Grand total, Chambly Canal.....	4,725	32,721	36,070	219,940	
<b>OTTAWA CANALS</b>					
Canadian vessels, steam.....	901	83,684	86,759	157	1,007
" " sail.....	1,034	97,542	93,175		2,392
Total Canadian.....	1,935	181,226	179,934	157	3,399

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passed through the several Canals during the Season of Navigation in 1909.

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up.	Down.	
81,423	109,466	252,281	123,254	1,515,000	1,434,978	2,949,978
	1,770			13,510	25,448	38,958
81,423	111,236	252,281	123,254	1,528,510	1,460,426	2,988,936
3,870,252	10,169,548	195,591	58,249	4,257,679	10,487,490	14,745,169
31,904	59,135	2,246		42,047	63,522	105,569
3,902,156	10,228,683	197,837	58,249	4,299,726	10,551,012	14,850,738
3,983,579	10,339,919	450,118	181,503	5,828,236	12,011,438	17,839,674
977		4,460	166,827	495,934	493,707	989,641
191		188	43,787	97,603	98,730	196,333
1,168		4,648	210,614	593,537	592,437	1,185,974
263,284	198,355	3,147	121,513	314,832	325,600	640,432
4,111	1,650	1,764	13,703	19,790	17,662	37,452
267,395	200,005	4,911	135,216	334,622	343,262	677,884
268,563	200,005	9,559	345,830	928,159	935,699	1,863,858
			114,329	737,381	717,500	1,454,881
			38,168	514,683	507,413	1,022,096
			152,497	1,232,064	1,224,913	2,476,977
8,660	111	93	162,841	171,710	165,915	337,625
129	795		59,276	73,502	78,105	151,607
8,789	906	93	222,118	245,212	244,020	489,232
8,789	906	93	374,615	1,497,276	1,468,932	2,966,209
				28,646	28,536	57,182
			14,545	20,150	20,203	40,353
			14,545	48,796	48,739	97,535
			205,278	203,865	207,154	411,019
			205,278	203,865	207,154	411,019
			219,823	252,661	255,893	508,554
		294	98	84,135	87,864	171,999
		472	404	98,014	95,971	193,985
		766	502	182,149	183,835	365,984

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TABLE NO. 3.—STATEMENT showing the Number, Tonnage and Nationality of vessels  
1909—

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
OTTAWA CANALS.					
United States vessels, steam .....	3	233			
" " sail .....	243	2,416			12,581
Total United States .....	246	2,649			12,581
Grand total, Ottawa Canals .....	2,181	183,875	179,934	157	15,980
RIDEAU CANAL.					
Canadian vessels, steam .....	1,773	57,222	57,419	3,067	76
" " sail .....	427	16,697	15,457		
Total Canadian .....	2,202	73,919	72,876	3,067	76
United States vessels, steam .....	2		10		
" " sail .....	32	198	1,012	10	99
Total United States .....	34	198	1,022	10	99
Grand total, Rideau Canal .....	2,236	74,117	73,898	3,077	175
ST. PETER'S CANAL.					
Canadian vessels, steam .....	276	16,282	15,118		
" " sail .....	1,152	34,412	36,611		
Total Canadian .....	1,428	50,694	51,729		
United States vessels, steam .....	8	215	502		
" " sail .....	3	78	126		
Total United States .....	11	293	628		
Grand total, St. Peter's Canal .....	1,439	50,987	52,357		
TRENT VALLEY CANALS.					
Canadian vessels, steam .....	2,947	68,853	70,833		
" " sail .....	783	16,869	17,373		
Total Canadian .....	3,730	85,722	88,206		
United States vessels, steam .....					
" " sail .....					
Total United States .....					
Grand total, Trent Valley Canals .....	3,680	85,722	88,206		
MURRAY CANAL.					
Canadian vessels, steam .....	652	137,796	88,847	3,347	
" " sail .....	234	11,254	10,956	4,938	
Total Canadian .....	886	149,050	99,803	8,285	
United States vessels, steam .....	47	175	162	36	
" " sail .....	24	114	117	349	7
Total United States .....	71	289	279	385	7
Grand total, Murray Canal .....	957	149,339	100,082	8,670	7





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TABLE 4.—COMPARATIVE STATEMENT of the Traffic of all the Canals for the Years ending December 31, 1908 and 1909.

Articles.	1908.	1909.	Increase.	Decrease.
<i>Class No. 1.</i>	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam.....	5,201,093	6,150,224	949,131	
"    sail.....	1,579,696	1,661,354	81,658	
United States vessels, steam.....	7,881,570	15,726,035	7,844,465	
"    sail.....	639,569	733,287	93,718	
Total, class No. 1.....	15,301,928	24,270,900	8,968,972	
<i>Class No. 2.</i>	No.	No.	No.	No.
Passengers.....	280,830	272,222		8,608
<i>Class No. 3.</i>	Tons.	Tons.	Tons.	Tons.
Barley.....	174,628	176,577	1,949	
Buckwheat.....	858	6,789	5,931	
Corn.....	153,713	180,203	26,490	
Oats.....	225,659	432,769	207,110	
Rye.....	26,661	7,688		18,973
Flax.....	234,738	206,750		27,988
Pease.....	286	326	40	
Wheat.....	3 199,031	3,397,567	198,536	
Flour.....	228,605	324,044	95,439	
Hay.....	18,259	36,503	18,244	
Other mill products.....	28,234	57,288	29,054	
Fruit and vegetables.....	23,838	15,036		8,802
Potatoes.....	6,858	9,457	2,599	
Live stock.....	1,907	1,635		272
Poultry, game, fish.....	2,220	3,064	844	
Dressed meats.....	106	573	467	
Other packing house products.....	2,273	3,201	928	
Hides and leather.....	101	594	493	
Wool.....	4	287	283	
All other animal products.....	10,177	14,947	4,770	
Total, class No. 3.....	4,338,156	4,875,298	593,177	56,035
<i>Class No. 4.</i>				
Agricultural implements.....	11,378	18,836	7,458	
Cement, bricks, lime.....	191,411	489,745	298,334	
Household goods and furniture.....	4,718	2,517		2,201
Iron, pig and bloom.....	52,952	98,667	45,715	
"    and steel, all other.....	227,284	309,188	81,904	
Petroleum and other oils.....	87,456	99,980	12,524	
Sugar and salt.....	22,709	104,474	81,765	
Wines, liquors and beers.....	10,193	18,314	8,121	
Merchandise not enumerated.....	542,029	723,680	181,651	
Total, class No. 4.....	1,150,130	1,865,401	717,472	2,201

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TABLE 4.—COMPARATIVE STATEMENT of the Traffic of all the Canals for the Years ending December 31, 1908 and 1909—*Concluded*.

Articles.	1908.	1909.	Increase.	Decrease.
<i>Class No. 5.</i>	Tons.	Tons.	Tons.	Tons
Pulpwood.....	467,306	883,937	416,631	.....
Sawed lumber.....	417,229	668,780	251,551	.....
Squared timber.....	53,072	31,772	.....	21,300
Shingles.....	9,990	8,992	.....	998
Other woods.....	39,834	95,665	55,831	.....
Total, class No. 5.....	987,431	1,689,146	724,013	22,298
<i>Class No. 6.</i>				
Hard coal.....	1,006,259	933,234	.....	73,025
Soft coal.....	2,521,850	3,090,799	568,949	.....
Coke.....	52	1,456	1,404	.....
Copper ore.....	8,855	8,329	.....	526
Iron ore.....	7,402,672	21,204,848	13,802,176	.....
Other ore.....	87,415	52,237	.....	35,178
Total, class No. 6.....	11,027,103	25,290,903	14,372,520	108,729
Grand total.....	17,502,820	33,720,748	16,407,191	189,263

Net Increase, 16,217,928 tons.

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TABLE 5.—STATEMENT of Traffic on the Undermentioned Canals during the Season of Navigation in 1909.

ARTICLES.	Sault Ste. Marie Canal.	Welland Canal.	St. Lawrence Canals.	Chambly Canal.	Ottawa Canals.	Rideau Canal.	St. Peter's Canal.	Murray Canal.	Trent Valley Canal.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class No. 1.</i>									
Canadian vessels, steam.....	2,949,978	989,641	1,454,881	57,182	171,999	122,113	31,400	233,344	139,686
" " sail.....	38,958	196,383	1,022,096	10,353	193,985	32,154	71,023	32,210	34,242
United States vessels, steam.....	14,745,169	640,432	337,625	233	24,386	13	717	1,846	.....
" " sail.....	105,969	37,452	151,607	411,019	24,386	2,041	486	727	.....
Total, class No. 1.....	17,839,674	1,863,858	2,966,209	508,554	390,603	156,321	103,626	268,127	173,928
<i>Class No. 2.</i>									
Passengers.....	No.	No.	No.	No.	No.	No.	No.	No.	No.
	32,810	3,092	97,371	2,979	21,731	19,498	.....	24,368	70,373
<i>Class No. 3.</i>									
Barley.....	133,708	23,151	19,255	17	59	30	5	348	4
Buckwheat.....	5,769	.....	1,002	.....	10	.....	1	.....	.....
Corn.....	5,562	140,902	33,535	48	47	102	4	3	.....
Oats.....	282,147	75,135	70,038	686	380	307	3,780	277	19
Rye.....	7,058	33	541	.....	36	.....	2	.....	18
Flax.....	166,045	20,538	20,152	1	14	.....	.....	.....	64
Peanut.....	69	63	106	18	3	1	2	.....	.....
Wheat.....	2,232,036	590,196	573,832	10	119	821	1,318	.....	559
Flour.....	252,270	38,763	28,895	1,312	1,111	310	2,528	.....	65
Hay.....	4,164	1,701	9,789	15,474	1,352	1,474	.....	.....	21
Other mill products.....	18,580	30,158	7,070	121	614	188	522	10	45
Fruit and vegetables.....	2,081	97	8,203	2,248	807	244	1,209	145	2
Potatoes.....	318	.....	1,312	27	1,139	205	6,243	45	168
Live stock.....	5	.....	1,013	.....	526	12	15	6	58
Poultry, game, fish.....	62	230	119	.....	112	8	2,532	1	.....
Dressed meats.....	.....	.....	309	.....	13	18	.....	225	.....
Other packing house products.....	78	427	1,540	.....	239	269	286	320	42
Hides and leather.....	259	315	14	.....	2	4	.....	.....	.....
Wool.....	70	157	10	.....	10	17	1	20	2

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	3,110,275	921,866	786,607	430	2,833	1,402	205	118	87
All other animal.....									
Total, class No. 3.....				20,392	9,456	5,369	19,661	1,518	1,154
<i>Class No. 4.</i>									
Agricultural implements.....	8,163	9,571	449	71	253	285	2	35	24
Cement, bricks, lime.....	123,028	80,852	177,143	915	42,070	27,662	3,619	33,705	751
Household goods and furniture.....	43	16	1,644	23	160	146	135	265	65
Iron, pig and bloom.....	51,903	21,193	20,920	58	665	510	25	395	.....
Iron and steel, all other.....	154,530	65,832	84,010	606	1,250	1,172	139	1,635	14
Petroleum and other oils.....	11,062	48,352	37,641	188	878	710	445	685	19
Sugar and salt.....	36,044	46,671	10,839	885	4,292	3,639	1,778	340	18
Wines, liquors and beers.....	4,361	4,899	6,280	160	1,018	668	297	660	18
Merchandise not enumerated.....	318,293	229,100	133,780	6,654	13,619	7,850	1,186	12,315	973
Total, class No. 4.....	710,360	506,489	472,656	9,560	64,153	42,642	7,626	50,935	1,880
<i>Class No. 5.</i>									
Pulpwood.....	2,331	122,867	253,086	483,573	778	1,710	.....	1	19,591
Sawed lumber.....	47,789	43,881	292,771	114,671	197,040	18,931	5,634	318	5,745
Squared timber.....	2,187	13,069	13,845	.....	225	1	986	50	1,479
Shingles.....	7,206	298	145	23	439	253	506	2	120
Other woods.....	11,616	4,499	9,310	1,063	33,543	5,832	1,347	304	28,151
Total, class No. 5.....	71,129	186,614	509,157	599,330	232,025	26,727	8,423	635	55,086
<i>Class No. 6.</i>									
Hard coal.....	361,618	148,828	313,709	98,533	4,706	9,447	287	1,245	61
Soft coal.....	2,435,781	234,353	326,058	.....	26,005	6,186	41,014	21,360	42
Coke.....	1,440	.....	2	.....	2	12	.....	.....	.....
Copper ore.....	8,323	.....	.....	.....	.....	.....	6	.....	.....
Iron ore.....	21,156,915	31,770	1,848	14,144	.....	.....	158	.....	11
Other ore.....	5,104	1,531	592	10,158	592	1,389	3,675	27,478	1,718
Total, class No. 6.....	23,969,481	410,982	642,209	122,835	31,305	17,036	45,140	50,083	1,832
Grand total.....	27,861,245	2,025,951	2,410,629	752,117	336,439	91,774	79,850	102,291	59,952

TABLE 6.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during the Season of Navigation ended December 31, 1909, showing the total quantity of each description of property passed through.

ARTICLES.	Sault Ste. Marie Canal.	Welland Canal.	St. Lawrence Canals.	Chambly Canal.	Ottawa Canals.	Rideau Canal.	St. Peter's Canal.	Murray Canal.	Trent Valley Canal.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Vessels of all kinds.....	17,839,674	1,863,858	2,966,209	508,554	390,603	156,321	163,626	268,127	173,928
Passengers.....	No.	No.	No.	No.	No.	No.	No.	No.	No.
	32,810	3,092	97,371	2,979	21,731	19,498	.....	24,368	70,373
<i>Forest—Produce of Wood.</i>									
Pulpwood.....	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Sawed lumber.....	2,331	122,867	253,086	483,573	778	1,710	.....	1	19,591
Dressed lumber.....	47,789	45,881	232,771	114,671	197,010	18,931	5,634	318	5,745
Square timber.....	2,187	13,069	13,845	.....	225	1	436	30	1,479
Shingles.....	7,206	298	145	23	439	253	506	2	120
Other woods.....	11,616	4,499	9,310	1,063	33,543	5,832	1,347	301	28,151
Total.....	71,129	186,614	509,157	599,330	232,025	26,727	8,423	655	55,086
<i>Animals and Produce of Animals.</i>									
Live stock.....	5	.....	1,013	.....	526	12	15	6	58
Poultry, game and fish.....	62	230	119	.....	112	8	2,632	1	.....
Dressed meats.....	.....	.....	369	.....	13	18	8	225	.....
Other packing house products.....	78	427	1,540	.....	239	269	286	320	42
Hides and leather.....	259	315	14	.....	2	4	.....	.....	.....
Wool.....	70	151	10	.....	10	17	1	20	2
All other animal products.....	.....	.....	9,872	430	2,833	1,402	265	118	87
Total.....	474	1,129	12,877	430	3,735	1,730	3,047	630	188





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TABLE 7 (No. 1)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Sault Ste. Marie Canal during the Season of Navigation in 1909.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....	8,133								30		8,133	30	8,163	
All other animal.....													105,713	27,995
Barley.....	35,033												5,769	5,990
Buckwheat.....	5,769												117,038	361,918
Cement, bricks, etc.....	1,600		11,605		91,880									2,435,781
Coal, hard.....	32		270,005		888,250									1,440
" soft.....	102,775		1,376,276		30,080									5,562
Coke.....														2,532
Corn.....	12				3,931				1,619		12	5,550	2,532	3,030
Dressed meats.....														
Flax.....	38,017				98,815									129,753
Flour.....	2,024				82,876		46	5,631			936	166,045	220,167	36,282
Fruits and vegetables.....	162,467		73	360	22						2,081	252,270	2,081	32,103
Hay.....	3,601				11						4,135	4,164	4,164	
Hides and leather.....	6										45	259	259	
Household goods.....	37										214	63	63	
Iron, pig and bloom.....	36,328				3,212		9,924				49,524	54,903	48,916	5,987
Iron and steel, all other.....	90,406				32,245		6				123,627	30,903	131,954	22,576
Live stock.....	4										4	5	5	
Merchandise.....	256,000				30,619		3,841				304,646	12,557	303,715	14,488
Oats.....	4,932				16,938		24,622				748	282,147	267,561	14,586
Other mill products.....	830				120		7,055				830	17,750	13,228	5,332
" packing house products.....														
" woods.....	32										32	78	78	
Ore, all other.....	8,618										8,618	2,998	11,616	361
" copper.....											1,367	3,737	5,104	5,104
" iron.....											8,323	8,323	8,323	8,323
Pease.....													3,339	21,153,576
Petroleum.....	41										41	69	41	28
Poultry, game and fish.....	6,372										9,825	1,237	6,756	4,306
Potatoes.....	62										62	17	62	
	273										301	12	318	

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Pulpwood.....	81	2,250	6,393	560	2,331	2,331	2,331	2,331
Rye.....	105	.....	12,178	.....	7,058	7,058	7,058	4,312
Sawed lumber.....	7,533	26,919	6,966	.....	46,630	47,789	31,447	16,342
Shingles.....	.....	.....	1,050	240	7,206	7,206	4,950	2,256
Squared timber.....	24	1,000	.....	.....	2,134	2,187	2,187	.....
Sugar and salt.....	900	11,155	35	.....	935	36,044	28,055	7,989
Wheat.....	993,041	400,330	764,212	61,681	2,219,264	2,232,030	1,907,415	324,615
Wines, liquors and beers.....	58	.....	.....	70	58	4,364	4,364	.....
Wool.....	50	203	.....	20	70	70	70	.....
Total freight.....	1,567,940	512,233	22,188,338	167,881	24,436,502	27,861,245	3,366,495	24,494,750

TABLE 7 (No. 2) —GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal during the Season of Navigation in 1909.—*Con.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to Canadian Ports.		From United States to United States Ports.		Tons.		Total tons.		Origin of cargo		
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.	Canadian.	United States.	
Agricultural implements.															
All other animal															
Barley	9,207	83				254			30	9,207			9,320	254	
Buckwheat		18,927				4,224							18,927	4,224	
Cement, bricks, &c.	54,379	13,900			6,804			5,769	61,483	19,689			63,727	11,125	
Coal, hard					130,731			11,067	141,798	1,530			143,328	143,328	
Coal, soft						400		233,353		234,353				234,353	
Coke															
Corn						100,967		30,935		140,902				140,902	
Dressed meats.															
Flax		20,538											20,538		
Flour		20,661				15,452		2,650		38,763			20,254	18,509	
Fruits and vegetables	97									97			97		
Hay	1,701					315			1,701				1,701		
Hides and leather.														315	
Household goods	3	13								3			16		
Iron, pig and bloom	18,338	1,398						1,457	18,338	2,855			19,736	1,457	
Iron and steel, all other	46,285	8,355						10,054	47,418	18,414			53,841	9,491	
Live stock.															
Merchandise.	82,971	28,128			68,826	5,861	400	9,503	185,608	13,492			147,241	81,859	
Oats		72,263						2,872		75,135			74,234	904	
Other mill products	15	2,185				22,620		5,388	15	30,143			1,089	29,069	
" packing house products.	25							402	25	402			25	402	
" woods.	84	140						1,343	84	4,415			224	4,275	
Ore, all other.									1,531					1,531	
" copper.															
" iron.															
Pease.						63		31,170		31,770				31,770	
Petroleum.														63	
Poultry, game and fish.	81	23,879	15					24,377	96	48,256			24,975	24,377	
						230			230					230	



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TABLE 7 (No. 3).—GENERAL STATEMENT showing the Quantity of each through Article transported on the Welland Canal during the Season of Navigation in 1909.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.	9,207	83							9,207	367	9,574		9,326	254
All other animal.		18,927		4,224		254		30			23,151		18,927	4,224
Barley.														
Buckhead.	54,379	300	6,804			5,769		61,183	6,069	67,252			56,127	11,125
Cement, bricks, &c.			130,731			1,530		141,798	234,353	143,328				143,328
Coal, hard.								233,953		234,353				234,353
" soft.						400								
Coke.						100,967		39,935		140,902				140,902
Corn.														
Dressed meats.														
Flax.		20,538								20,538			20,538	
Flour.		20,661				15,452		2,650		38,763			20,254	18,509
Fruits and vegetables.	97								97		97		97	
Hay.	1,701								1,701		1,701		1,701	
Hides and leather.						315				315				315
Household goods.	3	13							3	13			16	
Iron, pig and bloom.	18,338	1,308						1,007	18,338	2,405	20,743		19,736	1,007
Iron and steel, all other.	46,285	8,355				5		10,054	47,418	18,414	66,832		56,841	9,991
Live stock.														
Merchandise.	82,218	1,701	35,411			5,861		400	181,855	17,065	201,920		120,061	81,859
Oats.		72,263							15	30,143	75,135		74,231	904
Other mill products.	15	2,135				22,620		5,388	25	402	30,158		1,089	29,069
" packing house products.	25							402	25	2,934	2,934		25	402
" woods.						2,932		2	1,531		1,531			2,934
Ore, all other.														
" copper.														
" iron.								31,770		31,770	31,770			31,770
Pease.						63				63				63
Petroleum.									96	48,256	48,352		23,975	24,377
Poultry, game and fish.	81	23,879	15					24,377	230		230			230
Potatoes.														
Pulpwood.														
Rye.		33							122,867	33	122,867		122,867	33
Sawed lumber.	16		3,984	14,696				2,834	4,000	41,867	45,857		17,663	28,194





APPENDIX A—Continued  
 TABLE 7 (No. 4)—GENERAL STATEMENT showing the Quantity of each way article transported on the Welland Canal during the Season of Navigation in 1909.

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.		Origin of Cargo.	
	Up	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....												
All other animal.....												
Barley.....												
Buckwheat.....												
Cement, bricks, &c.....		13,600								13,600	13,600	
Coal, hard.....												
" soft.....												
Coke.....												
Corn.....												
Dressed meats.....												
Flax.....												
Flour.....												
Fruits and vegetables.....												
Hay.....												
Hides and leather.....												
Household goods.....												
Iron—pig and bloom.....												
Iron and steel, all other.....								450		450		450
Live stock.....												
Merchandise.....	753	26,427							753	26,427	27,180	
Oats.....												
Other mill products.....												
Other packing house products.....												
Other woods.....	84	140										
Ore, all other.....												
" copper.....												
" iron.....												
Peas.....												
Petroleum.....												
Poultry, game and fish.....												
Potatoes.....												
Pulpwood.....												
									84	1,481	1,565	224
								1,341				1,341







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TABLE 7 (No. 6)—GENERAL STATEMENT showing the Quantity of each through Article transported on the St. Lawrence Canals, during the Season of Navigation in 1909—Continued.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....	100	83							100	83			183	
All other animal.....	75	4,990							75	4,990			5,065	
Barley.....		19,143								19,143			19,143	
Buckwheat.....	14,011	12,715					4,985		11,011	17,700			27,694	4,017
Cement, bricks, &c.....	707	4,511			1,696	289,969			2,403	294,580			707	296,276
Coal, hard.....	11,140						175,115		11,140	175,115			11,140	175,115
" soft.....														
Coke.....	814	7,365					9,772		814	17,137			814	17,137
Corn.....	78	200							78	200			278	
Dressed meats.....		19,634								19,634			19,634	
Flax.....	25	19,546					2,359		25	21,905			19,231	2,679
Floor.....	44	5,989					25		44	6,014			6,058	25
Fruits and vegetables.....	1,701								1,701				1,701	
Hay.....														
Hides and leather.....	274	775							274	775			1,049	
Household goods.....	19,226	105							19,226	105			19,331	
Iron—pig and bloom.....	42,202	8,980					6,637		42,202	15,517			51,182	6,537
Iron and steel, all other.....	5	32							5	32			37	
Live stock.....	88,433	16,833					4,587		88,433	21,470			104,436	5,467
Merchandise.....		65,624								65,624			65,624	
Oats.....	47	960					4,916		47	3,876			1,071	4,852
Other mill products.....	162	216					384		162	600			354	404
" packing house products.....	2								2				2	
" woods.....		1,824								1,824			1,824	
Ore, all other.....														
" copper.....														
" iron.....		30								30			30	
Pease.....	1,087	18,555							1,087	34,122			19,537	15,682
Petroleum.....		6								6			6	
Poultry, game and fish.....														
Potatoes.....	27								27				27	

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Pulpwood.....	18,248	231,243	249,497	249,497	249,497	249,497	249,497	249,497	249,497
Eye.....	120	120	120	120	120	120	120	120	120
Sawed lumber.....	1,287	9,476	10,713	10,713	10,713	10,713	10,713	10,713	10,713
Shingles.....	900	900	900	900	900	900	900	900	900
Squared timber.....	324	324	324	324	324	324	324	324	324
Sugar and salt.....	4,936	4,936	4,936	4,936	4,936	4,936	4,936	4,936	4,936
Wheat.....	750	425,739	750	750	750	750	750	750	750
Wines, liquors and beers.....	4,209	747	4,209	4,209	4,209	4,209	4,209	4,209	4,209
Wool.....	40	40	40	40	40	40	40	40	40
Total freight.....	209,540	636,095	240,625	451,961	1,275,603	1,727,564	1,060,101	667,463	667,463

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TABLE 7 (No. 7).—GENERAL STATEMENT showing the Quantity of each Way Article transported on the St. Lawrence Canals during the Season of Navigation in 1909.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....	205	61							205	61			266	1
All other animal.....	1,204	3,603							1,204	3,603			4,807	
Barley.....	88	24							88	24			112	
Buckwheat.....	984	18							984	18			1,002	
Cement, bricks, &c.....	70,935	74,497							70,935	74,497			145,432	
Coal, hard.....	2,870	202						2,063	4,933	11,591			2,094	14,632
" soft.....	128,028	1,316					10,459		128,028	11,775			129,825	9,978
Coke.....	2	2							2	2			2	
Corn.....	2,146	13,438							2,146	13,438			15,584	336
Dressed meats.....	33	6			2				25	6			29	2
Flax.....	14	504							14	504			518	
Flour.....	2,072	4,833							2,072	4,833			6,965	
Fruits and vegetables.....	1,382	761							1,384	761			2,145	
Hay.....	5,662	2,426							5,662	2,426			8,088	
Hides and leather.....	7	5							9	5			12	
Household goods.....	244	349							246	349			595	
Iron—pig and bloom.....	1,173	416							1,173	416			1,589	
Iron and steel, all other.....	23,456	835							23,456	835			26,291	107
Live stock.....	81	895							81	895			976	
Merchandise.....	16,446	7,379							16,498	7,379			20,013	3,864
Oats.....	297	4,117			52				297	4,117			4,414	
Other mill products.....	364	788							364	788			1,147	
" packing house products.....	411	231							487	231			718	65
" woods.....	223	9,085							223	9,085			9,308	
Ore, all other.....	556	36							556	36			592	556
" copper.....														
" iron.....	24								24				24	
Pease.....	351	41							35	41			76	
Petroleum.....	2,206	216							2,206	216			1,022	1,400
Poultry, game and fish.....	1	112							1	112			113	
Potatoes.....	330	956							330	956			1,285	

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Pulpwood.....	675	685	2,229			2,904	685	3,589	3,589	
Rye.....	416	5				416	5	421	421	
Sawed lumber.....	36,341	149,170	36,547			36,341	185,717	222,058	222,058	
Shingles.....		145					145	145	145	
Squared timber.....	482	12,463				482	12,463	12,945	12,945	
Sugar and salt.....	5,123	360				5,123	360	5,483	5,483	
Wheat.....	16,297	6,010				16,297	6,010	22,307	22,307	
Wines, liquors and beers.....	1,084	41				1,084	41	1,125	1,125	
Wool.....		10					10	10	10	
Total freight.....	223,887	296,153	36,547	136	2,063	328,315	354,750	83,065	650,696	32,369

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TABLE 7 (No 8).—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly Canal during the Season of Navigation in 1909.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements	69	2							69	2	71		71	
All other animal	21	247					162		21	469	430		268	162
Barley	17								17		17		17	
Buckwheat														
Cement, bricks, &c.	478		146				291		624	291	915		624	291
Coal, hard	2						98,531		2	98,531	98,533		2	98,531
" soft														
Coke														
Corn	48								48		48		48	
Dressed meats														
Flax	1								1		1		1	
Flour	1,312								1,312		1,312		1,312	
Fruits and vegetables	669	1,579							669	1,579	2,248		2,248	
Hay		7,772							7,772	7,772	15,474		15,474	
Hides and leather														
Hides and leather	19								19		19		19	
Household goods		3								4	23		22	1
Iron-pig and bloom	52	6							52	6	58		58	
Iron and steel, all other	596	10							596	10	606		606	
Live stock														
Merchandise	836	407	172				5,239		1,008	5,646	6,654		1,415	5,239
Oats	17	609							17	609	686		686	
Other mill products	112	9							112	9	121		121	
Other packing house products														
Other woods	86	747	230				10,128		316	747	1,063		1,063	
Ore, all other	30								30	10,128	10,158		30	10,128
" copper														
" iron														
Pease	18								18		18		18	
Petroleum	156								156		156		156	
							32			32	188		188	32



TABLE 7 (No. 9).—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peter's Canal during the Season of Navigation in 1909.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.	Origin of Cargo.	
													Canadian.	United States.
Agricultural implements.....	2								2				2	
All other animal.....	5	200							5	200			205	
Barley.....	5								5				5	
Buckwheat.....	1								1				1	
Cement, bricks, &c.....	756	2,863							756	2,863			3,619	
Coal, hard.....	147				140				287				287	211
Coal, soft.....	47	40,967							47	40,967			41,014	
Coke.....	4								4				4	
Corn.....	4								4				4	
Dressed meats.....	8								8				8	
Flax.....														
Flour.....	1,303	15							1,303	15			1,318	
Fruits and Vegetables.....	1,209								1,209				1,209	
Hay.....	2,528								2,528				2,528	
Hides and leather.....		14								14			14	
Household goods.....	22	121							22	121			135	
Iron-pig and bloom.....	63	76							63	76			139	
Iron and steel, all other.....	15								15				15	
Live stock.....	988	194							988	194			1,182	4
Merchandise.....	3,780				4				3,780		4		3,784	
Oats.....	522								522				522	
Other mill products.....	283	3							283	3			286	
Other packing house products.....	365	980							367	980			1,347	2
Other woods.....		3,603							72	3,603			3,675	72
Ore, all other.....	6								6				6	
" copper.....														
" iron.....	158								158				158	
Pease.....	2								2				2	
Petroleum.....	403	42							403	42			445	





TABLE 7 (No. 10).—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray Canal during the Season of Navigation in 1909.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....	30	5							30	5			35	
All other animal.....	27	91							27	91			118	
Barley.....		348								348			348	
Buckwheat.....														
Cement, bricks, &c.....	32,825	880							32,825	880			33,705	
Coal, hard.....					672	573			672	573			1,245	1,245
Coal, soft.....					21,360	21,360					21,360		21,360	21,360
Coke.....														
Corn.....		3								3			3	
Dressed meats.....	65	160							65	160			225	
Flax.....														
Flour.....														
Fruits and vegetables.....	15	130							15	130			145	
Hay.....														
Hides and leather.....														
Household goods.....	307	58							307	58			365	
Iron-pig and bloom.....	370	25							370	25			395	
Iron and steel, all other.....	952	683							952	683			1,635	363
Live stock.....	4	2							4	2			6	
Merchandise.....	9,241	3,072				2			9,241	3,074			12,315	12
Oats.....		277								277			277	
Other mill products.....		16								16			16	
Other packing house products.....	165	155							165	155			320	
Other woods.....	100	204							100	204			304	
Ore, all other.....	26,928	550							26,928	550			27,478	
" copper.....														
" iron.....														
Pease.....														
Petroleum.....	385	300							385	300			685	2
Poultry, game and fish.....	1								1				1	



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TABLE 7 (No. 11).—GENERAL STATEMENT showing the quantity of each Article transported on the Ottawa Canals during the Season of Navigation in 1909.

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.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
Agricultural implements.....	194	39							194	39	233		233
All other animal.....	113	2,720							113	2,720	2,833		2,833
Barley.....	59								59		59		59
Buckwheat.....	10								10		10		10
Cement, bricks, &c.....	1,829	40,241							1,829	40,241	42,070		42,070
Coal, hard.....	784				3,922				4,706		4,706		4,706
" soft.....	25,995	10							25,995	10	26,005		26,005
Coke.....	9								9		9		9
Corn.....	47								47		47		47
Dressed meats.....	7	6							7	6	13		13
Flax.....	14								14		14		14
Floor.....	1,017	94							1,017	94	1,111		1,111
Fruits and vegetables.....	307	500							307	500	807		807
Hay.....	106	1,246							106	1,246	1,352		1,352
Hides and leather.....	2								2		2		2
Household goods.....	106	54							106	54	160		160
Iron-pig and bloom.....	682	1							682	1	683		683
Iron and steel, all other.....	1,189	41	20						1,269	41	1,250		1,250
Live stock.....	29	497							99	497	596		596
Merchandise.....	9,120	3,782	30		697				9,837	3,782	13,619		13,619
Oats.....	135	245							135	245	380		380
Other mill products.....	51	593							51	593	644		644
Other packing house products.....	207	22	10						217	22	239		239
Other woods.....	33,313			230					33,543		33,543		33,543
Ore, all other.....	36								556	36	592		592
" copper.....													
" iron.....	3								3		3		3
Petroleum.....	698	170	10						708	170	878		878
Poultry, game and fish.....		112								112	112		112









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TABLE 7 (No. 13).—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals during the Season of Navigation in 1909.

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.		Origin of Cargo.		
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.	Canadian.	United States.	
Agricultural implements.....															
All other animal.....	4	20							4	20			24		
Barley.....	34	53							34	53			87		
Buckwheat.....	4								4				4		
Cement, bricks, &c.....	527	224							527	224			751		
Coal, hard.....	37	24							37	24			61		
" soft.....	42								42				42		
Coke.....															
Corn.....															
Dressed meats.....															
Flax.....															
Flour.....	44	21							44	21			65		
Fruits and vegetables.....	2								2				2		
Hay.....	21								21				21		
Hides and leather.....															
Household goods.....	45	20							45	20			65		
Iron-pig and bloom.....															
Iron and steel, all other.....		14								14			14		
Live stock.....	45	13							45	13			58		
Merchandise.....	637	336							637	336			973		
Oats.....	19								19				19		
Other mill products.....	16	29							16	29			45		
Other packing house products.....	42								42				42		
Other woods.....	13,179	14,972							13,179	14,972			28,151		
Ore, all other.....	4	1,714							4	1,714			1,718		
" copper.....															
" iron.....	11								11				11		
Pease.....	64								64				64		
Petroleum.....	15	4							15	4			19		
Poultry, game and fish.....															
Potatoes.....	167	1							167	1			168		

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Pulpwood.....	539	19,052	539	19,052	19,591	19,591
Rye.....	18		18		18	18
Sawed lumber.....	1,044	4,701	1,044	4,701	5,745	5,745
Shingles.....	45	75	45	75	120	120
Squared timber.....	631	848	631	848	1,479	1,479
Sugar and salt.....	14	2	14	2	16	16
Wheat.....	559		559		559	559
Wines, liquors and beers.....	10	8	10	8	18	18
Wool.....		2		2	2	2
Total freight.....	17,819	42,133	17,819	42,133	59,952	59,952

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TABLE 8.—STATEMENT showing the Classified Tonnage of all kinds of Vessels passed

SAULT STE.

## CANADIAN.

Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	5,000 to 5,142 tons.....	1	5,142	1	5,000 to — tons.....		
2	4,000 " 5,000 ".....	1	4,361	2	4,000 " 5,000 ".....		
3	3,000 " 4,000 ".....	2	6,775	3	3,000 " 4,000 ".....		
4	2,000 " 3,000 ".....	6	17,333	4	2,000 " 3,000 ".....		
5	1,000 " 2,000 ".....	57	75,254	5	1,000 " 2,000 ".....		
6	Under 1,000 ".....	61	20,278	6	Under 1,000 ".....	4	3,244
	Total.....	128	129,143		Total.....	4	3,244

## WELLAND

1	250 to 1,579 tons.....	66	61,058	1	250 to 989 tons.....	14	7,585
2	200 " 249 ".....	2	430	2	200 " 249 ".....	3	675
3	150 " 199 ".....	4	675	3	150 " 199 ".....	4	670
4	100 " 149 ".....	4	450	4	100 " 149 ".....	6	600
5	50 " 99 ".....	6	460	5	50 " 99 ".....	1	50
6	Under 50 ".....	15	625	6	Under 50 ".....	1	15
	Total.....	97	63,698		Total.....	29	9,595

## ST. LAWRENCE

1	250 to 1,597 tons.....	46	48,242	1	250 to 1,184 tons.....	79	33,141
2	200 " 249 ".....	7	1,520	2	200 " 249 ".....	7	1,475
3	150 " 199 ".....	7	1,145	3	150 " 199 ".....	59	9,605
4	100 " 149 ".....	10	1,185	4	100 " 149 ".....	87	10,525
5	50 " 99 ".....	22	1,625	5	50 " 99 ".....	64	5,055
6	Under 50 ".....	36	706	6	Under 50 ".....	6	255
	Total.....	128	54,423		Total.....	302	60,056

## RIDEAU, OTTAWA AND

1	250 to 372 tons.....	4	1,334	1	250 to — tons.....		
2	200 " 249 ".....			2	200 " 149 ".....	5	1,025
3	150 " 200 ".....	1	185	3	150 " 200 ".....	39	6,375
4	100 " 149 ".....	1	100	4	100 " 149 ".....	52	6,650
5	50 " 99 ".....	8	530	5	50 " 99 ".....	17	1,290
6	Under 50 ".....	36	609	6	Under 50 ".....	11	286
	Total.....	50	2,758		Total.....	124	15,626

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through the following Canals during the Season of Navigation in 1909.

## MARIE CANAL.

UNITED STATES.							
Class.	Steam Vessels.	No.	Tonnage.	Class	Sailing Vessels.	No.	Tonnage.
1	5,000 to 6,498 tons	50	270,666	1	5,000 to — tons	3	13,839
2	4,000 " 5,000 "	77	308,184	2	4,000 " 4,725 "	6	19,540
3	3,000 " 4,000 "	137	464,262	3	3,000 " 4,000 "	6	14,962
4	2,000 " 3,000 "	45	123,158	4	2,000 " 3,000 "	5	7,148
5	1,000 " 2,000 "	59	96,016	5	1,000 " 2,000 "	6	3,348
6	Under 1,000 "	51	19,905	6	Under 1,000 "	26	58,837
	Total	419	1,282,191				

## CANAL.

1	250 to 1,673 tons	55	49,912	1	250 to 1,310 tons	10	1,925
2	200 " 249 "	1	249	2	200 " 249 "	1	200
3	150 " 199 "	2	340	3	150 " 199 "	1	160
4	100 " 149 "	1	120	4	100 " 149 "	4	290
5	50 " 99 "	9	750	5	50 " 99 "	1	35
6	Under 50 "	17	420	6	Under 50 "	17	2,610
		84	51,542				

## CANALS.

1	250 to 1,609 tons	29	24,552	1	250 to 796 tons	10	5,256
2	200 " 249 "	1	249	2	200 " 249 "	41	4,450
3	150 " 199 "	1	135	3	150 " 199 "	88	8,240
4	100 " 149 "	3	235	4	100 " 149 "	3	63
5	50 " 99 "	4	88	5	50 " 99 "	142	17,989
6	Under 50 "	4	88	6	Under 50 "		
			25,010				

## CHAMBLY CANALS.

1	250 to — tons			1	250 to — tons		
2	200 " 249 "			2	200 " 249 "	9	1,410
3	150 " 200 "			3	150 " 200 "	440	45,905
4	100 " 149 "			4	100 " 149 "	199	18,630
5	50 " 99 "			5	50 " 99 "	2	23
6	Under 50 "	9	174	6	Under 50 "	650	65,968
	Total	9	174		Total		



# APPENDIX

## DOMINION CANALS

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows:—

*First—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)*

	Miles.
1. Lachine canal. . . . .	8½
Lake St. Louis and River St. Lawrence. . . . .	16
2. Soulanges' canal. . . . .	14
Lake St. Francis and River St. Lawrence. . . . .	33
3. Cornwall canal. . . . .	11
River St. Lawrence. . . . .	5
4. Farran's Point canal. . . . .	1½
River St. Lawrence. . . . .	10
5. Rapide Plat canal. . . . .	3¾
River St. Lawrence. . . . .	4
6. Galops canal. . . . .	7½
River St. Lawrence and Lake Ontario. . . . .	236
7. Welland canal. . . . .	26¾
Lake Erie, Detroit river, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie canal. . . . .	1¼
Lake Superior to Port Arthur. . . . .	266
Total. . . . .	1,223½
To Duluth. . . . .	1,357
Chicago. . . . .	1,286

*Second.—Ottawa to Lake Champlain.*

1. Grenville. 2. Carillon. 3. St. Anne's. 4. Chambly. 5. St. Ours canals.

*Third.—Ottawa to Kingston and Perth.*

1. Rideau canal.

*Fourth.—Lake Ontario at Trenton to Lake Huron at mouth of River Severn.*

1. Trent canal (not completed).

*Fifth.—Ocean to Bras d'Or lakes.*

1. St. Peter's canal.



## 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, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of Lake Superior, a distance of 2,200 statute miles. The distance to Duluth is 2,343 statute miles. The distance to Chicago, 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through Lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869, this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the River St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and Lake Superior is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior, are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the River St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

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## LACHINE CANAL.

First construction commenced.....	1821
“ completed.....	1825
First enlargement commenced.....	1843
“ completed.....	1848
Second enlargement commenced.....	1873
“ completed.....	1901
Length of canal.....	8½ statute miles.
Number of locks.....	5
Dimensions of locks.....	270 feet by 45 feet.
Total rise of lockage.....	45 feet.
Depth of water } at two locks.....	18 “
on sills. } at three locks.....	14 “
Average width of new canal.....	150 “

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal 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.

## SOULANGES CANAL.

Construction commenced.....	1892
Open for traffic.....	1899
Length of canal.....	14 statute miles.
Number of locks } lift.....	4
} guard.....	1
Dimensions of locks.....	280 feet by 45 feet.
Total rise of lockage.....	84 feet
Depth of water on sills.....	15 “
Breadth of canal at bottom.....	100 “
Breadth of canal at water surface.....	164 “
Number of arc lights.....	219 of 2,000 c. p. each.

The canal extends from Cascade point to Coteau Landing, overcoming the Cascade Rapids, Cedar rapids and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges, the distance is sixteen miles.

## CORNWALL CANAL.

First commenced, 9 feet.....	1844
“ opened.....	1847
Enlargement commenced.....	1897
“ completed.....	1900
Length of canal.....	11 statute miles.
Number of locks.....	6
Dimensions of locks.....	270 feet by 75 feet.
Total rise of lockage.....	48 feet.
Depth of water on sills.....	14 “
Breadth of canal at bottom.....	100 “
Breadth of canal at water surface.....	164 “

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The old lift locks, 200 feet by 45 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through Lake St. Francis, of  $32\frac{3}{4}$  miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's landing.

### WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat and Galops canals are collectively known as the Williamsburg Canals.

#### FARRAN'S POINT CANAL.

First commenced, 9 feet . . . . .	1844
“ opened . . . . .	1847
Enlargement commenced . . . . .	1897
“ completed . . . . .	1900
Length of canal . . . . .	1½ miles.
Number of locks . . . . .	1
New lock . . . . .	800 feet by 45 feet
Old lock . . . . .	200 “
Total rise or lockages . . . . .	3½ feet.
Depth of water on sills of new lock . . . . .	14 “
Depth of water on sills of old lock . . . . .	9 “
Breadth of canal at bottom . . . . .	90 “
Breadth of canal at water surface . . . . .	154 “

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

#### RAPIDE PLAT CANAL.

First commenced, 9 feet . . . . .	1844
“ opened . . . . .	1847
Enlargement commenced . . . . .	1884
“ completed . . . . .	1897
Length of canal . . . . .	3¾ miles.
Number of locks . . . . .	2
Dimensions of locks . . . . .	270 feet by 45 feet.
Total rise in lockage . . . . .	11½ feet.
Depth of water on sills . . . . .	14 “
Breadth of canal at bottom . . . . .	80 “
Breadth of canal at surface of water . . . . .	152 “

The old lift lock, 200 feet by 45, is also available, with nine feet of water on mitre sills.

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 rapids at that place. Descending vessels run the rapids safely.

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## GALOPS CANAL.

First commenced, 9 feet.....	1844
Opened.....	1846
Enlargement commenced.....	1888
"    completed.....	1903
Length of canal.....	7 $\frac{1}{4}$ miles.
Number of locks.....	3
Dimensions of locks. } one of which is }.....	2-270 by 45.
} a guard lock. }.....	1-800 by 45.
Total rise of lockage.....	15 $\frac{1}{2}$ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	144 "

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4 $\frac{1}{2}$  miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

## MURRAY CANAL.

Construction begun.....	1882
Completed.....	1890
Length between eastern and western pier heads....	5 $\frac{1}{2}$ miles.
Breadth at bottom.....	80 feet.
Breadth at water surface.....	120
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 Quinte and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

## WELLAND CANAL.

Main line from Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie.

	Old Line.	Enlarged or New Line.
Length of Canal.....	27 $\frac{1}{2}$ miles	26 $\frac{3}{4}$ miles
Pairs of guard-gates (formerly 3) .. .. .		2
Number of locks { lift.....	26	25
{ guard.....	1	1
Dimensions.....	{ 1 lock 200 x 45 1 lock 200 x 45 1 (tidal) 230 x 45 24 locks 150 x 45 }	270 feet x 45 feet.
Total rise or lockage .. .. .	326 $\frac{3}{4}$ feet	326 $\frac{3}{4}$ feet.
Depth of water on sills.. .. .	10 $\frac{1}{4}$ "	14 "
Construction commenced, 10 feet 3 inches.....		1824
"    Completed.....		1833
Enlargement commenced, 14 feet.....		1872
"    completed.....		1887

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## WELLAND RIVER BRANCHES.

## Length of canal—

Port Robinson cut to River Welland . . . . .	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct . . . . .	300 "
Chippewa 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 feet 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 feet.
Total rise or lockage . . . . .	
Depth of water on sills . . . . .	9 feet.

## PORT WELLAND BRANCH.

Length of canal . . . . .	1¾ miles.
Number of locks . . . . .	1
Dimensions of locks . . . . .	185 feet 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 Allanburg, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

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 River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 266 miles, and to Duluth 400 miles.

## SAULT STE. MARIE CANAL.

Construction commenced . . . . .	1888
Opened for traffic . . . . .	1895
Length of canal, between the extreme ends of the entrance piers . . . . .	5,967 feet.
Number of locks . . . . .	1
Dimensions of locks . . . . .	900 feet by 60 feet.
Depth of water on sills (at lowest known water level) . . . . .	20 feet 3 inches.
Total rise or lockage . . . . .	18 feet.
Breadth of canal at bottom . . . . .	141 feet 8 inches.
Breadth at surface of water . . . . .	150 feet.



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This canal has been constructed through St. Mary's island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

### 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 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:—

#### Ottawa River Canals.

The Ste. Anne's lock.	Grenville canal.
Carillon canal.	Rideau canal.

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.	Interme- diate Distance.	Total Distance, from Montreal.
	Miles.	Miles.
The Lachine canal .....	8½	
From Lachine to Ste. Anne's lock .....	15	23
Ste. Anne's lock and piers .....	½	23
Ste. Anne's lock to Carillon canal .....	27	50
The Carillon canal .....	¾	51
The Carillon to Grenville canal .....	6¼	57
The Grenville canal .....	5¾	63
From the Grenville canal to entrance of Rideau navigation .....	56	119
Rideau navigation ending at Kingston .....	126¼	245

### STE. ANNE'S LOCK.

Construction commenced .....		1814.
“ completed .....		1816
Rebuilt of wood .....		1833
“ in masonry .....		1843.
	Old Lock.	New Lock.
Length of canal .....	⅓ mile.	⅓ mile.
Number of locks .....	1	1
Dimensions of locks .....	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 River Ottawa which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.



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## THE CARILLON CANAL.

Construction commenced. . . . .	1819
“ completed. . . . .	1833
Enlargement commenced. . . . .	1871
“ completed. . . . .	1887
Length of canal. . . . .	$\frac{3}{4}$ mile.
Number of locks. . . . .	2
Dimensions of locks. . . . .	200 x 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 navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.

By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

## GRENVILLE CANAL.

Construction commenced. . . . .	1819
“ completed. . . . .	1833
Enlargement commenced. . . . .	1871
“ completed. . . . .	1887
Length of canal. . . . .	$5\frac{3}{4}$ miles.
Number of locks. . . . .	5
Dimensions of locks. . . . .	200 x 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, up to which point the River Ottawa affords unimpeded navigation.

## RIDEAU NAVIGATION.

Construction commenced. . . . .	1826
“ completed. . . . .	1832

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigation waters. . . . .	126 $\frac{1}{4}$ miles.
Number of locks going from Ottawa to Kingston. . . . .	{ 35 ascending. 14 descending.
Total lockage. . . . . 446 $\frac{1}{2}$ feet	{ 282 $\frac{1}{4}$ rise and 16 $\frac{1}{4}$ fall } at high water.
Dimensions of locks. . . . .	134 x 33 feet.
Depth of water on sills. . . . .	5 feet.
Navigation depth through the several reaches. . . . .	4 $\frac{1}{2}$ “
Breadth of canal reaches at bottom. . . . .	{ 60 feet in earth. 54 feet in rock.
Breadth of canal at surface of water. . . . .	80 feet in earth.

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## PERTH BRANCH.

Construction commenced. . . . .	1883		
"    completed. . . . .	1892		
Length of canal. . . . .	7 miles.		
Number of locks. . . . .	2		
Dimensions of locks. . . . .	134 feet x 33 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. . . . .	<table> <tr> <td>    { 40 " in rock.</td> </tr> <tr> <td>    { 60 " in clay.</td> </tr> </table>	{ 40 " in rock.	{ 60 " in clay.
{ 40 " in rock.			
{ 60 " in clay.			

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on Lake Rideau and the town of Perth.

The summit level of the Rideau 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 Rideau river, and that towards Kingston follows the River Cataragui. 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 southwest descending level to Kingston, supplied by the Mud lake system formerly known as the Devil lake system, discharging into Lake Openicon.

Lake Openicon 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 Cataragui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

## 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 up 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 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 distances between Sorel and New York:—

Section of Navigation.	Interme- diate Distance.	Total Distances.
	Miles.	Miles.
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

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## ST. OURS LOCK DAM.

Construction commenced. . . . .	1844
“ completed. . . . .	1849
Length. . . . .	$\frac{1}{2}$ mile.
Number of locks. . . . .	1 “
Dimensions of lock. . . . .	200 feet by 45 feet.
Total rise of lockage. . . . .	5 “
Depth of water on sills. . . . .	7 feet at low water.
Length of dam in eastern channel. . . . .	300 “
Length of dam in western channel. . . . .	690 “

At St. Ours, 14 miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

## CHAMBLY CANAL.

Construction commenced. . . . .	1831
“ completed. . . . .	1843
Length of canal. . . . .	12 miles.
Number of locks. . . . .	9
Dimensions of locks:—	
Guard lock, No. 1 at St. Johns. . . . .	122 feet.
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 “
Breadth of canal at 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.

## TRENT CANAL.

The term ‘Trent canal’ 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. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

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, as originally contemplated and modified, is as follows:—

Through the River Trent, Rice lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, 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 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial Government in 1837, was deferred. By certain works, however, below specified, sections of these

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waters have been made practicable for navigation, and the whole scheme is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through Lake Seugog to Port Perry, a distance of 190 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches:—

From Trenton, Bay of Quinté to Nine Mile rapids ..	—	9
Nine Mile rapids to Percy landing.. . . . .	19½	—
Percy landing to Heeley's Falls dam.. . . . .	—	14½
Heeley's Falls dam to Peterborough.. . . . .	51¾	—
Peterborough to Lakefield.. . . . .	—	9½
Lakefield to a point across Balsam lake.. . . . .	61	—
	132¼	33

Total distance, Bay of Quinté to a point across Balsam lake..	165¼
From Sturgeon point on Sturgeon lake, 48¾ miles from Lake- field, the branch through the town of Lindsay to Port Perry at the head of Lake Seugog.. . . . .	27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young's point, Burleigh rapids, Lovesick, Buckhorn rapids, Bobcaygeon, Fenelon falls and Rosedale; also dams at Lakefield, Young's point, Burleigh falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, 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 Peterborough, the dam at the head of the Niue Mile rapids of the River Otonabee maintains navigation on Lake Katchewanoe up to Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchewanoe and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal.

At Burleigh rapids, 10 miles from Young's point, a canal, about 2¼ miles in length, passes the Burleigh and Lovesick rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn rapids, 7 miles from Burleigh rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15¾ miles from Buckhorn rapids, a dam, 553 feet long, controls the water level to Fenelon falls.

At Fenelon falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

1 Lock at Rosedale (maintained by the Ontario government), 100' x 30' x 4' 6" to 6' 6" depth water on mitre sill.			
2 Locks at Fenelon . . . . .	134' x 33' x 5' 0" to	7' 6" depth water on mitre sill.	
1 " Lindsay . . . . .	134' x 33' x 5' 0" to	7' 6" " "	
1 " Bobcaygeon . . . . .	134' x 33' x 5' 8" to	7' 0" " "	
1 " Buckhorn . . . . .	134' x 33' x 5' 0" to	9' 0" " "	
1 " Lovesick . . . . .	134' x 33' x 5' 0" to	9' 4" " "	
2 " Burleigh . . . . .	134' x 33' x 6' 0" to	8' 0" " "	
1 " Young's point. . . . .	134' x 33' x 5' 0" to	14' 0" " "	
1 " Peterborough . . . . .	134' x 33' x 5' 0" to	10' 0" " "	
1 " Hastings . . . . .	134' x 33' x 7' 0" to	10' 6" " "	
1 " Chisholms . . . . .	134' x 33' x 5' 0" to	8' 6" " "	

## ST. PETER'S CANAL, CAPE BRETON.

Construction commenced.. . . . .	1854
“ completed.. . . . .	1869
Enlargement begun.. . . . .	1875
“ completed.. . . . .	1881
Length of canal.. . . . .	About 2,400 feet.
Breadth at water line.. . . . .	50 feet.
Lock.. . . . .	One tidal lock, 4 pairs of gates.
Dimensions.. . . . .	200 feet by 48 feet.
Depth of water on sills.. . . . .	18 feet 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 northern 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.

## BEAUHARNOIS CANAL.

Construction begun.. . . . .	1842
“ completed.. . . . .	1845
Length of canal.. . . . .	12 statute miles.
Number of locks.. . . . .	9
Dimensions of locks.. . . . .	200 feet by 45 feet.
Total rise or lockage.. . . . .	82½ “
Depth of water on sills.. . . . .	9 “
Breadth of canal at bottom.. . . . .	80 “
Breadth of canal at water surface.. . . . .	120 “

As the new Soulanges canal is now opened for navigation, the Beauharnois canal is abandoned for navigation purposes.

## EARLIER CANALS.

A system of three canals preceded the Beauharnois. These were:—

## COTEAU DU LAC CANAL.

Construction commenced.. . . . .	1779
“ completed.. . . . .	1780

## SPLIT ROCK CANAL.

Construction commenced.. . . . .	1779
“ completed.. . . . .	1780

## CASCADE POINT CANAL.

Construction commenced.. . . . .	1782
“ completed.. . . . .	1783

The locks were 20 x 6 feet, and provided for a draft of 2 feet. In 1814 the work of widening them to 12 feet was begun, and finished in 1817.

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Two canals were also constructed off Burlington Bay, Ontario. They were:—

## BURLINGTON BAY CANAL.

Construction commenced.. . . . .	1825
“ completed.. . . . .	1832

## DESJARDINS CANAL.

Construction commenced.. . . . .	1826
“ completed.. . . . .	1837

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was  $7\frac{1}{2}$  feet.



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## ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES.

FROM STRAITS OF BELLE-ILE TO PORT ARTHUR, AT HEAD OF LAKE SUPERIOR  
BY WATER.

From	To	Sections of Navigation.	Statute Miles.	
			Inter- mediate.	Total to Straits of Belle-Ile.
Straits of Belle-Ile.....	Cape Whittle.....	Gulf of St. Lawrence.....	240	240
Cape Whittle.....	West Point, Anticosti.....	".....	201	441
West Point, Anticosti.....	Father Point.....	River St. Lawrence.....	202	643
Father Point.....	Rimouski.....	".....	6	649
Rimouski.....	Bic.....	".....	12	661
Bic.....	Isle Verte.....	".....	39	700
Isle-Verte (opp. Saguenay).....	Quebec.....	".....	126	826
Quebec.....	Three Rivers.....	" to tide-water.....	74	900
Three Rivers.....	Montreal.....	".....	86	986
Montreal.....	Lachine.....	Lachine Canal.....	8 $\frac{1}{2}$	994 $\frac{1}{2}$
Lachine.....	Cascade Point.....	Lake St. Louis.....	16	1,009 $\frac{1}{2}$
Cascade Point.....	Coteau Landing.....	Soulanges Canal.....	14	1,021
Coteau Landing.....	Cornwall.....	Lake St. Louis.....	30	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 Point.....	Upper end of Croyle's Island.....	Farran's Point.....	$\frac{3}{4}$	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 $\frac{3}{8}$	1,095 $\frac{5}{8}$
Point Cardinal.....	Head of Galops Rapids.....	Galops Canal.....	2	1,097 $\frac{5}{8}$
Galops Rapids.....	Prescott.....	River St. Lawrence.....	7 $\frac{3}{8}$	1,105
Prescott.....	Kingston.....	".....	59	1,164
Kingston.....	Port Dalhousie.....	Lake Ontario.....	170	1,334
Port Dalhousie.....	Port Colborne.....	Welland Canal.....	26 $\frac{3}{4}$	1,360 $\frac{3}{4}$
Port Colborne.....	Amherstburg.....	Lake Erie.....	232	1,592 $\frac{3}{4}$
Amherstburg.....	Windsor.....	River Detroit.....	18	1,610 $\frac{3}{4}$
Windsor.....	Foot of St. Mary's Island.....	Lake St. Clair.....	25	1,635 $\frac{3}{4}$
Foot of St. Mary's Island.....	Sarnia.....	River St. Clair.....	33	1,668 $\frac{3}{4}$
Sarnia.....	Foot of St. Joseph Island.....	Lake Huron.....	270	1,938 $\frac{3}{4}$
Foot of St. Joseph's Island.....	Foot of Sault Ste. Marie.....	River Ste. Marie.....	47	1,985 $\frac{3}{4}$
Sault Ste. Marie.....	Head of Sault Ste. Marie.....	Sault Ste. Marie Canal.....	1	1,986 $\frac{3}{4}$
Head of Sault Ste. Marie.....	Point aux Pins.....	River Ste. Marie.....	7	1,993 $\frac{3}{4}$
Pointe aux Pins.....	Port Arthur.....	Lake Superior.....	266	2,259 $\frac{3}{4}$
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 $\frac{3}{4}$  miles from the Straits of Belle-Ile to the head of Lake Superior, 73 $\frac{1}{2}$  miles are artificial navigation, and 2,188 $\frac{3}{4}$  open navigation.

Straits of Belle-Ile to Liverpool, 1,942 geographical or 2,234 statute miles.

The total fall from Lake Superior to tide-water is about 600 feet.

The steamboat voyage from Collingwood to Port Arthur is 532 miles.

" " Depot Harbour to Port Arthur is 510 miles; to Duluth is 644 miles; to Chicago 525 miles, and to Milwaukee, 442 miles.

DEPARTMENT OF RAILWAYS AND CANALS

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# CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1910

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY

1911



*To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., &c., Governor General of Canada.*

MAY IT PLEASE YOUR EXCELLENCY,

The undersigned has the honour to present to Your Excellency the report on Canal Statistics for the year ended December 31, 1910.

GEO. P. GRAHAM,  
*Minister of Railways and Canals.*



To the Honourable GEORGE P. GRAHAM,  
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Comptroller of Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1910.

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

A. W. CAMPBELL,  
*Deputy Minister of Railways and Canals.*





## OFFICE OF THE COMPTROLLER OF STATISTICS,

February 15, 1911.

A. W. CAMPBELL, Esq.,

Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit to you herewith Canal Statistics for the year ended December 31, 1910.

It will be observed that there was a further substantial increase in the volume of traffic through the canals of the Dominion. The freight transported amounted to 42,990,608 tons, as compared with 33,720,748 tons in 1909. This betterment of 9,269,860 tons was equal to 27.5 per cent.

The freight traffic of 1910 was distributed among the various canals as follows:—

	Tons.	Increase.
Sault Ste. Marie .....	36,395,687	8,534,442
Welland.....	2,326,290	300,359
St. Lawrence.....	2,760,752	350,123
Chambly.....	669,299	.....
St. Peter's.....	85,951	6,101
Murray.....	177,941	75,650
Ottawa.....	385,261	48,322
Rideau.....	134,881	43,107
Trent.....	46,263	.....
St. Andrew's.....	8,283	8,283
Total.....	42,990,608	9,366,367

It may be explained that St. Andrew's lock, which was constructed in 1909 to overcome the rapids by that name in the Red River near Winnipeg, appears in the list of canals for the first time. The traffic which it makes possible is between Lake Winnipeg and the city of Winnipeg.

In order that comparison may be made with preceding years, and, at the same time, a demonstration afforded of the rapid expansion of Canadian waterborne business, the figures relating to tonnage for the past decade are given:—

1901.....	5,665,259 tons.
1902.....	7,513,197 "
1903.....	9,203,817 "
1904.....	8,256,236 "
1905.....	9,371,744 "
1906.....	10,523,185 "
1907.....	20,543,639 "
1908.....	17,502,820 "
1909.....	33,720,748 "
1910.....	42,990,608 "

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The growth during the first five-year period was equal to 65 per cent, and during the second period 308 per cent.

The business of the past three years was distributed among the various canals as follows :—

	1908.	1909.	1910.
Sault Ste. Marie.....	12,759,216	27,861,245	36,395,687
Welland.....	1,703,453	2,025,951	2,326,290
St. Lawrence.....	2,009,102	2,410,629	2,760,752
Chambly.....	503,276	752,117	669,299
St. Peter's.....	72,015	79,850	85,951
Murray.....	25,901	102,291	177,941
Ottawa.....	258,527	336,939	385,261
Rideau.....	89,640	91,774	134,881
Trent.....	81,690	59,952	46,263
St. Andrew's.....			8,283

The classes of commodities which constitute the tonnage of the past two years with the volume of each, are shown in the following table :—

Canals.	Vegetable Products.	Animal Products.	Manu- factures.	Produce of Forest.	Produce of Mines.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1909.						
Soo.....	2,832,388	277,887	710,360	71,129	23,969,481	27,861,245
Welland.....	850,018	71,848	506,489	186,614	410,982	2,025,951
St. Lawrence.....	718,461	68,146	472,656	509,157	642,209	2,410,629
Chambly.....	780	19,612	9,560	599,330	122,835	752,117
St. Peter's.....	3,794	14,867	7,626	8,423	45,140	79,850
Murray.....	628	890	50,035	655	50,083	102,291
Ottawa.....	668	8,788	64,153	232,025	31,305	336,939
Rideau.....	1,268	4,101	42,642	26,727	17,036	91,774
Trent.....	664	490	1,880	55,086	1,832	59,952
Total.....	4,408,669	466,629	1,865,401	1,689,146	25,290,903	33,720,748
1910.						
Soo.....	2,530,396	304,729	862,526	100,613	32,597,423	36,395,687
Welland.....	982,346	60,880	516,333	154,737	611,994	2,326,290
St. Lawrence.....	856,611	83,754	497,007	564,328	759,052	2,760,752
Chambly.....	783	23,288	21,834	496,119	127,275	669,299
St. Peter's.....	4,603	14,867	7,889	10,124	48,468	85,951
Murray.....	20	4,544	162,506	3,471	7,400	177,941
Ottawa.....	723	8,111	72,294	268,199	35,934	385,261
Rideau.....	1,433	3,576	76,299	40,026	13,547	134,881
Trent.....	298	765	8,672	35,849	679	46,263
St. Andrew's.....	1	153	177	7,952		8,283
Total.....	4,377,214	504,667	2,225,537	1,681,418	34,201,772	42,990,608

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The proportion of commodities by classes is shown in the following comparison for 1909 and 1910 :—

	1909.	1910.
	Per cent.	Per cent.
Vegetable products.....	13·0	10·2
Animal ".....	1·5	1·2
Manufactures.....	5·6	5·2
Produce of forests.....	4·9	3·9
Produce of mines.....	75·0	79·5

#### TRANSPORTATION OF CANADIAN WHEAT.

The growth of the Canadian wheat trade has been reflected in the rising tonnage of the canal at Sault Ste. Marie. In order that the facts may be in mind, following is a statement of the volume of wheat which passed through that canal since it was opened for business in 1895 :—

	Bushels.
1895.....	4,518,334
1896.....	19,314,234
1897.....	17,925,834
1898.....	9,746,600
1899.....	12,759,634
1900.....	9,292,034
1901.....	9,639,534
1902.....	27,912,500
1903.....	32,233,934
1904.....	29,794,100
1905.....	25,983,100
1906.....	34,389,300
1907.....	49,399,967
1908.....	58,574,034
1909.....	*48,047,833
1910.....	51,774,833

During the past year it became necessary, in the adjustment of statistical methods, to make a more or less thorough study with respect to the movement of Canadian wheat through the canal at Sault Ste. Marie. Errors had been made in the classification of wheat of Canadian origin, and it was important to ascertain the correct figures. The inquiry covered the years 1909 and 1910.

It may be explained, that up to 1908 it had not been the practice of this Department to identify the products of Canada or the United States when they passed through any of the canals. At Sault Ste. Marie this was the rule on both sides of the boundary. Hence, it was quite impossible to know the volume of Canadian wheat which came down from the West or to follow the course which it took. This was obviously a defect in our statistical work, and a change was made in 1908.

\*For the first time represents Canadian wheat only. The figures of preceding years include American wheat which passed through the Canadian Canal.

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A further explanation is necessary. At Sault Ste. Marie there are two canals, one on the Canadian side of the line and the other on the American side.

Both canals are free, and the captain of a vessel may select whichever one he may at the moment prefer. On the Canadian side the origin of all commodities passed through the canal is recorded. On the American side an account it is understood, has been kept during the past two years of Canadian wheat taking that route; but the facts are not officially made public. In any event, only the volume is ascertained. The subsequent movement of each cargo is not made a matter of record.

Using the corrected figures, the volume of Canadian wheat which passed through the Sault Ste. Marie Canal during the year 1910 was 1,553,245 tons, or 51,774,833 bushels. In 1909 the aggregate was 1,441,435 tons, or 48,047,833 bushels. In addition, 9,117,328 bushels of Canadian wheat passed through the American canal in 1909, and 5,321,446 bushels in 1910. Joining the shipments of Canadian wheat which passed through the two canals, the total was 57,165,161 bushels for 1909, and 57,096,279 bushels for 1910.

By a careful analysis of the ships' reports it was ascertained that the distribution of Canadian wheat which passed through the Canadian Canal at Sault Ste. Marie in 1909 and 1910 without reference to official figures appearing elsewhere and here corrected, was as follows:—

	1909.	1910.
	Bushels.	Bushels.
Fort William to Montreal.....	10,517,266	13,185,370
"    "    "    Georgian Bay.....	13,384,400	12,753,200
"    "    "    other Canadian ports.....	10,149,633	9,603,400
"    "    "    Buffalo.....	12,841,334	15,693,363
Duluth to Montreal.....	520,000	315,000
"    "    "    Buffalo.....	528,200	224,500
"    "    "    Georgian Bay.....	28,000	.....
"    "    "    other Canadian ports.....	79,000	.....
Total.....	48,047,833	51,774,833
Through American canal.....	9,117,328	5,321,446
Grand total.....	57,165,161	57,096,279

As has been said, the course of Canadian wheat which passed through the American canal at Sault Ste. Marie cannot be followed. With respect to that which passed through the Canadian canal, however, the following summary illuminates the facts given in the preceding paragraph.

	1909.	1910.
	Per cent.	Per cent.
Fort William to Montreal.....	21.9	25.5
"    "    "    Georgian Bay.....	27.9	24.6
"    "    "    other Canadian ports.....	21.1	18.5
"    "    "    Buffalo.....	26.7	30.3
Duluth to Canadian ports.....	1.3	.6
"    American    "    ".....	1.1	.5

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With regard to the situation as a whole, it will be seen that  $\overline{62}$  per cent of the Canadian wheat which came down from the West in 1910 followed Canadian channels from start to finish. The remaining 38 per cent passed in part or wholly through American channels.]

It will be observed that last year 30.3 per cent of the wheat which was shipped eastward by water from the provinces of the Canadian west found an outlet by way of Buffalo. This took place in spite of the fact that both distance and rates were in favour of the St. Lawrence route. The freight rate which prevailed during the season was from  $3\frac{1}{2}$  to  $4\frac{1}{2}$  cents per bushel from the head of Lake Superior to Montreal. From either Duluth or Fort William to New York the rate was from 4 to 5 cents, according to the season. It would seem that the popular conviction with respect to the controlling force of distance and rates in the handling of a commodity like wheat, which is supposed to yield most easily to such influences, is not entirely sound. Other conditions may act as a countervail. They did in this instance to the extent indicated.

[It may help to a better understanding of our inland waterborne trade if the conditions which caused the diversion to Buffalo of over 30 per cent of the Canadian wheat which passed through the Sault Ste. Marie canal in 1910, while only 25 per cent was delivered at Montreal, are briefly presented. It may not be considered improper to discuss the basic facts of the matter, frankly and fairly in a report of this character. On the surface it would appear reasonable to expect that a cargo of wheat taken aboard a vessel at Fort William, and consigned to Liverpool, would seek the nearest ocean port. Montreal happens to be that port. Moreover, the lake freight rate to Montreal last year was from a half to over one cent per bushel less than the combined vessel and rail rate to New York, via Buffalo. At Buffalo the entire cargo must be transferred to cars or to barges. Only a small percentage of the 15,693,363 <sup>bushels</sup> tons of Canadian wheat which is definitely known to have gone to Buffalo in 1910 was carried by water to New York. The rail route commands the trade.

The conditions which operated against the St. Lawrence route in 1910, as in preceding years, were: First, the character of the vessels which ply between the head of Lake Superior and Buffalo; second, the ocean freight rates; third, the Atlantic insurance rate; and fourth, return cargo. The United States steamers engaged in the grain trade of the Great Lakes are much larger than those which can pass through the 14 feet waterway provided by the Welland and St. Lawrence canals. Such vessels can carry 450,000 bushels of wheat without lightering at Sault Ste. Marie. With a draft of 21 feet they cannot pass beyond Lake Erie. Many of them, too, are owned by the railways operating between Buffalo and New York. They have an advantage in the economical transportation of grain as against smaller steamers.

The ocean rates out of New York are lower than out of Montreal. The difference is from  $\frac{3}{4}$  to  $1\frac{1}{2}$  cents per bushel in favor of the former port. This situation is due to a number of causes, to which allusion need not be made here. The fact alone is of immediate importance.

The rates of marine insurance for vessels sailing out of Montreal during the season of 1910 were as follows: From the opening of navigation to 15th September, 25 cents per \$100; from October 16th to 31st, 45 cents; from 1st to 15th November, 60 cents;



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from 16th November to close of navigation, 75 cents. From New York and Boston the rates were from  $12\frac{1}{2}$  to 15 cents, according to the class of steamer, throughout the entire year.

The fourth consideration—return cargo—is of relatively large importance. It was ascertained that United States steamers were able during the season of 1910 to obtain westbound cargo at Buffalo, chiefly coal, to the extent of a little more than 50 per cent. of their capacity. The return cargo obtained by vessels at Montreal did not exceed 25 per cent. So far as vessels bound for Fort William were concerned, it did not reach 15 per cent.

The distribution of Canadian wheat which passed through the Sault Ste. Marie Canal during the seasons of 1909 and 1910 disclosed another fact worthy of attention. Of the entire traffic, 43 per cent was carried to Georgian Bay and other Canadian ports west of Lake Erie. Thence it was transported by rail eastward, chiefly to Montreal. It is sufficient to give the statistical facts, without comment, which this movement has created. The vessel freight rate from Fort William to Georgian Bay has averaged about 2 cents per bushel for the past two years. During the middle of the season of 1910 it was from 1 to  $1\frac{1}{4}$  cents. To this must be added the rail rate from Georgian Bay to Montreal, which was from  $3\frac{1}{2}$  to 5 cents per bushels, including the cost of elevation at both terminal points.

#### SAULT STE. MARIE CANAL.

The canal at Sault Ste. Marie forms the chief gateway of the inland waterborne traffic of the Dominion. Eighty-four per cent of the aggregate canal business of 1910 passed through the lock at that point. Having regard to freight tonnage, the eastbound traffic represented last year over 87 per cent of the total, showing that the movement of commodities is principally in one direction. Iron ore has for some years held first place in the freight list of eastbound cargoes, while wheat comes next. The up, or westbound, movement consists, to the extent of about 70 per cent, of coal. In view of the important position of the Sault Ste. Marie Canal, the following comparative summary of statistical facts is of interest :

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Years.	CANADIAN VESSELS.		U. S. VESSELS.		Total No.	Vessel Tonnage.	FREIGHT TONNAGE.		LOCKAGES.	DAYS OPEN.	Remarks.
	No.	Tonnage.	No.	Tonnage.			Canadian.	United States.			
									No.		
1895.	609	126,534	583	623,092	1,192	749,626	.....	699	87	Canal first operated Sept. 9, 1895.	
1896.	2,070	589,407	3,066	3,805,749	5,136	4,395,156	.....	3,042	218		
1897.	1,969	476,546	2,359	3,391,936	4,328	3,797,482	.....	2,604	238		
1898.	1,811	403,931	1,864	2,353,699	3,675	2,757,630	.....	2,520	243		
1899.	2,000	558,562	1,769	2,389,457	3,769	2,948,009	.....	2,610	239		
1900.	1,790	577,310	1,291	1,617,438	3,081	2,194,748	.....	2,035,677	238		
1901.	2,796	775,151	1,408	1,674,597	4,204	2,449,748	.....	2,890,394	246		
1902.	3,080	1,306,930	1,904	3,237,372	5,044	4,604,302	.....	4,739,268	264		
1903.	2,711	1,615,939	1,640	3,146,807	4,351	4,762,746	.....	5,511,868	256		
1904.	2,637	1,565,042	1,325	2,675,663	3,962	4,230,705	.....	3,022	241		
1905.	3,970	1,803,288	1,692	3,734,349	5,662	5,537,637	.....	4,031	255		
1906.	3,922	1,959,252	1,758	4,399,872	5,680	6,359,124	.....	4,152	253		
1907.	3,217	2,154,688	3,132	9,961,281	6,349	12,115,969	.....	6,574,039	238		
1908.	3,289	2,603,232	2,204	7,085,655	5,293	9,638,887	.....	15,688,165	235	Origin of cargo first shown.	
1909.	2,597	2,388,936	3,734	14,850,738	6,331	17,839,674	.....	3,667	240		
1910.	2,744	3,173,494	5,228	20,187,704	7,972	23,361,198	.....	5,046	248		
							3,345,619	33,030,008	6,110		

GENERAL STATISTICS.

STATEMENT of total Freight passed through the Canals for the following years.

Years.	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.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1887	336,648	1,154,424	138,692	292,565	151,805	192,528	86,374	457,482	713,519	2,006,397	2,720,516
1888	355,165	1,146,260	138,127	174,239	214,407	223,429	81,611	428,357	789,319	1,972,287	2,761,597
1889	384,777	1,156,306	122,295	194,497	267,224	300,193	81,243	603,311	865,529	2,258,367	3,143,896
1890	369,593	1,137,011	144,368	135,188	216,313	320,324	98,769	533,021	789,505	2,123,342	2,913,047
1891	370,120	1,155,237	163,514	123,133	248,188	397,958	59,747	513,259	772,869	2,129,657	2,902,526
1892	327,660	1,322,137	173,538	135,787	241,034	302,983	47,396	481,301	789,528	2,242,298	3,031,736
1893	351,706	1,344,822	214,075	141,602	247,329	385,769	54,912	806,773	868,023	2,678,866	3,546,989
1894	299,155	1,140,606	204,175	89,614	231,172	363,107	46,020	568,866	780,522	2,162,193	2,942,715
1895	264,824	1,070,046	296,191	91,177	362,637	608,778	62,285	590,140	975,937	2,360,141	3,336,078
1896	233,353	1,619,663	259,639	109,519	1,197,245	3,536,094	117,335	867,040	1,837,732	6,123,281	7,991,073
1897	275,587	1,713,274	268,700	187,960	669,112	4,369,314	108,787	968,263	1,322,216	7,238,751	8,560,967
1898	263,989	1,819,887	187,253	98,967	929,598	2,425,121	81,615	912,135	1,362,365	5,256,110	6,618,475
1899	296,208	1,833,412	206,364	115,133	732,030	2,129,988	125,078	727,111	1,420,280	4,895,644	6,225,924
1900	312,201	1,632,915	270,033	81,714	568,197	1,339,915	105,155	682,665	1,255,586	3,758,107	5,013,693
1901	340,805	1,686,094	268,449	201,231	507,204	1,801,696	177,715	682,665	1,294,173	4,371,086	5,665,259
1902	529,085	2,064,480	308,212	342,484	515,828	3,000,636	190,243	562,229	1,543,368	5,969,829	7,513,197
1903	648,150	2,391,366	430,174	348,150	863,337	3,130,816	373,456	358,018	2,316,117	6,888,700	9,203,817
1904	606,577	2,047,499	511,887	276,578	699,784	2,778,903	483,795	851,053	2,302,203	5,954,033	8,256,236
1905	736,976	2,252,514	649,305	347,089	607,228	3,183,895	577,528	1,137,146	2,451,097	6,920,647	9,371,744
1906	726,855	2,355,855	627,064	234,919	991,959	3,595,256	482,239	997,385	3,339,770	7,183,415	10,523,185
1907	1,034,733	3,162,158	891,692	296,138	1,991,959	11,060,878	819,369	1,326,712	4,737,753	15,805,886	20,543,639
1908	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820
1909	1,608,659	3,604,849	1,060,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	6,744,349	27,976,369	33,726,748
1910	2,312,740	3,861,272	600,144	661,436	3,323,822	29,530,163	995,749	1,705,282	7,232,455	35,758,153	42,990,608

\* Sault Ste. Marie canal opened in August, 1895.

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years:—

CANADIAN VESSELS.

YEARS.	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.	Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up and Down.		
1887.....	1,201,529	1,194,665	162,554	36,277	1,071	65	30,778	221,013	1,305,932	1,452,020	2,847,952	18,991	
1888.....	1,113,290	1,120,774	158,200	34,368	1,252	.....	22,553	189,876	1,295,304	1,345,018	2,640,322	17,661	
1889.....	1,286,574	1,207,892	188,131	39,371	976	802	20,271	252,565	1,494,952	1,500,630	2,995,582	19,393	
1890.....	1,314,127	1,250,999	229,478	35,909	929	351	14,003	296,676	1,568,537	1,580,935	3,139,472	20,655	
1891.....	1,356,518	1,287,168	201,758	28,642	560	292	16,350	244,176	1,575,176	1,569,278	3,135,454	19,246	
1892.....	1,517,249	1,460,505	177,136	29,184	394	394	14,659	201,374	1,710,510	1,691,455	3,401,965	21,171	
1893.....	1,548,094	1,422,826	170,186	26,787	1,466	10	17,037	248,442	1,736,489	1,637,565	3,434,054	20,757	
1894.....	1,319,792	1,260,907	217,635	19,298	1,172	5	6,394	222,696	1,545,998	1,502,906	3,048,904	19,027	
1895.....	1,258,848	1,165,683	253,693	13,383	.....	.....	5,899	285,553	1,464,619	1,479,227	2,983,659	17,136	
1896.....	1,547,757	1,420,342	200,282	5,234	157	.....	4,115	297,898	1,752,321	1,697,385	3,449,706	20,972	
1897.....	1,625,192	1,482,951	215,785	11,378	.....	.....	3,533	255,927	1,927,358	1,870,627	3,640,737	21,466	
1898.....	1,704,661	1,609,255	215,393	4,927	499	518	6,805	345,980	2,191,675	2,136,896	4,308,571	23,579	
1899.....	1,895,643	1,774,789	242,817	32,456	925	3,691	38,015	368,781	2,074,143	2,055,107	4,129,250	21,755	
1900.....	1,757,293	1,681,340	245,926	14,922	2,909	64	38,015	345,980	2,074,143	2,055,107	4,129,250	21,755	
1901.....	1,615,952	1,587,221	279,007	82,541	3,300	2,908	38,015	345,980	2,074,143	2,055,107	4,129,250	21,755	
1902.....	1,914,167	1,840,787	241,356	37,492	3,300	2,908	38,015	345,980	2,074,143	2,055,107	4,129,250	21,755	
1903.....	2,061,258	2,085,969	340,383	143,614	1,874	2,164	101,335	379,612	2,258,732	2,226,963	4,485,695	29,198	
1904.....	1,838,260	1,907,886	299,245	159,740	7,018	3,082	188,896	379,612	2,258,732	2,226,963	4,485,695	29,198	
1905.....	2,059,097	2,031,766	312,773	188,138	5,175	4,223	287,910	319,661	2,597,555	2,615,277	5,212,832	33,767	
1906.....	2,271,776	2,264,476	292,705	155,595	11,820	3,191	262,401	302,005	2,380,590	2,391,510	4,772,100	31,851	
1907.....	2,561,948	2,661,317	337,822	129,246	24,420	5,506	202,276	369,567	2,646,091	2,646,091	5,292,182	34,767	
1908.....	2,736,776	2,748,139	318,324	227,315	9,153	7,331	238,172	302,005	2,791,177	2,791,177	5,582,354	37,426	
1909.....	3,355,187	2,992,403	300,320	217,989	5,057	7,844	348,944	388,922	3,147,095	3,181,816	6,328,911	28,833	
1910.....	3,891,613	3,504,463	315,656	122,688	82,591	111,236	287,945	513,907	3,976,043	3,835,535	7,811,578	29,507	
					95,451	89,618	287,945	627,046	4,587,975	4,343,815	8,931,790	25,337	

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years:—

UNITED STATES VESSELS

YEARS.	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.		Number of Vessels.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up and Down.		
1887	16,265	17,925	38,857	56,708	143,730	140,562	52,793	98,840	251,645	98,840	315,035	566,680	3,883
1888	14,304	26,801	42,425	50,047	177,714	156,095	49,778	113,613	284,221	113,613	347,566	631,777	3,921
1889	21,125	26,449	55,996	53,088	253,088	266,567	56,249	160,442	386,458	160,442	444,190	830,648	4,542
1890	10,390	16,345	38,156	36,397	248,418	234,728	39,697	97,264	336,661	97,264	384,736	721,397	3,364
1891	10,357	29,851	70,665	97,727	283,013	238,818	31,083	146,602	395,118	146,602	442,998	838,116	3,602
1892	12,023	29,405	88,221	22,763	280,315	229,437	37,037	172,594	417,586	172,594	454,139	871,735	3,928
1893	10,752	34,303	214,017	33,741	351,394	282,724	307,994	307,740	627,787	307,740	638,308	1,286,295	4,585
1894	18,528	30,201	139,720	20,830	302,362	269,788	37,406	192,992	498,216	192,992	513,811	1,012,027	4,131
1895	8,838	24,768	138,554	17,712	262,240	216,542	32,295	185,730	441,927	185,730	444,752	886,679	4,427
1896	11,496	19,093	195,228	21,953	357,205	292,359	40,416	290,370	604,345	290,370	623,775	1,228,136	4,650
1897	14,666	18,367	269,430	338,938	277,345	277,345	26,341	347,698	649,375	347,698	664,028	1,310,403	4,675
1898	12,142	9,541	233,524	32,880	308,878	305,463	52,331	336,004	586,875	336,004	683,889	1,270,764	4,264
1899	17,217	18,044	172,807	30,092	1,665,887	1,156,593	51,992	234,336	1,846,848	234,336	1,438,885	3,285,733	6,101
1900	13,316	17,824	157,089	30,443	1,268,725	744,276	45,741	190,371	1,425,471	190,371	983,514	2,408,485	5,502
1901	11,587	18,706	177,169	28,124	922,464	1,044,797	54,895	224,622	1,106,115	224,622	1,316,159	2,482,274	5,634
1902	13,622	37,871	187,826	70,641	1,756,948	1,654,672	123,257	241,602	2,081,653	241,602	2,004,786	4,086,439	6,433
1903	14,014	24,168	265,208	65,247	1,736,187	1,689,414	106,401	335,836	2,121,810	335,836	2,114,665	4,236,475	6,695
1904	10,122	16,890	275,721	39,993	1,464,316	1,475,085	68,081	305,697	1,818,240	305,697	1,837,665	3,655,965	6,283
1905	19,743	19,424	364,985	81,876	2,350,494	1,701,704	104,536	456,459	2,836,708	456,459	5,096,241	7,485	
1906	37,306	15,324	356,259	78,501	2,738,623	1,328,131	118,346	5,244,863	2,440,452	5,244,863	5,685,315	7,319	
1907	57,349	72,018	304,591	442,773	4,739,653	5,376,080	205,769	623,941	5,463,767	623,941	6,141,027	11,604,834	9,328
1908	54,587	32,705	442,773	124,120	2,979,624	4,132,392	218,835	536,163	3,685,819	536,163	4,835,320	8,521,139	7,489
1909	263,592	109,407	442,176	296,292	4,178,378	10,429,344	213,750	621,903	5,098,196	621,903	11,361,426	16,459,392	9,996
1910	119,222	50,498	428,792	395,330	5,509,417	14,488,565	299,462	576,101	6,356,803	576,101	15,420,494	21,777,297	11,462



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CAPITAL EXPENDITURE.

The statement following brings the capital expenditure on the Canals of the Dominion down to March 31, 1910. It must be understood, however, that the total shown is apart from the outlay by the Imperial Government on the Carillon and Grenville Canal, as to which the records were lost in the destruction by fire of the Ordnance Office, Montreal, in 1852. The details are as follow :—

Canal.	Construction.		Enlargement.		Total.	
	\$	c.	\$	c.	\$	c.
St. Peter's .....	648,547	14			648,547	14
Lachine.....	2,589,532	85	9,786,178	93	12,375,711	78
Beauharnois.....	1,636,690	26			1,636,690	26
St. Lawrence River and Canals.....	18,442	85	3,451,470	56	3,469,913	41
Lake St. Louis.....			298,176	11	298,176	11
Lake St. Francis.....			75,906	71	75,906	71
Cornwall.....	1,945,624	73	5,289,142	41	7,234,767	14
Williamsburg	{ Farran's Point .....			877,090	57	} 10,485,611 69
		Galops.....		6,118,927	32	
		Rapide Plat.....		2,158,242	00	
		Williamsburg.....	1,320,655	54	10,696	
Welland.....	7,693,824	03	20,813,039	16	28,506,863	19
Ste. Anne's.....	134,456	51	1,035,759	12	1,170,215	63
*Carillon and Grenville .....	63,053	64	4,119,039	32	4,182,092	96
Culbute.....	382,776	46			382,776	46
Rideau.....	4,085,889	21			4,085,889	21
St. Ours.....	121,537	65			121,537	65
Chambly.....	637,214	66	43,786	43	681,001	09
Murray.....	1,248,946	71			1,248,946	71
Trent.....	7,873,501	09			7,873,501	09
Tay.....	489,599	23			489,599	23
Sault Ste. Marie.....	4,868,532	60			4,868,532	60
Soulanges.....	7,126,135	61			7,126,135	61
Total .....	42,884,960	77	54,077,454	90	96,962,415	67

The cost of maintenance during the fiscal year 1910 was \$1,608,390.54.

Details of tonnage by canals and commodities will be found in the tables subjoined.

I have the honour to be, Sir,

Your obedient servant,

J. L. PAYNE,  
*Comptroller of Statistics.*





## CANAL STATISTICS

FOR

## SEASON OF NAVIGATION, 1910

## GRAIN PASSED DOWN WELLAND.

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 twenty-nine years is as follows:—

QUANTITY PASSED DOWN TO MONTREAL.		To Ports in Ontario.	Quantity from U. S. Ports to U. S. Ports.
	Tons.	Tons.	Tons.
1882.....	180,694	.....	63,881
1883.....	186,814	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.....	288,513	16,899	245,932
1891.....	295,509	6,805	202,710
1892.....	261,954	8,942	201,540
1893.....	501,806	25,555	222,958
1894.....	273,651	16,699	203,979
1895.....	231,491	32,096	133,823
1896.....	461,049	73,386	160,372
1897.....	* 560,254	53,257	157,756
1898.....	519,532	31,279	144,612
1899.....	332,746	40,197	68,011
1900.....	244,661	17,525	84,589
1901.....	151,566	13,732	83,370
1902.....	208,215	22,787	81,164
1903.....	351,936	29,062	111,828
1904.....	198,246	23,711	102,523
1905.....	341,431	42,061	129,270
1906.....	404,935	33,351	176,119
1907.....	635,573	42,032	163,295
1908.....	756,141	38,142	135,172
1909.....	652,742	40,238	129,587
1910.....	789,661	63,657	115,457

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 151,566 tons in 1901 to 789,661 tons in 1910, and the quantity passed down the Welland Canal from United States ports to United States, has increased from 83,370 to 115,457 tons the same years.

1 GEORGE V., A. 1911

The quantity of barley, buckwheat, corn, oats, pease, rye and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific Railways for a period of 14 years, is reported as follows:—

	Tons.
For 1897.....	228,611
1898.....	293,391
1899.....	209,170
1900.....	229,624
1901.....	227,700
1902.....	263,861
1903.....	253,959
1904.....	154,625
1905.....	148,377
1906.....	386,963
1907.....	383,735
1908.....	285,262
1909.....	426,163
1910.....	.....

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 1897.....	604,200
1898.....	575,097
1899.....	372,291
1900.....	295,928
1901.....	203,316
1902.....	242,225
1903.....	400,057
1904.....	220,076
1905.....	375,630
1906.....	449,673
1907.....	684,697
1908.....	776,374
1909.....	652,742
1910.....	789,661

Comparative shipments of grain by the St. Lawrence route, and Railways, are as follows:—

QUANTITY OF GRAIN TO SEA BOARD BY COMPETING ROUTES.

The quantity of grain and pease passed down the whole length of the St. Lawrence Canal to Montreal, is as follows:—

	Tons.
For 1909.....	652,742
1910.....	789,661
Showing an increase of .....	136,919

The quantity of grain and pease carried to Montreal via Canadian Pacific and Grand Trunk Railways is reported as follows:—

	Tons.
For 1909.....	426,163
1910.....	.....
Showing .....	.....

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## TRANSHIPMENT OF GRAIN.

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

In Canadian vessels there were in—

	Tons.
1896, 196 cargoes, with an aggregate quantity of . . . . .	227,912
1897, 180 " " . . . . .	229,265
1898, 166 " " . . . . .	224,021
1899, 162 " " . . . . .	221,306
1900, 325 " " . . . . .	183,200
1901, 112 " " . . . . .	132,558
1902, 131 " " . . . . .	175,514
1903, 170 " " . . . . .	218,840
1904, 115 " " . . . . .	174,121
1905, 167 " " . . . . .	239,418
1906, 205 " " . . . . .	314,605
1907, 255 " " . . . . .	427,813
1908, 355 " " . . . . .	598,941
1909, 308 " " . . . . .	550,276
1810, 383 " " . . . . .	679,358

In the United States vessels there were in—

	Tons.
1896, 158 cargoes, with an aggregate quantity of . . . . .	217,978
1897, 197 " " . . . . .	285,847
1898, 339 " " . . . . .	464,852
1899, 167 " " . . . . .	205,571
1900, 259 " " . . . . .	163,575
1901, 135 " " . . . . .	123,229
1902, 135 " " . . . . .	136,652
1903, 219 " " . . . . .	273,986
1904, 118 " " . . . . .	150,359
1905, 235 " " . . . . .	273,344
1906, 178 " " . . . . .	269,800
1907, 263 " " . . . . .	413,087
1908, 271 " " . . . . .	330,514
1909, 174 " " . . . . .	272,291
1910, 182 " " . . . . .	295,714

One hundred and sixty-two Canadian and 49 American vessels took cargoes of 343,733 tons through to Montreal intact in 1908; 87 Canadian and 9 American of 135,582 in 1907; 74 Canadian and 10 American of 108,734 tons in 1906; 96 Canadian and 18 American of 180,206 in 1905; 56 Canadian and 16 American of 116,095 tons in 1904; 56 Canadian and 18 American of 99,582 tons in 1903; 19 Canadian and 17 American of 34,804 tons in 1902; 23 Canadian and 2 American of 17,303 tons in 1901, 15 of 7,924 tons in 1900, 2 of 558 tons in 1899, 7 of 2,426 in 1898, 7 of 2,324 in 1897, 3 of 1,176 in 1896, 4 of 1,344 tons in 1905, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 924 tons, and 3 in 1891 of 1,441 tons. Three vessels lightened a portion of their cargoes in 1901, 9 in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891; 222 vessels discharged the whole of their cargoes at Kingston in 1901, 540 in 1900, 316 in 1899, 473 in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.

1 GEORGE V., A. 1911

The quantity of grain transhipped at Port Colborne in 1909 and the four previous years was as follows :—

Articles.	1905.	1906.	1907.	1908.	1909.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat .....	679,840	1,009,474	1,428,300	1,106,244	2,686,963
Corn.....	104,027	110,629	112,036		
Rye.....					
Oats.....		29,118	30,824	23,945	
Barley.....		2,103		56,544	22,216
Flaxseed .....			39,040	49,628	8,202

## WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1910 was 2,326,290 tons; of this quantity 44,771 tons was way or local freight.

There were 1,601,456 tons of freight passed eastward, and 724,834 passed westward.

*East and West bound Through Freight.*

The total quantity of through freight passed through the whole length of the Welland Canal during the season of 1910 was 2,281,519.

Of this quantity 1,557,283 tons were east bound and 724,236 west bound freight.

Of the east bound through freight, Canadian vessels carried 1,146,457 tons and United States vessels carried 410,826 tons; and of the west bound through freight Canadian vessels carried 357,019 tons and United States vessels carried 367,217 tons, or a total of 1,503,476 tons for Canadian and 778,043 tons for American vessels.

## ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1910 was 2,760,752 tons; of this quantity 1,916,733 tons passed eastward and 844,019 passed westward.

*East and West bound Through Freight.*

The total quantity of through freight was 1,959,771 tons; of this quantity 1,488,551 tons were east bound and 471,220 tons were west bound.

*Way Freight.*

Of the total quantity of (way) or local freight 428,182 tons were east bound and 372,799 tons west bound freight.

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## THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC.

The total quantity of through freights passed eastward from Lake Erie and westward from Montreal through the Welland and St. Lawrence canals, during fifteen years, was as follows :—

	Eastward, to Montreal. Tons.	Westward, from Montreal. Tons.
1896.....	480,077	10,050
1897.....	584,246	4,542
1898.....	538,108	4,436
1899.....	354,933	5,991
1900.....	288,251	6,217
1901.....	184,420	13,714
1902.....	250,475	25,289
1903.....	390,786	100,699
1904.....	278,328	71,512
1905.....	448,704	72,482
1906.....	554,231	96,791
1907.....	789,167	1,281
1908.....	864,926	3,472
1909.....	925,005	191,510
1910.....	1,170,139	172,360

## THROUGH FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

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

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1896.....	385,695	267,518	653,213
1897.....	353,863	210,831	564,694
1898.....	277,023	210,516	487,539
1899.....	225,491	135,038	360,529
1900.....	218,969	99,560	318,529
1901.....	190,476	83,543	274,019
1902.....	224,110	44,919	269,029
1903.....	221,074	149,151	370,225
1904.....	165,337	87,144	252,481
1905.....	190,547	112,549	303,096
1906.....	237,226	84,205	321,431
1907.....	218,997	177,660	396,657
1908.....	209,518	239,136	448,654
1909.....	196,838	248,581	445,419
1910.....	197,301	288,198	485,499

The total quantity of freight passed through the Welland Canal from United States ports to United States ports shows an increase of 40,080 tons as compared with the previous year ; and a decrease of 167,714 tons as compared with 1896.



1 GEORGE V., A. 1911

The following statement shows the aggregate number of vessels and the total quantity of freight passed through the Welland Canal, and the quantity passed between United States ports during the years 1867 to 1910 inclusive.

Fiscal Year.	Aggregate number of Trips.	Total quantity transported on the Welland Canal.	Quantity passed from United States ports to United States ports.
	No.	Tons.	Tons.
1867..	5,405	933,260	458,386
1868..	6,157	1,161,821	641,711
1869..	6,069	1,231,903	688,700
1870..	7,356	1,311,956	747,567
1871..	7,729	1,478,122	772,756
<i>Season of navigation.</i>			
1872..	6,063	1,333,104	606,627
1873..	6,425	1,506,484	656,298
1874..	5,814	1,389,173	748,557
1875..	4,242	1,038,050	477,809
1876..	4,789	1,099,810	488,815
1877..	5,129	1,175,398	493,841
1878..	4,429	968,758	373,738
1879..	3,960	865,664	284,043
1880..	4,194	819,934	179,605
1881..	3,332	686,506	194,173
1882..	3,334	790,643	282,806
1883..	3,267	1,005,156	432,611
1884..	3,138	837,811	407,079
1885..	2,738	784,928	384,509
1886..	3,589	980,135	464,478
1887..	2,785	777,918	340,501
1888..	2,647	878,800	434,753
1889..	2,975	1,085,273	563,584
1890..	2,882	1,016,165	533,957
1891..	2,594	975,013	553,800
1892..	2,615	955,554	541,065
1893..	2,843	1,294,823	631,667
1894..	2,412	1,098,221	592,267
1895..	2,222	869,595	469,779
1896..	2,766	1,279,987	653,213
1897..	2,725	1,274,292	564,694
1898..	2,384	1,140,077	487,539
1899..	2,202	789,770	360,529
1900..	2,399	719,360	318,529
1901..	1,547	620,209	274,019
1902..	1,568	665,387	269,029
1903..	1,787	1,002,919	370,225
1904..	1,433	811,371	252,481
1905..	1,595	1,092,050	305,096
1906..	1,536	1,201,967	321,431
1907..	1,982	1,614,132	396,743
1908..	2,351	1,703,453	448,654
1909..	2,433	2,025,951	445,419
1910..	2,544	2,326,290	487,499

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The total quantity of freight passed through the several divisions of the Canadian Canal system during the season of 1910 is as follows :

	Farm Stock.	Forest Produce of Wood.	Manufac- tures.	Produce of Mines.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland. ....	688	154,737	516,333	611,994	1,042,538	2,326,290
St. Lawrence. ....	9,514	564,328	497,007	759,052	930,851	2,760,752
Chambly. ....	404	496,119	21,834	127,275	23,667	669,299
Ottawa. ....	3,242	268,199	72,294	35,934	5,592	385,261
Rideau. ....	2,124	40,026	76,299	13,547	2,885	134,881
St. Peters. ....	2,599	10,124	7,889	48,468	16,871	85,951
Murray. ....	149	3,471	162,506	7,400	4,415	177,941
Trent Valley. ....	435	35,849	8,672	679	628	46,263
Sault Ste. Marie. ....	1,368	100,613	862,526	32,597,423	2,833,737	36,395,687
St. Andrews. ....		7,952	177		177	8,283

The total quantity of freight moved on the Welland Canal was 2,326,290 tons, of which 1,042,538 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 2,760,752 tons, of which 930,851 were agricultural products, and 497,007 tons were manufactures.

On the Ottawa canals the total quantity of freight moved was 385,261 tons ; of this quantity 564,328 tons were the produce of the forest.

1 GEORGE V., A. 1911

COMPARATIVE Statement of the Commerce through the United States, St. Mary's Falls  
Canals and Canadian Sault Ste. Marie Canal, for the Seasons of 1909 and 1910.

	Traffic for 1910.		Total Traffic for		Increase	Decrease.
	U. States Canal.	Canadian Canal.	Season of 1910.	Season of 1909.	Amount.	Amount.
Vessels . . . . . No. †	12,927	7,972	20,899	19,134	1,765	
Lockages. . . . . "	8,459	6,110	14,569	13,571	998	
Tonnage registered. . . . . Net tons	26,506,986	23,361,198	49,868,184	46,779,137	3,089,047	
" freight. . . . . "	25,927,661	36,395,687	62,323,348	57,993,619	4,329,729	
Passengers . . . . . No.	33,536	33,291	66,827	60,546	6,281	
Coal hard . . . . . Net tons	1,109,533	601,208	1,710,741	1,422,671	288,070	
" soft. . . . . "	8,319,072	3,508,357	11,827,429	8,586,321	3,241,108	
Flour. . . . . Barrels	4,856,756	2,831,260	7,688,016	7,103,533	584,483	
Wheat. . . . . Bushels	17,505,949	68,396,300	85,902,249	112,839,716		25,937,467
Grain (excluding wheat). . . . . "	14,945,290	23,855,747	38,601,037	47,493,636		8,692,599
Manufactured & pig iron. Net tons	266,951	218,717	485,668	572,892		87,224
Salt. . . . . Barrels	390,191	138,419	528,610	651,091		122,481
Copper. . . . . Net tons	121,438	35,806	157,244	127,212	30,032	
Iron ore. . . . . "	13,075,362	28,440,952	41,516,314	40,023,414	1,492,900	
Lumber, ft. . . . . B. M.	558,607,000	44,646,650	603,253,650	552,003,300	51,250,350	
Silver ore. . . . . Net tons						
Building stone . . . . . "	9,335		9,335	1,784	7,551	
Unclassified freight. . . . . "	747,886	740,554	1,488,440	1,131,586	356,854	

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The United States canal was open to navigation during the season of—

1889.....	234 days	1900.....	238 days
1890.....	228 "	1901.....	230 "
1891.....	225 "	1902.....	256 "
1892.....	233 "	1903.....	249 "
1893.....	219 "	1904.....	223 "
1894.....	234 "	1905.....	245 "
1895.....	231 "	1906.....	249 "
1896.....	232 "	1907.....	233 "
1897.....	234 "	1908.....	231 "
1898.....	241 "	1909.....	236 "
1899.....	231 "	1910.....	224 "

The Canadian canal was open to navigation during the season of—

1895.....	87 days	1903.....	256 days
1896.....	218 "	1904.....	241 "
1897.....	238 "	1905.....	255 "
1898.....	243 "	1906.....	253 "
1899.....	239 "	1907.....	238 "
1900.....	238 "	1908.....	235 "
1901.....	246 "	1909.....	240 "
1902.....	264 "	1910.....	248 "

The average number of vessels passing per day through the two canals for the season of 1910 was over eighty-eight.

A—TABLE showing the total tonnage of the undermentioned articles moved Up and Down

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	144,561	18,455	24,496	1,454	3,198
1877. ....	13,558	253,953	169,196	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
1893. ....	15,235	258,392	441,092	18,599	31,283	3,671	36,981
1894. ....	33,628	270,993	169,233	28,353	27,962	567	60,673
1895. ....	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896. ....	42,425	320,563	320,444	11,368	28,178	9,403	56,591
1897. ....	9,065	324,743	390,615	14,173	25,161	8,483	44,674
1898. ....	5,578	297,647	437,861	12,286	17,592	16,127	23,182
1899. ....	11,625	197,732	204,004	2,907	24,637	923	18,460
1900. ....	10,968	137,800	163,509	4,035	41,955	3,538	14,815
1901. ....	18,978	151,586	67,756	7,119	28,485	2,961	14,024
1902. ....	22,282	225,171	67,647	7,418	11,232	4,079	12,963
1903. ....	25,998	250,031	210,758	14,656	7,911	4,904	13,994
1904. ....	35,049	165,138	116,444	27,171	16,582	.....	13,184
1905. ....	38,512	254,458	180,921	55,432	36,072	1,711	9,883
1906. ....	18,294	326,798	211,805	31,446	49,306	1,784	10,739
1907. ....	22,739	488,565	271,693	13,240	73,369	2,270	22,683
1908. ....	23,209	732,131	127,402	31,172	33,423	6,667	21,668
1909. ....	38,763	590,196	140,902	23,151	75,135	33	30,221
1910. ....	41,152	587,493	229,980	21,575	136,233	.....	18,149

\* Fiscal. † Apples, meal of all kinds, peas, potatoes.

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through the Welland Canal, during a period of forty years, ended December 31, 1910.

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	46,806	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	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	43,387
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	30,300	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	34,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,432	.....	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	93	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	7,953	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245
805,253	6	2,075	374	8,139	233,096	.....	243,690
591,409	.....	3,072	159	977	203,608	.....	207,816
486,421	185	6,245	54	2,819	158,866	1,140	169,309
788,974	1,192	6,332	82	3,264	223,445	1,158	235,473
816,914	7,206	17,012	227	590	176,226	.....	201,261
720,183	1,444	11,722	799	734	162,336	13,433	190,468
459,688	567	6,361	1,282	1,318	97,732	26,125	133,385
375,720	.....	8,190	533	4,800	47,392	58,400	119,315
290,909	83	6,094	327	8,773	49,480	99,487	164,244
350,792	64	7,488	.....	15,201	64,014	22,480	109,247
537,252	488	5,407	2,554	45,846	147,884	18,323	220,502
373,568	11,381	9,957	1,093	4,164	113,525	39,683	179,803
576,989	2,651	10,912	226	4,221	172,642	22,381	213,033
650,172	3,747	8,493	100	16,204	147,587	5,862	181,993
894,559	961	4,923	246	18,761	267,212	25,040	317,143
975,672	.....	35,726	429	.....	316,921	18,004	371,080
898,401	.....	87,025	.....	.....	377,681	33,301	498,007
1,034,582	.....	57,581	.....	.....	577,491	34,311	669,383



1 GEORGE V., A. 1911

B.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal during a series of forty years, ended December 31, 1910.

## VEGETABLE FOOD.

Years.	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	693	7,594	64	2,300	524,889
1873.....	30,660	345,720	180,042	643	1,188	3	3,557	563,813
1874.....	24,017	406,157	181,128	377	5,953	.....	3,301	620,933
1875.....	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876.....	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877.....	13,588	248,894	169,185	10,216	2,810	2,405	1,833	448,931
1878.....	8,854	188,106	185,931	1,217	3,088	.....	2,100	389,296
1879.....	10,588	271,515	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	.....	1,628	248,310
1886.....	19,418	146,151	218,897	.....	4,891	.....	14,581	403,923
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	28,356	1,918	18,273	530,759
1890.....	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,983
1891.....	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,058
1892.....	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709
1893.....	15,232	257,203	441,092	18,461	31,283	3,671	36,981	803,923
1894.....	33,628	270,514	169,233	28,353	27,962	.....	60,587	590,277
1895.....	43,895	202,636	164,894	8,689	18,236	.....	46,435	484,785
1896.....	42,159	319,388	320,444	11,368	28,178	8,970	54,031	784,538
1897.....	9,025	322,993	390,615	14,173	25,127	8,483	44,651	815,067
1898.....	5,578	206,313	437,849	12,286	17,491	16,127	23,170	718,814
1899.....	11,625	197,732	204,004	2,424	23,541	923	18,440	458,689
1900.....	10,968	137,800	163,509	3,449	40,256	3,538	14,802	374,322
1901.....	18,937	151,325	67,756	7,119	28,281	2,961	14,021	290,400
1902.....	22,282	223,499	67,647	7,418	11,223	4,079	12,912	349,060
1903.....	25,997	257,370	210,758	14,656	7,911	4,904	13,982	535,578
1904.....	35,046	164,515	116,444	27,171	16,582	.....	13,157	372,915
1905.....	38,512	247,599	180,921	55,432	36,072	1,711	9,882	570,129
1906.....	18,227	326,789	111,243	31,446	49,306	1,411	10,739	549,161
1907.....	22,689	488,565	271,693	13,240	73,369	2,270	22,683	894,509
1908.....	23,187	730,751	127,402	31,172	33,423	6,667	21,668	974,270
1909.....	38,763	590,074	140,902	23,151	73,135	33	30,206	898,264
1910.....	41,152	587,493	229,980	21,575	136,233	.....	18,149	1,034,582

\*Fiscal. †Apples, meal all kinds, pease, potatoes.

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C.—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 forty years, ended December 31, 1910.

YEARS.	VEGETABLE FOOD.										HEAVY GOODS.				
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	*Other Articles.	Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Cres.	Total.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1869	30,681	211,045	91,149	2,942	7,400	667	1,006	337,530	68,064	14,334	89,086	28,566	35,912	235,462	
1870	10,482	124,695	89,761	1,301	7,400		608	234,337	24,040	13,259	49,843	95,741	59,401	224,264	
1871	10,805	127,727	101,329	1,920	1,188	3	392	243,366	4,659	13,826	40,507	170,242	62,942	292,176	
1872	8,230	229,053	125,627	5,948	5,948		5,368	374,226	5,732	8,941	22,888	203,675	19,651	260,805	
1873	1,881	113,832	54,188	2,641	2,946	500	1,920	177,908	14	4,123	12,931	192,767	34,616	244,451	
1874	3,342	96,247	58,138	1,965	1,965	525	403	162,405		5,531	29,395	107,110	25,808	227,844	
1875	3,342	107,396	65,260	1,603	2,314	258	413	180,586	8,976	8,688	8,336	172,868	41,107	239,975	
1876	1,316	65,542	60,026	859	277		341	128,361		10,713	3,892	150,583	13,535	178,723	
1877	139	53,791	33,401		464		11	87,826	2,405	3,648	6,318	118,573	17,747	148,741	
1878		30,611	16,122	1,551	296			48,580	4,743	3,515	371	65,945	18,380	92,954	
1879		34,320	30,031	1,224				65,285	1,313	5,570		83,858	6,464	97,205	
1880	107	30,227	32,433	537		684	14	64,002		4,076		138,552	14,533	177,161	
1881	2,041	48,382	66,128	735			8,579	132,496	1,209	6,901	8	196,462	24,891	229,471	
1882	1,715	40,956	53,707		9,874		8,170	114,422	698			210,790	15,100	227,187	
1883	124	53,235	63,229	732	882			118,203		1,594		198,416	15,029	215,639	
1884	7,591	53,258	94,048		4,790		13,201	172,888	156	5,328	1	189,964	11,364	206,813	
1885	11,780	37,678	83,431	1,732	12,050		10,859	157,530		4,406		82,780	627	87,828	
1886	8,563	39,999	102,974	2	26,510	179	11,598	189,825	63	1,601	56	173,259	2,309	177,288	
1887	5,017	39,229	147,045		27,492		17,225	236,208		1,587	806	227,476	1,204	231,163	
1888	9,204	31,527	180,842	6,519	27,030		20,497	275,619		504	208	162,231	1,620	184,563	
1889	6,802	32,097	127,494	8,113	52,823		26,115	253,444		292	705	186,572	1,773	189,342	
1890	11,018	26,950	131,222	6,433	36,335		31,992	244,550		576	2	183,895		184,473	
1891	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389	344			206,827		207,171	
1892	17,795	53,846	105,329	28,095	27,621		60,462	198,358	297			188,521		188,818	
1893	10,169	27,881	100,512	7,904	17,029		46,316	209,302	181			149,490		149,917	
1894	16,224	34,878	175,094	11,128	16,137	490	46,456	300,407	146			207,348		207,494	
1895	7,237	28,919	169,057	14,173	14,969		41,887	276,242	965			165,143		166,123	
1896	4,212	11,268	150,667	6,909	12,732	1,197	22,671	209,656	770	339	4	156,814		157,927	
1897	6,118	12,926	81,777	2,424	19,526	923	18,198	141,892	351	1,646	553	88,931		91,481	
1898	7,966	18,771	60,545	2,402	39,706	2,149	14,248	145,787		953		46,024		46,977	
1899	17,165	23,557	55,531	7,119	26,344		14,016	143,732	83	80	106	46,702		46,970	
1900	13,785	32,630	66,111	7,418	10,006		12,675	142,634		214		12,911		13,125	

\* Apples, meal all kinds, pease, potatoes.

C.—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 forty years, ended December 31, 1910—*Concluded*.

YEARS.	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.	
1903.	6,082	15,439	108,917	11,433	6,112	4,174	13,568	165,725	459			113,072		113,535	
1904.	8,556	14,269	60,964	16,621	16,497		13,079	129,986				63,882		63,882	
1905.	21,054	15,483	93,622	9,197	10,892		9,682	162,930		1		73,465		73,465	
1906.	15,215	13,410	135,240	9,266	11,323		10,478	195,132		169		33,523		33,692	
1907.	18,898	21,892	124,474	2,812	4,741	2	22,001	194,820		30		110,347	4,050	114,420	
1908.	17,694	24,651	99,830	7,118	2,070	2	21,393	172,788				158,351	1,000	159,751	
1909.	15,452	17,940	100,967	4,224			22,683	161,266		5		131,131	1,531	132,667	
1910.	11,859	10,717	126,938	3,840			8,571	161,925				201,833		201,833	

\* Apples, meal all kinds, beans, potatoes.

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D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels entering the Canal at Port Colborne, during the season of Navigation in 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909 and 1910.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	191	100,242	129	75,777	201	212,027	78	36,962	599	425,008
1899.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Wheat.....	91,901	80,928	16,250	7,244	196,323					
Corn.....	28,015	18,905	138,834	18,250	204,004					
Barley.....			2,424		2,424					
Oats.....	1,557		21,646		23,203					
Pease.....										
Rye.....			923		923					
Coal.....	435	6,736		3,398	10,569					
Miscellaneous merchandise.....	25,203	18,651	49,522	1,567	94,943					
Shingles, woodenware, &c.....	485	916		100	1,501					
Sawed lumber..... Ft. B.M.	2,077,748	772,739	14,855,338	19,949,079	37,654,904					
Square timber..... Cub. ft.	322,138	585,780	20,802	328,806	1,257,526					
Firewood..... Cords.		9			9					
Staves..... No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	395,113
1900.	Tons.	Tons.	Tons.	Tons.	Tons.					
Wheat.....	67,694	43,157	23,066	2,130	136,047					
Corn.....	39,597	31,248	78,701	13,963	163,509					
Barley.....			2,402	1,047	3,449					
Oats.....			39,706	407	40,113					
Pease.....	115		4		119					
Rye.....	1,389		2,149		3,538					
Coal.....	723	637	433	559	2,352					
Miscellaneous merchandise.....	53,649	31,536	43,344	3,564	132,093					
Shingles, woodenware, &c.....	1,078				1,078					
Sawed lumber..... Ft. B.M.	6,847,279	5,344,258	14,984,483	18,770,405	45,946,425					
Square timber..... Cub. ft.	439,827	355,951	11,583	198,420	1,005,781					
Firewood..... Cords.	126	255			381					
Staves..... No.	1,000				1,000					
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	197	103,802	114	59,022	163	182,497	48	22,319	522	367,640
1901.	Tons.	Tons.	Tons.	Tons.	Tons.					
Wheat.....	57,641	58,973	31,955	1,241	149,810					
Corn.....	7,350	4,689	55,717		67,756					
Barley.....			7,119		7,119					
Oats.....	944		27,197		28,141					
Pease.....										
Rye.....	2,961				2,961					
Coal.....	1,960	362	357		2,679					
Miscellaneous merchandise.....	71,300	32,312	12,874	7,469	123,955					
Shingles, woodenware, &c.....	18				18					
Sawed lumber..... Ft. B.M.	6,533,423	4,060,251	11,089,806	13,092,940	34,776,420					
Square timber..... Cub. ft.	362,441	204,682	9,384	149,531	726,038					
Firewood..... Cords.	165	264			429					
Staves..... No.										

1 GEORGE V., A. 1911

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &amp;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.
	196	90,791	122	73,958	191	201,339	52	22,097	561	388,185
1902.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	82,954		85,973		52,889				221,816	
Corn.....	148		1,388		66,111				67,647	
Barley.....					7,418				7,418	
Oats.....	1,200		43		9,963				11,206	
Pease.....										
Rye.....	3,808				271				4,079	
Coal.....	3,977		25,732		13,497		8,332		51,538	
Miscellaneous merchandise..	33,111		8,723		38,351		1,594		81,779	
Shingles, woodenware, &c..	47		28		4				79	
Sawed lumber..... Ft. B.M.	13,218,960		3,256,187		25,437,287		19,540,426		61,452,860	
Square timber..... Cub. ft.	370,718		557,689				115,000		1,043,407	
Firewood..... Cords.	56		40						96	
Staves..... No.			14,000						14,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	329	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	149,378		38,473		60,514		6,305		254,670	
Corn.....	21,356		4,682		174,588		10,132		210,758	
Barley.....	2,580		667		11,409				14,656	
Oats.....	306		1,335		6,112				7,753	
Pease.....	63				22				85	
Rye.....					4,904				4,904	
Coal.....	389		12,991		8,133		8,496		30,009	
Miscellaneous merchandise..	39,563		3,367		41,584		2,000		86,514	
Shingles, woodenware, &c..			54						54	
Sawed lumber..... Ft. B.M.	12,841,552		1,625,855		17,871,652		14,733,677		47,072,736	
Square timber..... Cub. ft.	572,000		660,000				84,200		1,316,200	
Firewood..... Cords.			210		9				219	
Staves..... No.			641,000						641,000	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	228	157,539	55	39,375	205	187,748	42	15,918	530	490,580
1904.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	116,794		33,302		14,269				164,365	
Corn.....	12,768		7,814		95,862				116,444	
Barley.....	2,619		824		23,728				27,171	
Oats.....					16,261				16,261	
Pease.....					3				3	
Rye.....	1,925		7,187		17,133		7,668		33,913	
Coal.....	34,907				1,925				36,832	
Miscellaneous merchandise..	29,567				60,548				90,115	
Shingles, woodenware, &c..										
Sawed lumber..... Ft. B.M.	15,077,382		854,811		32,751,541		9,572,655		58,259,389	
Square timber..... Cub. ft.	944,508		744,000				149,000		1,837,508	
Firewood..... Cords.					717				717	
Staves..... No.	634,000								634,000	



SESSIONAL PAPER No. 20a

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &amp;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.
	252	182,373	91	48,692	319	286,656	64	29,120	726	546,841
1905.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Wheat .....	188,706	18,575	28,757	2,512	238,550					
Corn .....	6,385	6,636	163,374	4,526	180,921					
Barley .....	6,870	1,451	47,111	.....	55,432					
Oats .....	8,225	2,570	21,535	3,742	36,072					
Pease .....	.....	.....	76	.....	76					
Rye .....	.....	.....	1,711	.....	1,711					
Coal .....	18,756	35,324	28,330	8,678	91,088					
Iron ore .....	14,358	8,023	.....	.....	22,381					
Merchandise .....	29,375	7,485	74,975	3,126	114,961					
Shingles, woodenware, &c. ....	.....	2,748,941	2,325	.....	2,325					
Sawed lumber ..... Ft. B.M.	2,867,147	.....	38,290,831	12,479,698	54,589,200					
Square timber ..... Cub. ft.	355,000	951,524	.....	.....	538,000					
Firewood ..... Cords.	.....	183,000	900	.....	900					
No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	
328	238,690	121	66,355	305	310,622	43	15,758	797	631,425	
1906.	Tons.	Tons.	Tons.	Tons.	Tons.					
Wheat .....	250,493	34,355	35,578	.....	320,436					
Corn .....	8,177	.....	202,250	1,378	49,306					
Barley .....	8,546	5,046	17,854	.....	31,446					
Oats .....	21,900	16,083	11,323	.....	49,306					
Pease .....	.....	.....	11	.....	11					
Rye .....	.....	5	1,406	.....	1,411					
Coal .....	30,455	47,242	24,190	9,356	111,243					
Iron ore .....	5,862	.....	.....	.....	5,862					
Merchandise .....	35,383	7,009	110,263	50	152,705					
Shingles, woodenware, &c. ....	16	37	851	.....	904					
Sawed lumber ..... Ft. B.M.	3,471,514	235,624	25,711,196	10,769,755	49,188,089					
Square timber ..... Cub. ft.	375,000	200,000	.....	.....	575,000					
Firewood ..... Cords.	110	18	1,093	.....	1,221					
Staves ..... No.	.....	.....	300,000	.....	300,000					
No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	
375	290,509	148	81,070	408	397,616	76	36,921	1,007	806,116	
1907.	Tons.	Tons.	Tons.	Tons.	Tons.					
Wheat .....	294,298	50,808	130,818	4,429	480,303					
Coru .....	6,713	514	259,895	4,571	271,693					
Barley .....	8,726	468	4,046	.....	13,240					
Oats .....	49,689	16,647	7,033	.....	73,369					
Pease .....	.....	.....	25	.....	25					
Rye .....	.....	.....	2,270	.....	2,270					
Coal .....	31,506	57,373	50,183	14,493	143,555					
Iron ore .....	12,040	8,950	.....	.....	20,990					
Merchandise .....	21,545	9,436	5,231	6,235	42,447					
Shingles, woodenware, &c. ....	.....	.....	2,222	.....	2,222					
Sawed lumber ..... Ft. B.M.	.....	.....	14,395,124	11,201,446	25,596,570					
Square timber ..... Cub. ft.	558,090	323,000	.....	.....	881,090					
Firewood ..... Cords.	.....	.....	660	.....	660					



1 GEORGE V., A. 1911

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—*Concluded.*

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	567	432,623	149	64,034	428	319,030	36	19,866	1180	835,553
1908.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Wheat .....	505,151	39,001	183,101	3,498	730,751					
Corn.....	2,405	124,997	127,402							
Barley.....	19,775	1,133	10,264	31,172						
Oats.....	30,091	643	2,689	33,423						
Pease .....	.....	.....	40	40						
Rye.....	742	5,925	6,667							
Coal.....	39,733	42,656	57,448	8,344	148,181					
Merchandise .....	26,815	14,783	14,410	13,686	69,694					
Firewood .....	.....	70	1,173	1,243						
Sawed lumber .....	Ft. B.M.	.....	17,572,070	6,578,545	24,150,615					
Square timber .....	Cub. ft.	221,300	313,000	534,300						
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	555	486,406	136	71,034	323	324,576	26	17,317	1040	899,333
1909.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Wheat .....	415,208	34,903	133,172	583,283						
Corn.....	6,694	134,208	140,902							
Barley.....	17,943	360	4,848	23,151						
Oats.....	70,392	4,743	.....	75,135						
Pease .....	.....	.....	63	63						
Rye.....	33	.....	.....	33						
Coal.....	160,475	53,681	21,097	630	235,883					
Merchandise .....	52,994	14,782	12,232	16,498	96,506					
Sawed lumber .....	.....	.....	31,643	10,214	41,857					
Square timber .....	3,450	7,840	125	1,475	12,890					
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	596	599,416	142	88,963	249	285,704	14	13,563	1,001	987,646
1910.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Wheat .....	481,624	22,200	77,040	580,864						
Corn.....	15,759	214,221	229,960							
Barley.....	17,159	576	3,840	21,575						
Oats.....	136,743	490	136,233							
Pease .....	.....	.....	123	123						
Rye.....	.....	.....	.....	.....						
Coal.....	216,779	114,671	29,646	894	361,990					
Merchandise .....	39,149	15,231	21,818	20,466	96,664					
Sawed lumber .....	3,630	800	16,932	21,362						
Square timber.....	1,930	5,000	800	7,730						
Shingles.....	.....	.....	525	525						
Unenumerated.....	74,434	1,772	24,031	100,237						
Total .....	986,207	160,250	389,466	21,360	1,557,283					

SESSIONAL PAPER No. 20a

## WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

## WELLAND CANAL—WEST BOUND FREIGHT.

THE total quantity of Through Freight passed Up the Welland Canal in Canadian and United States Vessels during the Season of Navigation in 1910 is as follows:—

Summary.	Tons.	Tons.
In Canadian steam vessels.....	352,468	
"    sail.....	4,551	
Total quantity in Canadian vessels.....		357,019
In United States steam vessels.....	356,183	
"    sail vessels.....	11,034	
Total in United States vessels.....		367,217
Grand total freight passed Up the Welland Canal in Canadian and United States vessels.....		724,236

STATEMENT of the Quantity of Through Freight passed Up and Down the Welland Canal during the Season of Navigation in 1910.

Summary.	Tons.	Tons.
In Canadian steam vessels up.....	352,468	
"    "    down.....	986,207	
Total in Canadian steam vessels.....		1,338,675
In Canadian sail vessels up.....	4,551	
"    "    down.....	160,250	
Total in Canadian sail vessels.....		164,801
Total quantity in Canadian vessels.....		1,503,476
In United States steam vessels up.....	356,183	
"    "    down.....	389,466	
Total in United States steam vessels.....		745,649
In United States sail vessels up.....	11,034	
"    "    down.....	21,360	
Total in United States sail vessels.....		32,394
Total quantity in United States vessels.....		778,043
Total in Canadian and United States vessels.....		2,281,519
	Down on East Bound.	Up or West Bound.
In Canadian vessels.....	1,146,457	357,019
In United States vessels.....	410,826	367,217
Total.....	1,557,283	724,236

F.—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 1898 to 1910.

Articles.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>													
Cement and water lime.	52	15	15				35	22				5,652	484
Clay, lime and sand.					50		8,170	10					
" pig.	6,217	5,063	4,292	1,178	5,785	2,542	1,651	384	269	124	553	12,689	7,154
" all other	1,351	3,000	5,420				16	48					
Steel.													
Stone, for cutting													
Apples.	3,960	596	1,288			2,206	1			9,936			
Barley.	310,498	150,999	109,359	14,319	1,719	123,864	9,697	43,607	21,196	105,984	24,318	19,143	20,000
Corn.	5,687			4,965		3,643	55,021	84,204	55,559		10,454	17,137	77,612
Flaxseed.	653	4,229	1,595	1,400	6,755	16,151	24,682	14,571	9,174	3,730	27,500	19,634	6,607
Flour, all kinds.				35		348	57	270	60		156	21,905	27,081
Meal, all kinds.	3,975	10,250	8,922	1,584	1,442	2,438		23,404	37,164	66,941	28,081	65,624	129,900
Oats.				1,083		462	7,846	9,229					
Oil cake.													
Pense.	260		115			63						30	
Rye.	15,488	923	3,978	2,961	4,079	4,260		1,711	1,405	2,266	6,662	120	
Salt.	144	200		50		132		168	75	143	419		
Seed, all kinds.													
Hay, pressed.		36		246									
Tobacco, raw.				23									
Wheat.	184,154	169,978	121,896	132,702	200,975	223,746	133,528	190,505	280,611	450,446	686,626	550,775	562,149
All other agricultural products, vegetables.	56	32											
Hides, skins, horns and hoofs.							10					5,876	
Horses.	4	1							2				
Lard and lard oil.				1,155				2,847	4,810				
Meats, all kinds.				114									
Pork.				34									
Tallow.						3		53					524
All other agricultural products, animal.							1					366	
Total, class 3.	532,499	345,565	256,491	161,849	220,805	382,858	241,522	384,727	499,895	688,749	790,321	718,951	841,310



C.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1909, 1910, and 1910.

Articles.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>												
Bricks.....	70	24	49	196	22	80	115	132	556			
Brimstone.....				5	20	23	12					
Cement and water lime.....	996	997	1,931	2,916	178	3,924	39	181	88	13	400	17,565
Clay, lime and sand.....	144	8	4	2	1	181				100		
Cotton, raw.....						23						
Fish.....	9	10	8	8		8	4			39		
Gypsum.....		4										
Iron, railway.....				74	11,735	39,641	283	126	7,289	4,119	7,231	2,069
" pig.....				3	555	273		312	680	7,655		
" all other.....	690	1,318	1,428	4,950	2,904	5,845	3,782	3,633	8,235	6,987		540
Salt.....	35		48	75	4	87	99	150	17			
Steel.....	19	18		3	11	332	58	192	111	2,561	35,153	
Stone for cutting.....							41					
Flour.....				16				18				
Hay.....										30	255	
Meals.....						17	25					1,113
Oats.....												
Potatoes.....												
Seeds, all kinds.....	56	121	218	302	58	325	164	35	17			
Tobacco, raw.....					1	2						
Agricultural products, not enumerated, vegetable.....				1	1							
Hides and skins.....					16	6						
Horses.....	1											
Lard and lard oil.....	2				11						1	
Meats other than pork.....											15	
Pork.....			1			1	25					
Wool.....												
All other articles not enumerated.....												
Total, class 3.....	2,031	2,500	3,764	9,222	15,520	50,768	4,617	4,934	16,437	22,076	43,039	21,278







H.—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 from 1898 to 1910 inclusive.

Articles.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 2.</i>													
Bricks.....													2,000
Cement and water lime.....	300		18							20			
Fish.....										30			
Iron, railway.....	770		714		30			1	27				
" " all other.....	324	1,008											
Salt.....	549			105									
Steel.....	2,951	13,522	3,110						2	509	9,086		
Stone for cutting.....													
Apples.....													
Barley.....	6,909	2,424	2,402	7,119	7,418	11,433	16,621	9,197	9,266	2,812	7,148	4,224	3,840
Corn.....	130,667	81,777	60,545	55,531	66,111	108,917	60,964	93,622	135,240	124,474	99,830	100,967	126,938
Flour.....	4,212	6,118	7,966	17,168	13,785	6,082	8,556	24,054	15,215	18,898	17,694		11,859
Hay, pressed.....								200					
Meal, all kinds.....	22,636	18,198	14,244	14,016	12,675	13,546	13,076	9,606	10,668	21,976	21,353		8,621
Marble.....								87					
Nails.....								1					
Oil cake.....			2,705	1,302	110	740	16,497	228		114			
Oats.....	12,729	19,526	39,706	26,344	10,006	6,112	3	10,892	11,323	4,741	2,070		
Pease.....	45		4			22		76	11	25	40	63	123
Potatoes.....													
Rye.....	1,197	923	2,149			4,174				2			
Flax seed.....		200				1,594			756			15,452	
Seeds, all kinds.....	44	11			10	27		43	3	17			
Tobacco.....				23									
Wheat.....	11,268	12,926	18,771	23,537	32,639	15,436	14,269	15,483	13,410	21,892	24,651	17,940	10,717
Agricultural products, vegetable.....			6	10		1			1	7		21	233
Hides and skins, &c.....													
Horses.....	2		1				2						
Lard and lard oil, &c.....	3,671	864	1,588	1,680	2,413				22	86			
Meats, other than pork.....													
Pork.....	1,271	343	117	970	632	152	379	273	268	429			
Sheep.....	359	201	631	119							190		
Tallow.....	89	130		3	752	482	134	21	89	30		157	233
Wool.....													
Total, class 3.....	219,434	158,720	154,680	147,947	146,581	168,720	130,499	163,784	196,301	196,062	182,085	161,738	164,564



1 GEORGE V., A. 1911

L—STATEMENT of the quantity of Grain Transhipped to the following Ports for the season of 1910.

Ports.	Wheat.	Oats.	Barley.	Corn.	Other Grain.	Total.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.
Kingston.....	9,481,700	3,848,235	438,250	375,428	1,360	14,144,973	371,699
Prescott.....	85,527	32,016	.....	62,711	.....	180,254	5,010
Ogdensburg.....	.....	.....	.....	15,000	.....	15,000	420
Total Bushels....	9,567,227	3,880,251	438,250	453,139	1,360	14,340,227	.....
Total Tons. ....	287,017	66,558	10,768	12,738	48	.....	377,129

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M—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1910 inclusive, 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.
	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1885.....			193,442	4,974	10,321	31,350	240,037
1886.....			184,564	5,400	22,187	49,724	261,875
1887.....			81,617	1,163	26,775	25,968	135,523
1888.....			172,381	878	17,365	27,183	217,807
1889.....			226,352	1,124	12,036	25,931	265,443
1890.....	80		116,616	615	17,280	22,781	202,372
1891.....			185,190	1,382	17,374	20,698	224,644
1892.....			183,244	651	12,391	15,330	211,616
1893.....			204,704	2,123	8,325	17,944	233,096
1894.....			187,794	727	1,269	13,947	203,737
1895.....	4		148,887	603	1,565	7,807	158,866
1896.....	20	210	206,093	1,255	4,127	11,740	223,445
1897.....		4	165,143		1,277	9,799	176,223
1898.....			156,055	759	986	4,536	162,336
1899.....			86,638	2,293	525	8,276	97,732
1900.....	8		45,032	992		1,360	47,392
1901.....			46,345	357	456	2,322	49,480
1902.....			12,410	501	65	51,037	64,013
1903.....	3		113,076		4,796	30,009	147,884
1904.....	2,919		62,782	1,100	3,711	32,813	103,325
1905.....			70,118	3,346	11,436	37,742	172,642
1906.....	60		29,123	4,400	7,161	106,843	147,687
1907.....	2,857		110,347		10,453	143,555	267,212
1908.....	4,401		158,351		5,988	148,181	316,921
1909.....			130,731	400	11,067	235,483	377,681
1910.....	2,045		197,482	4,411	15,974	357,579	577,491

1 GEORGE V., A. 1911

N.—STATEMENT showing the quantity of Coal passed through the whole length of the St. Lawrence Canals during the seasons of 1885 to 1910, inclusive.

Years.	Quantity	Quantity	Total
	passed up.	passed down to Montreal.	Quantity passed up and down
	Tons.	Tons.	Tons.
1885.	5,035	122,829	127,864
1886.	3,301	118,802	122,103
1887.	7,579	121,618	129,197
1888.	8,341	123,050	131,391
1889.	5,360	124,290	129,650
1890.	6,538	135,168	141,706
1891.	7,951	141,701	149,652
1892.	7,543	157,134	164,677
1893.	2,285	147,139	149,424
1894.	16,213	169,552	185,765
1895.		165,151	165,151
1896.	689	161,551	162,240
1897.	40	164,963	165,003
1898.	400	175,609	176,009
1899.	448	201,546	201,994
1900.	10	280,169	280,179
1901.	2,765	298,245	301,010
1902.	9,231	95,702	104,933
1903.	30	290,548	290,578
1904.	9,670	320,973	330,643
1905.	8,518	345,589	354,107
1906.	6,989	313,080	320,069
1907.	1,281	406,978	408,259
1908.	23,939	448,140	472,079
1909.	13,543	469,695	483,238
1910.	7,351	746,926	754,277

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O.—STATEMENT showing the quantity of Through Freight passed down the Welland Canal, &amp;c.

## RECAPITULATION.

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 Lake Ontario.
1899.	Tons.	Tons.	Tons.
Barley .....	568	.....	1,828
Corn .....	150,999	16,594	43,854
Oats .....	10,250	1	13,139
Pease .....	.....	.....	.....
Rye .....	923	.....	.....
Wheat .....	169,978	24,602	9,190
Total grain .....	† 332,736	40,197	68,011
Other articles .....	21,739	68,671	104,727
Total .....	354,485	108,958	172,732
1900.			
Barley .....	1,288	563	1,598
Corn .....	109,358	9,844	44,406
Oats .....	8,925	348	30,840
Pease .....	115	.....	4
Rye .....	3,078	160	300
Wheat .....	121,896	6,610	7,541
Total grain .....	**244,661	17,525	84,589
Other articles .....	43,670	95,680	98,287
Total .....	288,231	113,205	177,876
1901.			
Barley .....	.....	.....	.....
Corn .....	14,319	4,528	49,609
Oats .....	1,584	853	25,704
Pease .....	.....	.....	.....
Rye .....	2,961	.....	.....
Wheat .....	132,702	8,051	9,057
Total grain .....	†151,566	13,732	83,370
Other articles .....	32,834	128,614	91,799
Total .....	184,420	142,346	175,169
1902.			
Barley .....	.....	.....	7,418
Corn .....	1,719	10,335	55,583
Oats .....	1,412	.....	9,764
Pease .....	.....	.....	.....
Rye .....	4,079	.....	.....
Wheat .....	200,075	12,452	8,389
Total grain .....	†208,215	22,787	81,165
Other articles .....	42,260	32,946	179,914
Total .....	250,475	55,733	261,078



1 GEORGE V., A. 1911

O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &amp;c.—Continued.

## RECAPITULATION—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 on Lake Ontario.
1903.	Tons.	Tons.	Tons.
Barley.....	2,206	1,017	11,433
Corn.....	116,223	13,846	80,689
Oats.....	2,438	.....	5,315
Pease.....	63	.....	22
Rye.....	4,200	.....	644
Wheat.....	226,746	14,199	13,725
Total grain.....	\$351,936	29,062	111,828
Other articles.....	38,850	82,298	101,621
Total.....	390,786	111,360	213,449
1904.			
Barley.....	9,697	853	16,621
Corn.....	53,021	3,950	57,473
Oats.....	.....	.....	16,497
Pease.....	.....	.....	3
Rye.....	.....	.....	.....
Wheat.....	*133,528	18,998	11,929
Total grain.....	198,246	23,711	102,523
Other articles.....	77,031	80,092	138,475
Total.....	375,277	193,803	240,998
1905.			
Barley.....	43,607	2,628	9,197
Corn.....	84,204	3,095	93,622
Oats.....	21,404	3,776	16,892
Pease.....	.....	.....	76
Rye.....	1,711	.....	.....
Wheat.....	190,505	32,562	15,483
Total grain.....	**341,431	42,061	129,270
Other articles.....	107,273	123,225	104,747
Total.....	448,704	165,286	234,017
1906.			
Barley.....	21,196	984	9,266
Corn.....	53,559	15,688	140,558
Oats.....	37,164	819	11,323
Pease.....	.....	11	.....
Rye.....	1,495	6	.....
Wheat.....	***289,611	15,843	14,972
Total grain.....	404,935	33,351	176,119
Other articles.....	118,224	176,277	59,884
Total.....	523,159	209,628	236,003

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O.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &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 Lake Ontario.
1907.	Tons.	Tons.	Tons.
Barley .....	9,936	492	2,812
Corn .....	106,299	31,901	133,493
Oats .....	67,063	1,565	4,741
Pease .....			25
Rye .....	2,266	2	2
Wheat .....	*450,009	8,072	22,222
Total grain .....	635,573	42,032	163,295
Other articles .....	153,594	126,423	93,127
Total .....	789,167	168,455	256,422
1908.			
Barley .....	24,318	3,546	3,308
Corn .....	10,454	11,489	105,459
Oats .....	28,081	3,272	2,070
Pease .....			40
Rye .....	6,662	3	2
Wheat .....	1686,626	19,832	24,293
Total grain .....	756,141	38,142	135,172
Other articles .....	108,785	162,378	91,875
Total .....	864,926	200,520	227,047
1909.			
Barley .....	19,143		4,008
Corn .....	17,137	22,798	100,967
Oats .....	65,624	2,872	6,639
Pease .....	30		33
Rye .....	33		
Wheat .....	550,775	14,568	17,940
Total grain .....	652,742	40,238	129,587
Other articles .....	272,263	113,970	126,223
Total .....	925,005	154,208	255,810
1910.			
Barley .....	20,000		1,575
Corn .....	77,612	49,326	103,042
Oats .....	129,900	6,333	
Pease .....			123
Rye .....			
Wheat .....	562,149	7,988	10,747
Total grain .....	789,661	63,657	115,457
Other articles .....	380,500	152,325	55,683
Total .....	1,170,161	215,982	171,140

TABLE 1.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation, 1909 and 1910.

Canals.	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.		Origin of Cargo.		
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.	
															Up.
1909.															
South St. Marie.....	641,601	1,567,940	46,041	512,293	1,736,801	22,188,888	1,000,300	167,881	3,424,743	24,436,502	27,861,245	3,366,495	24,494,750		
Welland.....	217,737	618,718	164,304	16,469	248,581	196,838	11,467	551,837	642,089	1,383,862	2,025,951	1,050,241	975,710		
St. Lawrence.....	533,658	932,101	242,954	36,547	.....	.....	3,759	661,557	780,421	1,630,208	2,410,629	1,710,797	699,832		
Chambly.....	5,480	11,475	606,466	.....	.....	.....	.....	128,696	611,946	140,171	752,117	623,421	128,696		
St. Peter's.....	27,169	52,052	.....	.....	.....	.....	629	.....	27,798	52,052	79,850	79,150	700		
Murray.....	72,034	7,244	406	.....	.....	.....	672	21,935	73,112	29,179	102,291	79,254	23,037		
Ottawa.....	49,131	240,150	150	42,333	.....	.....	5,175	.....	54,456	282,483	336,939	331,104	5,835		
Rideau.....	44,120	33,033	334	252	.....	.....	1,827	12,148	46,341	45,433	91,774	77,643	14,131		
Trent.....	17,819	42,133	.....	.....	.....	.....	.....	.....	17,819	42,133	59,952	59,952	.....		
Grand total.....	1,608,659	3,504,849	1,040,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	5,678,725	28,042,023	33,720,748	7,378,057	26,342,691		
1910.															
South St. Marie.....	779,961	1,567,285	28,648	565,335	3,035,290	29,332,862	969,248	117,038	4,813,147	31,582,510	36,395,687	3,378,268	33,017,419		
Welland.....	265,790	742,908	154,617	6,983	288,198	197,301	16,229	654,264	724,834	1,601,456	2,326,290	1,196,946	1,129,344		
St. Lawrence.....	596,833	1,123,520	286,075	22,235	.....	.....	777	770,978	844,019	1,916,733	2,760,752	1,377,311	787,311		
Chambly.....	383,148	12,307	130,245	.....	.....	.....	.....	143,599	513,393	155,906	669,299	525,700	143,599		
St. Peter's.....	33,482	52,240	.....	.....	.....	.....	.....	.....	33,711	52,240	85,951	85,722	229		
Murray.....	161,737	8,546	555	.....	.....	.....	.....	.....	162,292	15,649	177,941	170,680	7,261		
Ottawa.....	49,923	266,519	61,013	.....	.....	.....	7,806	.....	57,729	327,532	385,261	377,268	7,993		
Rideau.....	58,049	57,218	4	5,870	.....	.....	1,460	12,280	59,513	75,368	134,881	121,048	13,838		
Trent.....	15,065	30,598	.....	.....	.....	.....	.....	.....	15,065	30,598	46,263	46,263	.....		
St. Andrew's.....	8,152	131	.....	.....	.....	.....	.....	.....	8,152	131	8,283	8,283	.....		
Grand total.....	2,312,740	3,861,272	600,144	661,436	3,323,822	29,530,163	995,749	1,705,282	7,232,455	35,758,153	42,990,608	7,883,614	35,106,994		

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TABLE 2.—Statement showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the Season of Navigation in 1910.

Vessels.	Total Number of Trips.	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.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
CANADIAN VESSELS.												
<i>Steam and Sail.</i>												
Sault Ste. Marie.....	2,744	1,192,124	1,200,938	100,620	120,788	76,096	89,461	270,561	113,906	1,630,401	1,534,093	3,173,494
Welland.....	1,862	528,479	476,520	175,646	18,839	18,839	157	15,633	246,825	738,497	723,062	1,461,499
St. Lawrence.....	8,884	1,452,888	1,198,749	10,104	260	216		1,361	249,817	1,464,569	1,445,826	2,910,395
Chambly.....	619	33,386	33,210	12,081					7,170	51,417	46,380	97,797
Ottawa.....	2,189	203,063	206,805		1,033					203,069	207,838	410,907
Rideau.....	2,749	83,284	81,867	4,351	605				6,340	87,635	88,812	176,447
St. Peter's.....	1,466	53,893	52,349							53,893	52,349	106,242
Trent Valley.....	3,442	85,400	86,685							85,400	86,685	172,085
Murray.....	1,240	230,714	182,879	10,954	2				3,488	241,668	136,369	378,037
St. Andrew's.....	202	22,426	22,461							22,426	22,461	44,887
Total Canadian.....	25,337	3,891,613	3,504,463	313,656	122,088	95,151	89,618	287,555	627,046	4,587,975	4,343,815	8,931,790
UNITED STATES VESSELS.												
Sault Ste. Marie.....	5,228	74,922	17,785	26,865	270,188	5,220,109	14,268,834	266,890	42,111	5,588,786	14,598,918	20,187,704
Welland.....	1,392	41,235	27,148	165,640	8,041	12,059	977	12,317	214,727	231,251	250,893	482,144
St. Lawrence.....	692	89	1,319	57,999	2,430	277,249	218,745	927	128,260	336,264	350,754	687,018
Chambly.....	3,600		1,206	177,848					190,395	177,848	191,601	369,449
Ottawa.....	3,412	771	1,120		22,203			17,568		18,339	23,634	41,963
Rideau.....	66	1,715	1,031	2,313	2,313			1,736		3,451	3,344	6,795
St. Peter's.....	4	134	522		155					134	677	811
Trent Valley.....												
Murray.....	68	356	367	350			9	24	307		683	1,413
St. Andrew's.....												
Total United States.....	11,462	119,222	50,498	428,702	305,330	5,509,417	14,488,565	299,462	576,101	6,356,803	15,420,494	21,777,297
Grand total Canadian and U.S.....	36,799	4,010,835	3,554,961	742,358	428,018	5,604,568	14,578,183	587,017	1,203,147	10,944,778	19,764,309	30,709,087

1 GEORGE V., A. 1911

TABLE 3.—STATEMENT showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
<b>SAULT STE. MARIE CANAL.</b>					
Canadian vessels, steam.....	2,652	1,175,362	1,195,110	96,171	120,788
" " sail.....	92	16,762	14,828	4,449	.....
Total Canadian.....	2,744	1,192,124	1,209,938	100,620	120,788
United States vessels, steam.....	5,103	67,950	17,507	26,845	264,640
" " sail.....	125	6,972	278	20	5,548
Total United States.....	5,228	74,922	17,785	26,865	270,188
Grand total of Sault Ste. Marie Canal.....	7,972	1,267,046	1,227,723	127,485	390,976
<b>WELLAND CANAL.</b>					
Canadian vessels, steam.....	1,316	482,482	433,387	112,091	.....
" " sail.....	536	45,997	43,133	63,455	.....
Total Canadian.....	1,852	528,479	476,520	175,546	.....
United States vessels, steam.....	646	89	1,319	39,523	2,430
" " sail.....	46	.....	.....	18,476	.....
Total United States.....	692	89	1,319	57,999	2,430
Grand total, Welland Canal.....	2,544	528,568	477,839	233,545	2,430
<b>ST. LAWRENCE CANALS.</b>					
Canadian vessels, steam.....	4,251	831,546	632,368	5,562	98
" " sail.....	4,583	621,342	563,381	4,742	162
Total Canadian.....	8,834	1,452,888	1,195,749	10,104	260
United States vessels, steam.....	772	18,898	8,018	133,316	253
" " sail.....	620	22,337	19,130	50,324	7,788
Total United States.....	1,392	41,235	27,148	163,640	8,041
Grand total, St. Lawrence Canals.....	10,226	1,494,123	1,222,897	173,744	8,301
<b>CHAMBLY CANAL.</b>					
Canadian vessels, steam.....	299	34,053	34,105	.....	.....
" " sail.....	320	5,283	5,105	12,081	.....
Total Canadian.....	619	39,336	39,210	12,081	.....
United States vessels, steam.....	.....	.....	1,206	177,848	.....
" " sail.....	3,600	.....	.....	.....	.....
Total United States.....	3,600	.....	1,206	177,848	.....
Grand total, Chambly Canal.....	4,219	39,336	40,416	190,929	.....
<b>OTTAWA CANALS.</b>					
Canadian vessels, steam.....	972	97,812	102,043	.....	569
" " sail.....	1,217	105,257	104,762	.....	464
Total Canadian.....	2,189	203,069	206,805	.....	1,033

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passed through the several Canals during the season of Navigation in 1910.

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up.	Down.	
71,207	85,961	267,299	106,388	1,610,039	1,508,247	3,118,286
4,889	3,500	3,262	7,518	29,362	25,846	55,208
76,096	89,461	270,561	113,906	1,639,401	1,534,093	3,173,494
5,135,154	14,162,381	262,794	42,111	5,492,743	14,486,639	14,979,382
84,955	106,453	4,096	.....	96,043	112,279	208,322
5,220,109	14,268,834	266,890	42,111	5,588,786	14,598,918	20,187,704
5,296,205	14,358,295	537,451	156,017	7,228,187	16,133,011	23,361,198
18,471	157	13,031	179,130	626,075	612,674	1,238,749
368	.....	2,602	67,195	112,422	110,328	222,750
18,839	157	15,633	246,325	738,497	723,002	1,461,499
276,680	218,745	927	111,629	317,219	334,123	651,342
569	.....	.....	16,631	19,045	16,631	35,676
277,249	218,745	927	128,260	336,264	350,754	687,018
296,088	218,902	16,560	374,585	1,074,761	1,073,756	2,148,517
216	.....	145	192,780	837,269	825,246	1,662,515
.....	.....	1,216	57,037	627,300	620,580	1,247,880
216	.....	1,361	249,817	1,464,569	1,445,826	2,910,395
11,263	977	6,554	177,304	172,031	186,552	358,583
796	.....	5,763	37,423	59,220	64,341	123,561
12,059	977	12,317	214,727	231,251	250,893	482,144
12,275	977	13,678	464,544	1,695,820	1,696,719	3,392,539
.....	.....	.....	.....	34,053	34,105	68,158
.....	.....	.....	7,170	17,364	12,275	29,639
.....	.....	.....	7,170	51,417	46,380	97,797
.....	.....	.....	190,395	177,848	191,601	369,449
.....	.....	.....	190,395	177,848	191,601	369,449
.....	.....	.....	197,565	229,265	237,981	467,246
.....	.....	.....	.....	97,812	102,612	200,424
.....	.....	.....	.....	105,257	105,226	210,483
.....	.....	.....	.....	203,069	207,838	410,907



1 GEORGE V., A. 1911

Table 3.—STATEMENT Showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
CHAMBLY CANAL.					
United States vessels, steam.....	6	180	240		280
" " sail.....	406	591	880		21,923
Total United States.....	412	771	1,120		22,203
Grand total, Ottawa Canals.....	2,601	203,840	207,925		23,236
RIDEAU CANAL.					
Canadian vessels, steam.....	2,105	57,602	56,987	4,351	
" " sail.....	644	25,682	24,880		605
Total Canadian.....	2,749	83,284	81,867	4,351	605
United States vessels, steam.....	2	9	9		
" " sail.....	64	1,706	1,022		2,313
Total United States.....	66	1,715	1,031		2,313
Grand total, Rideau Canal.....	2,815	84,999	82,898	4,351	2,918
ST. PETER'S CANAL.					
Canadian vessels, steam.....	310	17,414	15,570		
" " sail.....	1,156	36,479	36,779		
Total Canadian.....	1,466	53,893	52,349		
United States vessels, steam.....	2	134	37		
" " sail.....	2		485		155
Total United States.....	4	134	522		155
Grand total, St. Peter's Canal....	1,470	54,027	52,871		155
TRENT VALLEY CANALS.					
Canadian vessels, steam.....	2,794	68,746	68,336		
" " sail.....	648	16,654	18,349		
Total Canadian.....	3,442	85,400	86,685		
United States vessels, steam.....					
" " sail.....					
Total United States.....					
Grand total, Trent Valley Canals	3,442	85,400	86,685		
MURRAY CANAL.					
Canadian vessels, steam.....	845	194,763	101,957	3,085	
" " sail.....	395	35,951	30,922	7,869	2
Total Canadian.....	1,240	230,714	132,879	10,954	2
United States vessels, steam.....	47	87	329	243	
" " sail.....	21	269	38	107	
Total United States.....	68	356	367	350	
Grand total, Murray Canal.....	1,308	231,070	133,246	11,304	2

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passed through the several Canals during the Season of Navigation in 1910—Continued.

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons
Up.	Down.	Up.	Down.	Up.	Down.	
		17,568	301	18,159	23,104	41,263
		17,568	301	18,339	23,624	41,963
		17,568	301	221,408	231,462	452,820
			6,122	61,953	63,109	125,062
			218	25,682	25,703	51,385
			6,340	87,635	88,812	176,447
				9	9	18
		1,736		3,442	3,335	6,777
		1,736		3,451	3,344	6,795
		1,736	6,340	91,086	92,156	183,242
				17,414	15,570	32,984
				36,479	36,779	73,258
				53,893	52,349	106,242
				134	37	171
					640	640
				134	677	811
				54,027	53,026	107,053
				68,746	68,336	137,082
				16,654	18,349	35,003
				85,400	86,685	172,085
				85,400	86,685	172,085
			1,083	197,848	103,040	300,888
			2,405	43,820	33,329	77,149
			3,488	241,668	136,369	378,037
	9	24	254	354	592	946
			53	376	91	467
	9	24	307	730	683	1,413
	9	24	3,795	242,398	137,052	379,450

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TABLE 3.—STATEMENT showing the Number, Tonnage and Nationality of Vessels

Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.	
		Up.	Down.	Up.	Down.
ST. ANDREW'S CANAL.					
Canadian vessels, steam .....	180	21,489	21,425		
" " sail .....	22	937	1,036		
Total Canadian .....	202	22,426	22,461		
United States vessels, steam .....					
" " sail .....					
Total United States .....					
Grand total, St. Andrew's Canal.	202	22,426	22,461		

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passed through the several Canals during the season of Navigation in 1910—*Concluded.*

From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
Up.	Down.	Up.	Down.	Up	Down.	
				21,489	21,425	42,914
				937	1,036	1,973
				22,426	22,461	44,887
				22,426	22,461	44,887

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TABLE 4.—COMPARATIVE STATEMENT of all the Canals for the Years ended December 31, 1909 and 1910.

Articles.	1909.	1910.	Increase.	Decrease.
<i>Class No. 1.</i>				
	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam .....	6,150,224	6,927,062	776,838	
"    sail .....	1,661,354	2,004,728	343,374	
United States vessels, steam .....	15,726,035	20,991,142	5,265,107	
"    sail .....	733,287	786,135	52,868	
Total, class No. 1 .....	24,270,900	30,709,087	6,438,187	
<i>Class No. 2.</i>				
	No.	No.	No.	No.
Passengers. ....	272,222	320,574	48,352	
<i>Class No. 3.</i>				
	Tons.	Tons.	Tons.	Tons.
Barley .....	176,577	161,016		15,561
Buckwheat .....	6,789	1,048		5,741
Corn .....	180,203	336,592	156,389	
Oats .....	432,769	565,430	132,661	
Rye .....	7,688	4,272		3,416
Flax .....	206,750	85,654		121,096
Peas .....	326	340	14	
Wheat .....	3,397,567	3,222,862		174,705
Flour .....	324,044	362,187	39,143	
Hay .....	36,503	42,846	6,343	
Other mill products .....	57,288	55,003		2,285
Fruit and vegetables .....	15,036	16,026	990	
Potatoes .....	9,457	7,082		2,375
Live stock .....	1,635	2,250	615	
Poultry, game, fish .....	3,064	2,815		249
Dressed meats .....	573	148		425
Other packing house products .....	3,201	1,205		1,996
Hides and leather .....	594	1,261	667	
Wool .....	287	675	388	
All other animal products .....	14,947	12,169		2,778
Total, class No. 3 .....	4,875,298	4,881,881	337,210	330,627
<i>Class No. 4.</i>				
Agricultural implements .....	18,836	28,358	9,522	
Cement, bricks, lime .....	489,745	728,453	238,708	
Household goods and furniture .....	2,517	3,797	1,280	
Iron, pig and bloom .....	98,667	115,997	17,330	
"    and steel, all other .....	309,188	252,061		57,127
Petroleum and other oils .....	99,980	106,191	6,211	
Sugar and salt .....	104,474	101,003		3,471
Wines, liquors and beers .....	18,314	28,316	10,002	
Merchandise not enumerated .....	723,680	861,361	137,681	
Total, class No. 4 .....	1,865,401	2,225,587	429,734	60,598

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TABLE 4.—COMPARATIVE STATEMENT of all the Canals for the Years ended December 31, 1909 and 1910—*Concluded.*

Articles.	1909.	1910.	Increase.	Decrease.
<i>Class No. 5.</i>	Tons.	Tons.	Tons.	Tons.
Pulpwood .....	883,937	777,427	.....	106,510
Sawed lumber .....	668,780	735,589	66,809	.....
Squared timber .....	31,772	58,633	26,861	.....
Shingles .....	8,992	11,475	2,483	.....
Other woods .....	95,665	98,294	2,629	.....
Total, class No. 5. ....	1,689,146	1,681,418	98,722	106,510
<i>Class No. 6.</i>				
Hard coal .....	933,234	1,208,722	275,488	.....
Soft " .....	3,090,799	4,429,222	1,338,423	.....
Coke .....	1,456	792	.....	664
Copper ore .....	8,329	37,986	29,657	.....
Iron " .....	21,204,848	28,494,716	7,289,868	.....
Other " .....	52,237	30,334	.....	21,903
Total, class No. 6. ....	25,290,908	34,201,772	8,933,436	22,567
Grand total .....	33,720,748	42,990,608	9,790,162	520,302

Net increase, 9,269,860.







TABLE 6—SUMMARY Statement of Traffic on the undermentioned Canals during the Season of Navigation, ended December 31, 1910, showing the total quantity of each description of property passed through.

	Sault Ste. Marie.	Welland.	St. Lawrence	Chambly.	Ottawa.	Rideau.	St. Peter's.	Murray.	Trent Valley.	St. Andrew's
Vessels of all kinds.....	Tons, 23,361,198	Tons, 2,148,517	Tons, 3,392,539	Tons, 467,246	Tons, 452,870	Tons, 183,242	Tons, 107,053	Tons, 379,450	Tons, 172,085	Tons, 44,887
Passengers.....	No., 33,291	No., 1,655	No., 129,752	No., 2,399	No., 26,458	No., 26,040	No., 633	No., 33,782	No., 69,186	No., 6,398
<i>Forest Produce of Wood.</i>										
Pulwood.....	Tons, 10,350	Tons, 123,143	Tons, 264,062	Tons, 364,717	Tons, 2,049	Tons, 2,049	Tons, 2,049	Tons, 915	Tons, 5,963	Tons, 6,228
Sawed lumber.....	64,163	21,372	259,667	130,365	218,230	29,472	8,168	2,113	1,782	317
Squared timber.....	13,285	8,097	28,776	19	6,605	788	431	89	543	.....
Shingles.....	9,141	525	545	14	65	110	886	.....	189	.....
Other woods.....	3,674	1,600	11,278	1,064	43,299	7,607	639	.....	27,372	1,407
Totals.....	100,613	154,737	564,328	496,119	268,199	40,026	10,124	3,471	35,849	7,952
<i>Animals and Produce of Animals.</i>										
Live stock.....	47	.....	1,003	233	649	13	35	.....	270	.....
Poultry, game and fish.....	.....	202	168	12	88	7	2,328	.....	10	.....
Dressed meats.....	.....	.....	47	.....	2	50	19	.....	29	.....
Other packing house products.....	12	.....	363	98	267	206	206	.....	52	.....
Hides and leather.....	903	248	77	.....	11	6	6	.....	12	.....
Wool.....	394	238	29	1	.....	1	2	.....	5	.....
All other animal products.....	12	.....	7,825	60	2,225	1,844	3	.....	53	.....
Total.....	1,368	688	9,514	404	3,242	2,124	2,599	149	435	.....
<i>Agricultural Products.</i>										
Barley.....	117,687	21,575	21,654	23	19	45	7	.....	6	.....
Buckwheat.....	.....	.....	1,038	9	3	.....	5	.....	.....	.....
Corn.....	4,879	223,980	101,258	90	55	316	3	.....	2	.....
Oats.....	282,369	134,233	140,709	522	583	426	4,569	.....	18	1
Rye.....	3,780	.....	461	.....	.....	.....	2	.....	6	.....
Flax.....	69,792	6,942	8,919	4	.....	1	19	.....	.....	.....





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Sawed lumber.....	2,230	2,357	22,179	884	34,605	1,908	90	5,022	59,141	64,163	49,733	14,430
Shingles.....	7,051	555	160	11,527	8,831	3,912	894	11,123	9,141	9,141	5,085	3,456
Square timber.....	17,590	85	1,075	60	713	3,275	30	30,217	2,162	13,285	9,048	4,237
Sugar and salt.....		1,073,176	461,054		475,063				115	30,332	25,612	4,720
Wheat.....	4,419	15	364	60	40			4,843	2,051,889	2,051,889	1,809,211	242,678
Wines, liquors and beers.....					394				55	4,898	4,648	230
Wool.....					394				394	394	394	
Total freight.....	779,961	1,567,285	28,648	3,035,290	29,332,862	969,248	117,058	4,813,147	31,582,540	36,395,087	3,378,268	33,017,419

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TABLE 7 (No. 2)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Welland Canal during the Season of Navigation in 1910.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....	13,624								13,624				13,624	
All other animal.....														
Barley.....		17,735										21,375	17,735	3,840
Buckwheat.....														
Cement, bricks, &c.....	99,541	8,954	292		2,000		200		101,833	9,154			108,287	2,700
Coal, hard.....	2,045		197,482		15,974				215,501					215,501
" soft.....							357,579			361,990				361,990
Coke.....							192			192				192
Corn.....							103,012			229,980				229,980
Dressed meats.....									645	6,942			6,942	
Flax.....		6,297		645				700		6,297			6,942	
Flour.....		28,593								41,152			29,293	11,859
Fruits and vegetables.....					50				50					50
Hay.....	841								841				841	
Hides and leather.....	15								15	233			15	233
Household goods.....	141								141	3			144	
Iron, pig and bloom.....	17,376	386	1,419				993		18,995	1,379			19,393	981
Iron and steel, all other.....	18,433	1,217	1,944				15,113		20,877	16,339			22,214	14,993
Lime stock.....														
Live stock.....	101,604	23,023	21,240	1,289	52,080	15,478	255	7,488	175,179	47,373			146,520	75,932
Merchandise.....		133,856								136,233			136,233	
Oats.....									1,113	17,036			1,584	16,565
Other mill products.....		471												
" packing house products.....														
" woods.....	17								17	1,583				1,600
Orc, all other.....	800								800	1,552			800	1,552
" copper.....														
" iron.....										2,180				2,180
Peas.....										29,779				29,779
Petroleum.....	129	27,302	1,049		8				1,186	56,621				123
Poultry, game and fish.....									202					202
Potatoes.....														
Pulpwood.....	1,035		129,577		1,531				123,143				122,383	760
Rye.....														

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Sawed lumber..	4,440	5,194	11,738	4,600	21,372	21,372	8,402	12,970
Shingles.....	3,417	500	29	.....	525	525	500	25
Square timber.....	80	.....	.....	4,600	8,017	8,097	2,367	5,730
Sugar and salt.....	5,969	1,954	34,723	625	1,022	43,668	8,754	34,914
Wheat.....	486,309	.....	10,717	90,407	587,493	587,493	514,282	73,211
Wines, liquors and beers.....	3,440	4,379	122	1,616	2,127	10,068	9,759	399
Wood.....	.....	5	233	.....	233	233	5	233
Total freight.....	265,790	154,617	197,301	654,264	1,601,456	2,326,290	1,196,946	1,129,344



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Sugar and salt	5,969	397	1,954	34,723	629	42,646	1,022	43,668	8,754	34,914
Wheat	479,680	511	4,379	10,717	90,467	7,941	580,864	580,864	507,653	73,211
Wines, liquors and beers	3,440	5	5	233	1,616	5	2,127	10,068	9,759	309
Wool				288,198			233	238		233
Total freight	265,192	706,153	154,617	6,983	10,229	646,846	1,557,283	2,281,519	1,159,783	1,121,926







TABLE 7 (No. 5). GENERAL STATEMENT showing the Quantity of each Article Transported on the St. Lawrence Canals during the Season of Navigation in 1910.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	U. States.
Agricultural implements.	228	18							228	18				
All other animal.	1,163	6,657					3		1,166	6,657			246	3
Barley	1,523	20,131							1,523	20,131			7,823	
Buckwheat.	614	304							614	304			21,654	
Cement, bricks, &c.	100,829	90,709							100,829	90,709			1,638	
Coal, hard.	9,114	2			350	298,718			9,464	298,720			189,211	2,320
" soft.	115,918	11,554				318,591			145,948	330,145			8,942	269,242
Coke.	300								300				300	
Corn	1,174	22,495							1,474	22,495			23,969	77,289
Dressed meats.	26	21							26	21			47	
Flax.	1,321	7,598							1,321	7,598			8,919	
Flour	2,043	32,607							2,043	32,607			34,650	
Fruits and vegetables.	283	6,612							283	6,612			6,895	
Hay.	6,514	5,229							6,514	5,229			11,743	
Hides and leather	41	56							41	56			77	
Household goods	662	1,036					2		662	1,038			1,698	2
Iron, pig and bloom.	20,692	243					16		20,842	259			21,101	16
Iron and steel, all other.	51,570	6,016					6,120		51,827	12,136			57,843	6,120
Live stock.	84	919							84	919			1,003	
Merchandise	110,251	27,517			329		184		117,616	35,727			141,374	11,969
Oats.	4,490	136,229							4,490	136,229			138,992	1,717
Other mill products.	8,306	7,112					1,549		8,306	11,961			11,035	6,232
" packing house products	292	75							292	73			365	
" wood.	127	8,829							2,449	8,829			11,038	240
Ore, all other.	4,063	248							4,063	248			1,451	2,850
" copper.														
" iron.	10	154							10	154			164	
Peas.	101	45							101	45			146	
Petroleum	4,292	15,355					17,060		4,872	32,415			17,787	19,500
Poultry, game and fish.	78	90							78	90			168	
Potatoes.	91	594							91	594			685	
Pulpwood									264,062				264,062	



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TABLE 7 (No. 6).—GENERAL STATEMENT showing the Quantity of each Through Article Transported on the St. Lawrence Canals during the Season of Navigation in 1910.

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.		Origin of Cargo.		
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.	
Agricultural implements.....	7								7					7	
All other animal.....		4,457								4,457				4,457	
Barley.....	5	20,000							5	20,000				20,000	
Buckwheat.....		372								372				372	
Cement, bricks, &c.....	20,995	484							20,995	484				21,479	
Coal, hard.....	650								650	257,996				258,646	
" soft.....	6,701								6,701	308,334				315,035	
Coke.....														6,701	308,334
Corn.....		323								77,612				323	77,939
Dressed meats.....	10								10					10	
Flax.....	645	6,607							645	6,607				7,252	
Flour.....	187	27,081							187	27,081				27,268	
Fruits and vegetables.....	35	6,087							35	6,087				6,122	
Hay.....	216	7							216	7				223	
Hides and leather.....	39								39					39	
Household goods.....	382	805							382	808				1,190	2
Iron, pig and bloom.....	20,060	12	150						20,210	28				20,238	16
Iron and steel, all other.....	20,505	3,811	257						20,762	9,931				24,693	6,120
Live stock.....	2								2					26	
Merchandise.....	95,726	20,564	6,616						102,342	28,245				130,587	7,681
Oats.....	90	130,997							90	130,997				131,087	1,717
Other mill products.....	1,229	5,809							1,229	10,358				11,587	
" packing house products.....	40	25							40	25				65	
" woods.....		2	2,082						2,082	2				2,084	
Ore, all other.....															
" copper.....															
" iron.....	10								10					10	
Peas.....	90								90					90	
Petroleum.....	925	15,021	580						1,505	32,081				16,526	17,060
Poultry, game and fish.....															
" potatoes.....	5	7							5	7				12	
Pulpwood.....			264,062											264,062	
Rye.....															
Sawed lumber.....			10,577						10,577	487				10,577	487



TABLE 7 (No. 7)—GENERAL STATEMENT showing the Quantity of each Way Article Transported on the St. Lawrence Canals during the Season of Navigation in 1910.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....	221	18							221	18			239	
All other animal.....	1,158	2,200					3		1,161	2,200			3,361	3
Barley.....	1,523	131							1,654	131			1,654	
Buckwheat.....	644	22							644	22			666	
Cement, bricks, &c.....	79,827	90,225					350		79,827	90,225			170,052	2,320
Coal, hard.....	8,464								8,814	10,724			8,292	11,246
"    soft.....	139,247	11,554							139,247	21,811			150,801	10,257
Coke.....	300								300				300	
Corn.....	1,474	22,172							1,174	22,172			23,646	
Dressed meats.....	16	21							16	21			37	
Flax.....	676	991							676	991			1,667	
Flour.....	1,856	5,256							1,856	5,256			7,382	
Fruits and vegetables.....	248	525							248	525			773	
Hay.....	6,298	5,222							6,298	5,222			11,520	
Hides and leather.....	2	36							2	36			38	
Household goods.....	280	250							280	230			510	
Iron, pig and bloom.....	632	231							632	231			863	
Iron and steel, all other.....	31,065	2,205							31,065	2,205			33,270	
Live stock.....	82	835							82	835			377	
Merchandise.....	14,525	6,953	236		184	529			15,274	7,482			18,468	4,288
Oats.....	4,390	5,232							4,390	5,232			9,622	
Other mill products.....	7,077	1,613							7,077	1,603			8,680	
"    packing horse products.....		48								252			300	
"    woods.....	127	8,827			240				367	8,827			8,924	240
Ore, all other.....	4,063	248							4,063	248			4,311	2,860
"    copper.....													154	
"    iron.....	11	154							11	154			56	
Peas.....	11	45								45			56	
Petroleum.....	3,367	334							3,367	334			3,701	2,440
Poultry, game and fish.....	78	90							78	90			168	
Potatoes.....	86	587							86	587			673	
Pulpwood.....														
Rye.....	140	321							140	321			461	

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Sawed lumber.....	40,653	185,710	22,235	5	40,658	207,945	248,603	248,598	5
Shingles.....	500	45	.....	.....	500	45	545	545	.....
Square timber.....	14	26,962	.....	.....	14	26,962	26,976	26,967	.....
Sugar and salt.....	5,343	720	.....	.....	5,343	720	6,063	5,895	168
Wheat.....	15,823	4,334	.....	.....	15,823	4,334	20,157	20,157	.....
Wines, liquors and beers.....	984	12	.....	.....	984	12	996	996	.....
Wool.....	6	8	.....	.....	6	8	14	14	.....
Total freight.....	371,452	384,439	235	334	372,799	428,182	800,981	757,154	33,827



TABLE 7 (No. 8)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Chambly Canal during the Season of Navigation in 1910.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.	116	2							116	2			118	
All other animal.	2	58							2	58			60	
Barley.	21	2							21	2			23	
Buckwheat.	2	2							2	2			4	
Cement, bricks, &c.	201	40							201	5,543			5,744	5,503
Coal, hard.	5	207							5	99,123			99,128	98,916
Coal, soft.										357			357	357
Corn.	95	4							95	4			99	
Dressed meats.														
Flax.														
Floor.	1,083	34							1,083	34			1,117	
Fruits and vegetables.	628	2,052							628	2,059			2,687	17
Hay.	11,775	7,026							11,775	7,026			18,801	
Hides and leather.														
Household goods.	40	22							40	22			62	
Iron, pig and bloom.	97	17							97	17			114	
Iron and steel, all other.	840	3							840	3			843	
Live stock.	7	292							7	226			233	4
Merchandise.	2,039	1,008							2,039	12,020			14,059	11,012
Oats.	34	488							34	488			522	
Other mill products.	240	7							240	7			247	
" packing house products.	80	18							80	18			98	
" woods.	20	1,044							20	4,243			4,263	4,243
Ore, all other.														
" copper.														
" iron.														
Peas.	27	6							27	6			33	
Petroleum.	152								152				152	
Poultry, game and fish.	2	10							2	10			12	
Potatoes.	22								22				22	
Pulpwood.	364,717								364,717				364,717	
Rye.														
Sawed lumber.	37	23							130,282	23			130,305	



TABLE 7 (No. 9).—GENERAL STATEMENT showing the Quantity of each Article Transported on the St. Peter's Canal during the Season of Navigation in 1910.

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.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.
Agricultural implements.....	11	1							11	1			12	
All other animal.....	2	1							2	1			3	
Barley.....	7								7				7	
Buckwheat.....	5								5				5	
Cement, bricks, &c.....	409	2,230							409	2,230			2,639	
Coal, hard.....	218							229	447				218	
" soft.....	17	41,896							17	41,896			41,913	
Coke.....	3								3				3	
Corn.....	19								19				19	
Dressed meats.....														
Flax.....														
Flour.....	1,934	1							1,934	1			1,935	
Fruits and vegetables.....	974								974				974	
Hay.....	2,996								2,996				2,996	
Hides and leather.....	4	2							4	2			6	
Household goods.....	49								49				49	
Iron, pig and bloom.....	64								64				64	
Iron and steel, all other.....	254	251							254	251			505	
Live stock.....	35								35				35	
Merchandise.....	2,647	186							2,647	186			2,833	
Oats.....	4,569								4,569				4,569	
Other mill products.....	627								627				627	
" packing house products.....	206								206				206	
" woods.....	428	211							428	211			639	
Ore, all other.....	955	4,913							955	4,913			5,868	
" copper.....														
" iron.....	2	238							2	238			240	
Peas.....														
Petroleum.....	414	91							414	91			505	
Poultry, game and fish.....	128	2,200							128	2,200			2,328	
Potatoes.....	5,734	2							5,734	2			5,736	
Pulpwood.....														
Rye.....	19								19				19	
Sawed lumber.....	8,165	3							8,165	3			8,168	

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Shingles.....	886	886	886	886	886	886	886	886	886
Square timber.....	431	431	431	431	431	431	431	431	431
Sugar and salt.....	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142
Wheat.....	128	128	128	128	128	128	128	128	128
Wines, liquors and beers.....	12	12	12	12	12	12	12	12	12
Wool.....	2	2	2	2	2	2	2	2	2
Total freight.....	33,482	33,711	52,240	52,240	85,951	85,722	85,722	85,722	229

TABLE 7 (No. 10)—GENERAL STATEMENT showing the Quantity of each Article Transported on the Murray Canal during the Season of Navigation in 1910.

Articles.	From Canadian to Canadian Ports.		From Canadian to Canadian Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
	Agricultural implements.		2								2	2	
All other animal.		23								23	53		
Barley.	30								30				
Buckwheat.													
Cement, bricks, &c.	149,800								149,800		149,800		
Coal, hard.													
" soft.		297								7,400	7,400		7,103
Coke.													
Corn.										29		29	
Dressed meats.		29											
Flax.													
Flour.	1,645	2,602							1,645	2,602	4,247		4,247
Fruit and vegetables.													
Hay.													
Hides and leather.		50							71	50	121		121
Household goods.	71									667	667		667
Iron, pig and bloom.		277							1,135	277	1,412		1,412
Iron and steel, all other.	1,135												
Lave stock.													
Merchandise.	5,514	3,738							5,514	3,738	9,252		9,250
Oats.													
Other mill products.	118	30							118	30	148		148
" packing house products.	10	42							10	42	52		52
" woods.	354								354		354		354
Ore, all other.													
" copper.													
" iron.													
Peas.													
Petroleum.	85	287							85	287	372		372
Poultry, game and fish.	10								10		10		10
Potatoes.													
Pulpwood.	360								915		915		915
Rye.													
Sawed lumber.	2,095	18							2,095	18	2,113		2,113







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Sawed lumber .....	459	162,062	60,681	.....	459	222,743	223,202	223,202	.....
Shingles .....	20	45	.....	.....	20	45	65	65	.....
Square timber .....	2	1,633	.....	.....	2	1,633	1,633	1,633	.....
Sugar and salt .....	4,268	64	.....	.....	4,268	64	4,332	4,332	.....
Wheat .....	59	.....	.....	.....	59	.....	59	59	.....
Wines, liquors and beers .....	955	11	.....	.....	955	11	966	966	.....
Wool .....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total freight .....	49,923	266,519	61,013	7,906	57,729	327,532	385,261	377,268	7,993

TABLE 7 (No. 12).—GENERAL STATEMENT showing the Quantity of each Article Transported on the Rideau Canal during the Season of Navigation in 1910.

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.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
Agricultural implements.....	285	177							285	177	462		462
All other animal.....	518	1,826							518	1,826	1,844		1,844
Barley.....		45								45			45
Buckwheat.....													
Cement, bricks, &c.....	29,171	13,217	4				925	8,703	29,175	31,217	60,392		60,392
Coal, hard.....	8	26							933	8,729	9,662		9,662
" soft.....	227	16						3,899	227	3,415	3,642		3,413
Coke.....									5	311	316		256
Corn.....	5	311							4	18	22		22
Dressed meats.....	4	18								1			1
Flax.....		1								1			
Flour.....	88	260							88	260	348		348
Fruits and vegetables.....	325	75							325	75	400		400
Hay.....	361	18							361	18	379		379
Hides and leather.....	3	1							3	1	4		4
Household goods.....	132	128							132	128	260		260
Iron, pig and bloom.....	221	122							221	122	343		343
Iron and steel, all other.....	1,025	187							1,025	187	1,212		1,212
Live stock.....	8	5							8	5	13		13
Merchandise.....	4,818	2,854					535	178	5,353	3,032	8,385		7,672
Oats.....		426								426	426		426
Other mill products.....	42	265							42	265	307		307
" packing house products.....	199	34							199	34	233		233
" woods.....	6,599	1,008							6,599	1,008	7,607		7,607
Ore, all other.....	9	234							9	234	243		243
" copper.....													
" iron.....													
Peas.....	1								1		1		1
Petroleum.....	583	329							583	329	912		912
Poultry, game and fish.....	4	3							4	3	7		7
Potatoes.....	15	3							15	3	18		18
Pulpwood.....	552	1,497							552	1,497	2,049		2,049
Rye.....		2								2	2		2
Sawed lumber.....	8,384	15,218					5,870		8,384	21,088	23,472		23,472

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Shingles	96	14	96	14	110	110
Square timber	677	111	677	111	788	788
Sugar and salt	3,097	589	3,097	589	3,636	3,636
Wheat	17	625	17	625	642	642
Wines, liquors and beer	574	123	574	123	697	697
Wool	1	1	1	1	1	1
Total freight	58,049	57,218	59,513	75,368	134,881	121,043
		4	12,280	1,460		13,838
		5,870				

TABLE 7 (No. 13).—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals during the Season of Navigation in 1910.

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.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	United States.
Agricultural Implements													
All other animal													
Barley	21	53							21	53	74		71
Buckwheat	93	58							93	58	151		151
Cement, bricks, &c	6								6		6		6
Coal, hard.	7,126	270							7,126	270	7,396		7,396
" soft	92	115							92	115	207		207
Coke	68	115							68	115	183		183
Corn		2								2	2		2
Dressed meats		1								1	1		1
Flax	43	43							43	43	86		86
Flour													
Fruits and vegetables													
Hay	48	2							48	2	50		50
Hides and leather		12								12	12		12
Household goods	37	9							37	9	46		46
Iron, pig and bloom	32	40							32	40	72		72
Iron and steel, all other	20	3							20	3	23		23
Lave stock	243	27							243	27	270		270
Merchandise	650	353							650	353	1,003		1,003
Oats	18	18							18	18	36		36
Other mill products	16	46							16	46	62		62
" packing house products													
" woods													
Ore, all other	5,770	21,602							5,770	21,602	27,372		27,372
" copper		374								374	374		374
" iron	30								30		30		30
" iron	30	7							30	7	37		37
Pears	19	5							19	5	24		24
Petroleum													
Poultry, game and fish													
Potatoes	131	1							131	1	132		132
Pulpwood	110	5,853							110	5,853	5,963		5,963
Rye	6								6		6		6

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Sawed lumber .....	720	1,062	720	1,062	1,782	1,782
Shingles .....	51	138	51	138	189	189
Square timber .....	26	517	26	517	543	543
Sugar and salt .....	11		11		11	11
Wheat .....	229		229		229	229
Wines, liquors and beers .....	19	4	19	4	23	23
Wool .....		1		1	1	1
Total freight .....	15,665	30,598	15,665	30,598	46,263	46,263







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TABLE 8.—STATEMENT showing the Classified Tonnage of all kinds of Vessels  
SAULT STE.

CANADIAN.							
Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	5,000 to 5,142 tons	1	5,142	1	5,000 to ---- tons		
2	4,000 " 5,000 "	1	4,500	2	4,000 " 5,000 "		
3	3,000 " 4,000 "	2	7,000	3	3,000 " 4,000 "		
4	2,000 " 3,000 "	8	18,500	4	2,000 " 3,000 "		
5	1,000 " 2,000 "	64	80,506	5	1,000 " 2,000 "		
6	Under 1,000 "	50	12,090	6	Under 1,000 "	26	7,070
	Total	126	127,732		Total	26	7,070

WELLAND							
1	250 to 1,665 tons	65	72,766	1	250 to 1,226 tons	9	7,720
2	200 " 249 "	3	625	2	200 " 249 "	3	625
3	150 " 199 "	2	320	3	150 " 199 "	2	365
4	100 " 149 "	3	370	4	100 " 149 "	10	1,060
5	50 " 99 "	5	380	5	50 " 99 "	3	205
6	Under 50 "	24	634	6	Under 50 "	1	15
	Total	104	75,095		Total	28	9,990

ST. LAWRENCE							
1	250 to 1,665 tons	74	69,492	1	250 to 1,000 tons	104	51,965
2	200 " 249 "	4	820	2	200 " 249 "	8	1,620
3	150 " 199 "	14	2,400	3	150 " 199 "	75	12,030
4	100 " 149 "	15	1,810	4	100 " 149 "	92	10,340
5	50 " 99 "	56	3,885	5	50 " 99 "	42	3,260
6	Under 50 "	79	1,485	6	Under 50 "	17	608
	Total	242	79,892		Total	338	79,823

RIDEAU, OTTAWA							
1	250 to 492 tons	3	1,162	1	250 to 350 tons	1	350
2	200 " 249 "	2	400	2	200 " 249 "	7	1,480
3	150 " 199 "	4	650	3	150 " 199 "	49	7,970
4	100 " 149 "	5	575	4	100 " 149 "	44	5,595
5	50 " 99 "	7	470	5	50 " 99 "	14	895
6	Under 50 "	32	575	6	Under 50 "	12	290
	Total	53	3,832		Total	127	16,580

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passed through the following during the Season of Navigation in 1910.

## MARIE CANAL.

UNITED STATES.							
Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1	5,000 to 6,498 tons .....	104	546,000	1	5,000 to — tons .....		
2	4,000 " 5,000 " .....	65	275,000	2	4,000 " 5,000 " .....	3	12,500
3	3,000 " 4,000 " .....	138	452,500	3	3,000 " 4,000 " .....	13	40,500
4	2,000 " 3,000 " .....	56	120,000	4	2,000 " 3,000 " .....	10	21,000
5	1,000 " 2,000 " .....	54	75,500	5	1,000 " 2,000 " .....	7	9,000
6	Under 1,000 " .....	93	112,750	6	Under 1,000 " .....	24	10,950
	Total .....	510	1,581,750		Total .....	57	93,950

## CANAL.

1	250 to 1,691 tons .....	33	39,916	1	250 to 1,599 tons .....	3	3,908
2	200 " 249 " .....			2	200 " 249 " .....	1	200
3	150 " 199 " .....			3	150 " 199 " .....		
4	100 " 149 " .....	1	100	4	100 " 149 " .....		
5	50 " 99 " .....	9	630	5	50 " 99 " .....	1	75
6	Under 50 " .....	24	335	6	Under 50 " .....	4	71
	Total .....	67	40,981		Total .....	9	4,234

## CANAL.

1	250 to 1,552 tons .....	24	21,331	1	250 to 1,590 tons .....	16	9,968
2	200 " 249 " .....			2	200 " 249 " .....	1	200
3	150 " 199 " .....	2	340	3	150 " 199 " .....		
4	100 " 149 " .....	5	590	4	100 " 149 " .....	45	4,670
5	50 " 99 " .....	7	460	5	50 " 99 " .....	75	6,925
6	Under 50 " .....	36	395	6	Under 50 " .....		
	Total .....	74	23,116		Total .....	137	21,763

## AND CHAMBLEY CANALS.

1	250 to — tons .....			1	250 to 250 tons .....	1	250
2	200 " 249 " .....			2	200 " 249 " .....	1	200
3	150 " 199 " .....			3	150 " 199 " .....	11	1,710
4	100 " 149 " .....			4	100 " 149 " .....	382	40,260
5	50 " 99 " .....			5	50 " 99 " .....	254	23,905
6	Under 50 " .....			6	Under 50 " .....		
	Total .....				Total .....	649	66,325



## APPENDIX

### DOMINION CANALS

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows:—

*First—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)*

	Miles.
1. Lachine canal. . . . .	8½
Lake St. Louis and River St. Lawrence. . . . .	16
2. Soulanges canal. . . . .	14
Lake St. Francis and River St. Lawrence. . . . .	33
3. Cornwall canal. . . . .	11
River St. Lawrence. . . . .	5
4. Farran's Point canal. . . . .	1½
River St. Lawrence. . . . .	10
5. Rapide Plat canal. . . . .	3¾
River St. Lawrence. . . . .	4
6. Galops canal. . . . .	7½
River St. Lawrence and Lake Ontario. . . . .	236
7. Welland canal. . . . .	26¾
Lake Erie, Detroit river, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie canal. . . . .	1¼
Lake Superior to Port Arthur. . . . .	266
Total. . . . .	1,223½
To Duluth. . . . .	1,357
Chicago. . . . .	1,286

*Second.—Ottawa to Lake Champlain.*

1. Grenville. 2. Carillon. 3. St. Anne's. 4. Chambly. 5. St. Ours canals.

*Third.—Ottawa to Kingston and Perth.*

1. Rideau canal.

*Fourth.—Lake Ontario at Trenton to Lake Huron at mouth of River Severn.*

1. Trent canal (not completed).

*Fifth.—Ocean to Bras d'Or lakes.*

1. St. Peter's canal.



## 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, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of Lake Superior, a distance of 2,200 statute miles. The distance to Duluth is 2,343 statute miles. The distance to Chicago, 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through Lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869, this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the River St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and Lake Superior is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior, are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the River St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

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## LACHINE CANAL.

First construction commenced.....	1821
“ completed.....	1825
First enlargement commenced.....	1843
“ completed.....	1848
Second enlargement commenced.....	1873
“ completed.....	1901
Length of canal.....	8½ statute miles.
Number of locks.....	5
Dimensions of locks.....	270 feet by 45 feet.
Total rise of lockage.....	45 feet.
Depth of water } at two locks.....	18 “
on sills. } at three locks.....	14 “
Average width of new canal.....	150 “

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal 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.

## SOULANGES CANAL.

Construction commenced.....	1892
Open for traffic.....	1899
Length of canal.....	14 statute miles.
Number of locks } lift.....	4
} guard.....	1
Dimensions of locks.....	280 feet by 45 feet.
Total rise of lockage.....	84 feet
Depth of water on sills.....	15 “
Breadth of canal at bottom.....	100 “
Breadth of canal at water surface.....	164 “
Number of arc lights.....	219 of 2,000 c. p. each.

The canal extends from Cascade point to Coteau Landing, overcoming the Cascade Rapids, Cedar rapids and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges, the distance is sixteen miles.

## CORNWALL CANAL.

First commenced, 9 feet.....	1844
“ opened.....	1847
Enlargement commenced.....	1897
“ completed.....	1900
Length of canal.....	11 statute miles.
Number of locks.....	6
Dimensions of locks.....	270 feet by 75 feet.
Total rise of lockage.....	48 feet.
Depth of water on sills.....	14 “
Breadth of canal at bottom.....	100 “
Breadth of canal at water surface.....	164 “

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The old lift locks, 200 feet by 45 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through Lake St. Francis, of  $32\frac{3}{4}$  miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's landing.

### WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat and Galops canals are collectively known as the Williamsburg Canals.

#### FARRAN'S POINT CANAL.

First commenced, 9 feet . . . . .	1844
“ opened . . . . .	1847
Enlargement commenced . . . . .	1897
“ completed . . . . .	1900
Length of canal . . . . .	$1\frac{1}{2}$ miles.
Number of locks . . . . .	1
New lock . . . . .	800 feet by 45 feet
Old lock . . . . .	200 “
Total rise or lockages . . . . .	$3\frac{1}{2}$ feet.
Depth of water on sills of new lock . . . . .	14 “
Depth of water on sills of old lock . . . . .	9 “
Breadth of canal at bottom . . . . .	90 “
Breadth of canal at water surface . . . . .	154 “

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

#### RAPIDE PLAT CANAL.

First commenced, 9 feet . . . . .	1844
“ opened . . . . .	1847
Enlargement commenced . . . . .	1884
“ completed . . . . .	1897
Length of canal . . . . .	$3\frac{3}{4}$ miles.
Number of locks . . . . .	2
Dimensions of locks . . . . .	270 feet by 45 feet.
Total rise in lockage . . . . .	$11\frac{1}{2}$ feet.
Depth of water on sills . . . . .	14 “
Breadth of canal at bottom . . . . .	80 “
Breadth of canal at surface of water . . . . .	152 “

The old lift lock, 200 feet by 45, is also available, with nine feet of water on mitre sills.

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 rapids at that place. Descending vessels run the rapids safely.

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## GALOPS CANAL.

First commenced, 9 feet.....	1844
Opened.....	1846
Enlargement commenced.....	1888
"    completed.....	1903
Length of canal.....	7 $\frac{1}{4}$ miles.
Number of locks.....	3
Dimensions of locks. } one of which is }.....	2-270 by 45.
} a guard lock. }.....	1-800 by 45.
Total rise of lockage.....	15 $\frac{1}{2}$ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	144 "

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4 $\frac{1}{2}$  miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

## MURRAY CANAL.

Construction begun.....	1882
Completed.....	1890
Length between eastern and western pier heads.....	5 $\frac{1}{2}$ miles.
Breadth at bottom.....	80 feet.
Breadth at water surface.....	120
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 Quinte and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

## WELLAND CANAL.

Main line from Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie.

Length of Canal.....	Old Line. 27 $\frac{1}{2}$ miles	Enlarged or New Line. 26 $\frac{3}{4}$ miles
Pairs of guard-gates (formerly 3) .. ..	..	2
Number of locks	{ lift..... 26	25
	{ guard..... 1	1
Dimensions.....	{ 1 lock 200 x 45	270 feet x 45 feet.
	{ 1 lock 200 x 45	
	{ 1 (tidal) 230 x 45	
	{ 24 locks 150 x 45	
Total rise or lockage .. ..	326 $\frac{3}{4}$ feet	326 $\frac{3}{4}$ feet.
Depth of water on sills.. ..	10 $\frac{1}{4}$ "	14 "
Construction commenced, 10 feet 3 inches.....		1824
"    Completed.....		1833
Enlargement commenced, 14 feet.....		1872
"    completed.....		1887

WELLAND RIVER BRANCHES.

Length of canal—	
Port Robinson cut to River Welland . . . . .	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct . . . . .	300 "
Chippewa 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 feet 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 feet.
Total rise or lockage . . . . .	
	7 to 8 feet.
Depth of water on sills . . . . .	9 feet.

PORT WELLAND BRANCH.

Length of canal . . . . .	1¼ miles.
Number of locks . . . . .	1
Dimensions of locks . . . . .	185 feet 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 Allanburg, 11¼ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

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 River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 266 miles, and to Duluth 400 miles.

SAULT STE. MARIE CANAL.

Construction commenced . . . . .	1888
Opened for traffic . . . . .	1895
Length of canal, between the extreme ends of the entrance piers . . . . .	
	5,967 feet.
Number of locks . . . . .	1
Dimensions of locks . . . . .	900 feet by 60 feet.
Depth of water on sills (at lowest known water level) . . . . .	
	20 feet 3 inches.
Total rise or lockage . . . . .	18 feet.
Breadth of canal at bottom . . . . .	141 feet 8 inches.
Breadth at surface of water . . . . .	150 feet.



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This canal has been constructed through St. Mary's island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

## 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 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:—

*Ottawa River Canals.*

The Ste. Anne's lock.	Grenville canal.
Carillon canal.	Rideau canal.

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.	Interme- diate Distance.	Total Distance, from Montreal.
	Miles.	Miles.
The Lachine canal.....	8½	
From Lachine to Ste. Anne's lock.....	15	23
Ste. Anne's lock and piers.....	1	23
Ste. Anne's lock to Carillon canal.....	27	50
The Carillon canal.....	3	51
The Carillon to Grenville canal.....	6½	57
The Grenville canal.....	5½	63
From the Grenville canal to entrance of Rideau navigation.....	56	119
Rideau navigation ending at Kingston.....	126½	245

## STE. ANNE'S LOCK.

Construction commenced.....	1814.
“ completed.....	1816
Rebuilt of wood.....	1833
“ in masonry.....	1843.

	Old Lock.	New Lock.
Length of canal.....	½ mile.	½ mile.
Number of locks.....	1	1
Dimensions of locks.....	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 River Ottawa which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.



## THE CARILLON CANAL.

Construction commenced. . . . .	1819
“ completed. . . . .	1833
Enlargement commenced. . . . .	1871
“ completed. . . . .	1887
Length of canal. . . . .	$\frac{3}{4}$ mile.
Number of locks. . . . .	2
Dimensions of locks. . . . .	200 x 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 navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.

By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

## GRENVILLE CANAL.

Construction commenced. . . . .	1819
“ completed. . . . .	1833
Enlargement commenced. . . . .	1871
“ completed. . . . .	1887
Length of canal. . . . .	$5\frac{3}{4}$ miles.
Number of locks. . . . .	5
Dimensions of locks. . . . .	200 x 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, up to which point the River Ottawa affords unimpeded navigation.

## RIDEAU NAVIGATION.

Construction commenced. . . . .	1826
“ completed. . . . .	1832

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigation waters. . . . .	126 $\frac{1}{4}$ miles.
Number of locks going from Ottawa to Kingston. . . . .	} 35 ascending. 14 descending.
Total lockage. . . . . 446 $\frac{1}{2}$ feet	
Dimensions of locks. . . . .	134 x 33 feet.
Depth of water on sills. . . . .	5 feet.
Navigation depth through the several reaches. . . . .	4 $\frac{1}{2}$ “
Breadth of canal reaches at bottom. . . . .	} 60 feet in earth. 54 feet in rock.
Breadth of canal at surface of water. . . . .	

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## PERTH BRANCH.

Construction commenced. . . . .	1883
"    completed. . . . .	1892
Length of canal. . . . .	7 miles.
Number of locks. . . . .	2
Dimensions of locks. . . . .	134 feet x 33 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.
	60 " in clay.

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on Lake Rideau and the town of Perth.

The summit level of the Rideau 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 Rideau river, and that towards Kingston follows the River Catarqui. 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 southwest descending level to Kingston, supplied by the Mud lake system formerly known as the Devil lake system, discharging into Lake Openicon.

Lake Openicon 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 Catarqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

## 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 up 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 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 distances between Sorel and New York:—

Section of Navigation.	Inter- mediate Distance.	Total Distances.
	Miles.	Miles.
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 DAM.

Construction commenced. . . . .	1844
"    completed. . . . .	1849
Length. . . . .	$\frac{1}{2}$ mile.
Number of locks. . . . .	1
Dimensions of lock. . . . .	200 feet by 45 feet.
Total rise of lockage. . . . .	5 "
Depth of water on sills. . . . .	7 feet at low water.
Length of dam in eastern channel. . . . .	300 "
Length of dam in western channel. . . . .	690 "

At St. Ours, 14 miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

## CHAMBLY CANAL.

Construction commenced. . . . .	1831
"    completed. . . . .	1843
Length of canal. . . . .	12 miles.
Number of locks. . . . .	9
Dimensions of locks:—	
Guard lock, No. 1 at St. Johns. . . . .	122 feet.
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 "
Breadth of canal at 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.

## TRENT CANAL.

The term 'Trent canal' 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. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

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, as originally contemplated and modified, is as follows:—

Through the River Trent, Rice lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, 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 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial Government in 1837, was deferred. By certain works, however, below specified, sections of these

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waters have been made practicable for navigation, and the whole scheme is now being carried out. 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:—

From Trenton, Bay of Quinté to Nine Mile rapids ..	—	9
Nine Mile rapids to Percy landing.. . . . .	19½	—
Percy landing to Heeley's Falls dam.. . . . .	—	14½
Heeley's Falls dam to Peterborough.. . . . .	51¾	—
Peterborough to Lakefield.. . . . .	—	9½
Lakefield to a point across Balsam lake.. . . . .	61	—
	132¼	33

Total distance, Bay of Quinté to a point across Balsam lake.. 165¼

From Sturgeon point on Sturgeon lake, 48¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog.. . . . . 27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young's point, Burleigh rapids, Lovesick, Buckhorn rapids, Bobcaygeon, Fenelon falls and Rosedale; also dams at Lakefield, Young's point, Burleigh falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, 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 Peterborough, the dam at the head of the Nine Mile rapids of the River Otonabee maintains navigation on Lake Katchewanoe up to Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchemannoé and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal.

At Burleigh rapids, 10 miles from Young's point, a canal, about 2¼ miles in length, passes the Burleigh and Lovesick rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn rapids, 7 miles from Burleigh rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15¾ miles from Buckhorn rapids, a dam, 553 feet long, controls the water level to Fenelon falls.

At Fenelon falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

1 Lock at Rosedale (maintained by the Ontario government), 100' x 30' x 4' 6" to 6' 6" depth water on mitre sill.

2 Locks at Fenelon. . . . . 134' x 33' x 5' 0" to 7' 6" depth water on mitre sill.

1 " Lindsay . . . . . 134' x 33' x 5' 0" to 7' 6" " "

1 " Bobcaygeon . . . . . 134' x 33' x 5' 8" to 7' 0" " "

1 " Buckhorn . . . . . 134' x 33' x 5' 0" to 9' 0" " "

1 " Lovesick . . . . . 134' x 33' x 5' 0" to 9' 4" " "

2 " Burleigh . . . . . 134' x 33' x 6' 0" to 8' 0" " "

1 " Young's point. 134' x 33' x 5' 0" to 14' 0" " "

1 " Peterborough . . . . . 134' x 33' x 5' 0" to 10' 0" " "

1 " Hastings . . . . . 134' x 33' x 7' 0" to 10' 6" " "

1 " Chisholms . . . . . 134' x 33' x 5' 0" to 8' 6" " "

## ST. PETER'S CANAL, CAPE BRETON.

Construction commenced. . . . .	1854
"    completed. . . . .	1869
Enlargement begun. . . . .	1875
"    completed. . . . .	1881
Length of canal. . . . .	About 2,400 feet.
Breadth at water line. . . . .	50 feet.
Lock. . . . .	One tidal lock, 4 pairs of gates.
Dimensions. . . . .	200 feet by 48 feet.
Depth of water on sills. . . . .	18 feet 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 northern 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.

## BEAUHARNOIS CANAL.

Construction begun. . . . .	1842
"    completed. . . . .	1845
Length of canal. . . . .	12 statute miles.
Number of locks. . . . .	9
Dimensions of locks. . . . .	200 feet by 45 feet.
Total rise or lockage. . . . .	82½ "
Depth of water on sills. . . . .	9 "
Breadth of canal at bottom. . . . .	80 "
Breadth of canal at water surface. . . . .	120 "

As the new Soulanges canal is now opened for navigation, the Beauharnois canal is abandoned for navigation purposes.

## EARLIER CANALS.

A system of three canals preceded the Bearharnois. These were:—

## COTEAU DU LAC CANAL.

Construction commenced. . . . .	1779
"    completed. . . . .	1780

## SPLIT ROCK CANAL.

Construction commenced. . . . .	1779
"    completed. . . . .	1780

## CASCADE POINT CANAL.

Construction commenced. . . . .	1782
"    completed. . . . .	1783

The locks were 20 x 6 feet, and provided for a draft of 2 feet. In 1814 the work of widening them to 12 feet was begun, and finished in 1817.

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Two canals were also constructed off Burlington Bay, Ontario. They were:—

## BURLINGTON BAY CANAL.

Construction commenced. . . . .	1825
“ completed. . . . .	1832

## DESJARDINS CANAL.

Construction commenced. . . . .	1826
“ completed. . . . .	1837

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was  $7\frac{1}{2}$  feet.



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## ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES.

FROM STRAITS OF BELLE-ILE TO PORT ARTHUR, AT HEAD OF LAKE SUPERIOR  
BY WATER.

From	To	Sections of Navigation.	Statute Miles.	
			Inter- mediate.	Total to Straits of Belle-Ile.
Straits of Belle-Ile	Cape Whittle	Gulf of St. Lawrence	240	240
Cape Whittle	West Point, Anticosti	"	201	441
West Point, Anticosti	Father Point	River St. Lawrence	202	643
Father Point	Rimouski	"	6	649
Rimouski	Bic.	"	12	661
Bic.	Isle Verte	"	39	700
Isle-Verte (opp. Saguenay)	Quebec	"	126	826
Quebec	Three Rivers	" to tide-water	74	900
Three Rivers	Montreal	"	86	986
Montreal	Lachine	Lachine Canal	8 $\frac{1}{2}$	994 $\frac{1}{2}$
Lachine	Cascade Point	Lake St. Louis	16	1,009 $\frac{1}{2}$
Cascade Point	Coteau Lauding	Soulanges Canal	14	1,021
Coteau Lauding	Cornwall	Lake St. Louis	30	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 Point	Upper end of Croyle's Island	Farran's Point	3 $\frac{3}{4}$	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 $\frac{3}{4}$	1,095 $\frac{3}{4}$
Point Cardinal	Head of Galops Rapids	Galops Canal	2	1,097 $\frac{3}{4}$
Galops Rapids	Prescott	River St. Lawrence	7 $\frac{3}{4}$	1,105
Prescott	Kingston	"	59	1,164
Kingston	Port Dalhousie	Lake Ontario	170	1,334
Port Dalhousie	Port Colborne	Welland Canal	26 $\frac{3}{4}$	1,360 $\frac{3}{4}$
Port Colborne	Amherstburg	Lake Erie	232	1,592 $\frac{3}{4}$
Amherstburg	Windsor	River Detroit	18	1,610 $\frac{3}{4}$
Windsor	Foot of St. Mary's Island	Lake St. Clair	25	1,635 $\frac{3}{4}$
Foot of St. Mary's Island	Sarnia	River St. Clair	33	1,668 $\frac{3}{4}$
Sarnia	Foot of St. Joseph Island	Lake Huron	270	1,938 $\frac{3}{4}$
Foot of St. Joseph's Island	Foot of Sault Ste. Marie	River Ste. Marie	47	1,985 $\frac{3}{4}$
Sault-Ste. Marie	Head of Sault Ste. Marie	Sault Ste. Marie Canal	1	1,986 $\frac{3}{4}$
Head of Sault Ste. Marie	Point aux Pins	River Ste. Marie	7	1,993 $\frac{3}{4}$
Pointe aux Pins	Port Arthur	Lake Superior	266	2,259 $\frac{3}{4}$
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 $\frac{3}{4}$  miles from the Straits of Belle-Ile to the head of Lake Superior, 73 $\frac{1}{2}$  miles are artificial navigation, and 2,188 $\frac{3}{4}$  open navigation.

Straits of Belle-Ile to Liverpool, 1,942 geographical or 2,234 statute miles.

The total fall from Lake Superior to tide-water is about 600 feet.

The steamboat voyage from Collingwood to Port Arthur is 532 miles.

" " Depot Harbour to Port Arthur is 510 miles; to Duluth is 644 miles; to Chicago 525 miles, and to Milwaukee, 442 miles.

SESSIONAL PAPER No. 20a

TABLE of distances of Stations between the cities of Ottawa and Kingston.

No. of Station.	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.
				Ft.				
		Miles.		Rise.				
				Ft.				
				In.				
1	Ottawa.....	0	8	82 0	3	230 1,320 1,616	13 33 14	
2	Hartwell's.....	4 $\frac{1}{2}$	2	22 0	..	100	28	
3	Hogsback.....	5 $\frac{1}{2}$	2	13 6	1	320	60	
4	Black Rapids.....	9 $\frac{1}{2}$	1	10 0	1	300	12	
5	Long Island.....	14 $\frac{3}{4}$	3	27 0	3	850	68	
6	Burritt's.....	40 $\frac{3}{4}$	1	10 6	1	240	14	
7	Nicholson.....	43 $\frac{3}{4}$	2	15 2	1	500	9	
8	Clowes.....	44 $\frac{1}{2}$	1	10 6	1	481	16	
9	Merrickville.....	46 $\frac{3}{4}$	3	25 0	1	150	6	
10	Maitland.....	55	1	4 9	1	270	8	
11	Edmunds.....	59 $\frac{3}{4}$	1	10 10	1	343	8	
12	Old Slys.....	60 $\frac{1}{2}$	2	15 6	1	250	20	
13	Smith's Falls.....	61 $\frac{1}{2}$	4	33 9	2	600	24	
14	First Rapids or Poonamadie.....	64	1	7 9	1	260	5	
15	Narrows.....	83 $\frac{1}{2}$	1	4 0	1	600	9	
	Total rise at low water.....			292 3				
				Fall				
16	Isthmus.....	87 $\frac{1}{2}$	1	4 0			1 25	
17	Chaffey.....	92	1	12 6			0 13	
18	Davis.....	94 $\frac{1}{2}$	1	9 0	1	300	15	
19	Jones' Falls.....	97 $\frac{3}{4}$	4	60 0	1	300	60	
20	Brewer's Upper Mills.....	108 $\frac{1}{2}$	2	19 0	1	200	20	
21	" 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 $\frac{1}{2}$					0 25	
	Total fall at low water.....			165 4				
	Total.....		47		24	15,472	16 46	



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# RAILWAY STATISTICS

OF THE

## DOMINION OF CANADA

FOR THE

YEAR ENDED JUNE 30

### 1910

*(From sworn Returns furnished by the several Railway Companies)*

A. W. CAMPBELL

*Deputy Minister of the Department of Railways and Canals.*

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY

1910





*To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George. &c., &c., &c., Governor General of Canada.*

MAY IT PLEASE YOUR EXCELLENCY,

The undersigned has the honour to present to Your Excellency the Annual Report of the Comptroller of Statistics for the year ended June 30, 1910,

GEO. P. GRAHAM,  
*Minister of Railways and Canals.*



To the Honourable GEORGE P. GRAHAM,  
Minister of Railways and Canals.

SIR.—I have the honour to submit the annual report of the Comptroller of Statistics for the year ended June 30, 1910.

This is the fourth report compiled from the new schedules which were put into force on July 1, 1906.

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

A. W. CAMPBELL,  
*Deputy Minister of Railways and Canals.*



## OFFICE OF THE COMPTROLLER OF STATISTICS,

OTTAWA, November 15, 1910.

A. W. CAMPBELL, Esq., C.E.,  
Deputy Minister of Railways and Canals.

SIR.—I have the honour to submit herewith Railway Statistics for the year ended June 30, 1910.

Four years of experience with the classifications and schedules which were made effective in 1907 have made reporting railways reasonably familiar with the new method of accounting. The information gathered in this way is presenting a cumulative value as the bases of comparison widen.

It is with peculiar satisfaction I am able to report the prompt return of statistical schedules to the Department. This commendable spirit of co-operation on the part of railways has done much to expedite the heavy work of tabulation.

The figures subjoined reveal a year of marked progress in all the aspects of railway development in Canada.

## MILEAGE.

The railway mileage of Canada was increased by 626.69 miles during the year 1910. Of this increase 519.12 miles were in the four western Provinces of Saskatchewan, Alberta, Manitoba and British Columbia.

The 24,730.86 miles of railway reported as being in operation on June 30 last, do not include a considerable mileage in actual operation, but officially regarded as 'under construction.' For example, while the Grand Trunk Pacific Railway is conducting a regular passenger and freight service over that portion of its line between Winnipeg and Edmonton, as well as a freight service between Fort William and Winnipeg, a distance of more than 900 miles, not a mile of that system is included in the total just indicated. It might, in fact, be fairly assumed that 1,500 miles of additional railway are really available throughout the Dominion, although returned as technically unfinished.

As you are aware, the Department is frequently asked for specific information with respect to the number of miles of railway under construction in Canada. It is always impracticable to give a satisfactory answer. The term 'under construction' is too comprehensive. It covers the work of railway building all the way from the preliminary survey to the driving of the last spike. Assuming, however, that construction implies the active prosecution of positive work toward a completed railway, it is estimated that at least 4,500 miles of line were thus under way on June 30 last.



1 GEORGE V., A. 1911

The record of railway mileage in Canada since 1835 is as follows:—

Year.	Miles in operation.	Year.	Miles in operation.
1835.....	0	1873.....	3,832
1836.....	16	1874.....	4,331
1837.....	16	1875.....	4,804
1838.....	16	1876.....	5,218
1839.....	16	1877.....	5,782
1840.....	16	1878.....	6,226
1841.....	16	1879.....	6,858
1842.....	16	1880.....	7,194
1843.....	16	1881.....	7,331
1844.....	16	1882.....	8,697
1845.....	16	1883.....	9,577
1846.....	16	1884.....	10,273
1847.....	54	1885.....	10,773
1848.....	54	1886.....	11,793
1849.....	54	1887.....	12,184
1850.....	66	1888.....	12,163
1851.....	159	1889.....	12,628
1852.....	205	1890.....	13,151
1853.....	506	1891.....	13,838
1854.....	764	1892.....	14,564
1855.....	877	1893.....	15,005
1856.....	1,414	1894.....	15,627
1857.....	1,444	1895.....	15,977
1858.....	1,863	1896.....	16,270
1859.....	1,994	1897.....	16,550
1860.....	2,065	1898.....	16,870
1861.....	2,146	1899.....	17,250
1862.....	2,189	1900.....	17,657
1863.....	2,189	1901.....	18,140
1864.....	2,189	1902.....	18,714
1865.....	2,240	1903.....	18,988
1866.....	2,278	1904.....	19,431
1867.....	2,278	1905.....	20,487
1868.....	2,270	1906.....	21,353
1869.....	2,524	1907.....	22,452
1870.....	2,617	1908.....	22,966
1871.....	2,695	1909.....	24,104
1872.....	2,899	1910.....	24,731

The railway mileage for 1910 was distributed by Provinces as follows:—

	Miles.	Increase.
Ontario.....	8,230.25	1.14
Quebec.....	3,794.94	132.00
Manitoba.....	3,220.62	15.32
Saskatchewan.....	2,931.90	300.56
Alberta.....	1,488.42	166.90
British Columbia.....	1,832.28	36.34
New Brunswick.....	1,521.65	.....
Nova Scotia.....	1,350.56	.03
Prince Edward Island.....	269.33	.....
Yukon.....	90.91	.....
Total.....	24,730.86	626.86

The growth of railway mileage by Provinces during the past four years is shown in the following table:—

	1907.	1908.	1909.	1910.
Ontario.....	7,638	7,933	8,229	8,230
Quebec.....	3,516	3,574	3,663	3,795
Manitoba.....	3,074	3,111	3,205	3,221
Saskatchewan.....	2,025	2,081	2,631	1,488
British Columbia.....	1,686	1,733	1,796	1,832
New Brunswick.....	1,503	1,509	1,547	1,522
Nova Scotia.....	1,329	1,344	1,351	1,351
Prince Edward Island.....	267	267	269	269
Yukon.....	91	91	91	91

## CORRECTION.

---

The growth of railway mileage by Provinces during the past four years, as shown on page VIII, should read as follows :—

	<b>1907</b>	<b>1908</b>	<b>1909</b>	<b>1910</b>
Ontario.....	7,638	7,933	8,229	8,230
Quebec.....	3,516	3,574	3,663	3,795
Manitoba.....	3,074	3,111	3,205	3,221
Saskatchewan.....	2,025	2,081	2,631	2,932
Alberta.....	1,323	1,323	1,321	1,488
British Columbia.....	1,686	1,733	1,796	1,832
New Brunswick.....	1,503	1,509	1,547	1,522
Nova Scotia.....	1,329	1,344	1,351	1,351
Prince Edward Island.....	267	267	269	269
Yukon.....	91	91	91	91

**J. L. PAYNE,**  
*Comptroller of Statistics.*



## SESSIONAL PAPER No. 20b

The decrease of 25 miles in New Brunswick is due to the elimination of the Albert Southern Railway, which has not been operated for many years.

During the year 1910 there were added 79.43 miles of second track, while yard track and sidings were increased by 393.47 miles. These additions have an important relationship to transportation facilities as a whole. The record in this regard since 1907 is as follows:—

	1907.	1908.	1909.	1910.
Double track.....	1,067	1,211	1,461	1,543
Yard track and sidings.....	4,092	4,546	4,761	5,155

It will be seen that during the past four years there has been an increase of 2,279 miles of main line, 476 miles of second track, and 1,063 miles of yard track and sidings—a total of 3,818 miles.

Combining main line, second track and yard track and sidings, following is the result for the past four years:—

Year.	Miles.	Increase
1907.....	27,967	.....
1908.....	29,068	1,101
1909.....	30,667	1,599
1910.....	31,767	1,100

## RAILWAY CAPITAL.

During the year \$101,816,271 was added to the capital liability of Canadian railways, of which \$40,022,740 was represented in stocks and \$61,793,531 in funded debt. The total of outstanding obligations was \$1,410,297,687.

Comparing 1909 and 1910, the result is as follows:—

	1909.		1910.		Increase.	
	\$	cts.	\$	cts.	\$	cts.
Stocks.....	647,531	647	687,557	387	40,022	740
Funded debt.....	660,946	769	722,740	300	61,793	531
Total.....	1,308,481	416	1,410,297	687	101,816	271

The funded debt of 1910 was divided under the following heads:—

Bonds.....	\$696,677,305
Miscellaneous obligations.....	8,365,077
Income bonds.....	5,036,546
Equipment trust obligations.....	12,661,372
Total.....	\$722,740,300

Details with respect to the distribution of the above stock and bond liability by railways will be found in Table 4.

It has been the quite natural practice of those who have sought to measure the capital liability of Canadian railways to add to the stock and bond issues the cost of

Government railways, as well as the amount received by way of cash subsidy, and to divide the aggregate thus obtained by the main line, or single track, mileage. The so-called capital cost per mile was thus obtained. This has always been regarded as a convenient method of comparing the capital liability of railways in different countries, and, whenever the bases of the calculation have been identical, it was satisfactory; but, when applied to Canada, it has produced a wholly misleading result.

If to the \$1,410,297,687 of stock and bond liability indicated above is added the \$190,753,063 shown in Table 5 to have been received by railways as cash aid, a total of \$1,601,050,750 is had. That sum, divided by the 24,731 miles of main line in Canada, gives a capital liability of \$64,747 per mile. This, however, would be a delusive result, for the sufficient reason that both the capital liability and the railway mileage are exaggerated. Let these two factors be dealt with separately.

First, as to capital liability: It was pointed out in the reports of 1908 and 1909 that a very considerable volume of practically extinct stock and bond obligations was being shown in the annual returns of railways. Smaller roads had in many instances been absorbed by the larger, and, notwithstanding the fact that this absorption involved the purchase of the stocks and bonds of the former by the issue of similar pledges by the latter, the capital liability of both corporations was reported to the Department. That is to say, the A B & C Railway Company, having bought the stocks and bonds of the D E & F Railway Company by issuing new stocks and bonds of its own, and thus coming into possession of the property, returned its own increased liability and that of the absorbed corporation as though both were alive. Obviously, the liability of the acquired railway should be cancelled, and not any longer regarded as representing an actual obligation, although the certificates might be in the vault of the purchasing company. Such would be the practice in everyday commerce. If A obtained possession of a promissory note for \$100 made by B by giving one of his own for a like amount, the transaction would not be said to involve an obligation of \$200.

There are also a considerable number of railways included in Table 4 which, while having outstanding issues of stocks and bonds, have not passed beyond the construction stage. The case of the Grand Trunk Pacific will serve as an illustration of this class. Until a definite mileage is attached to such roads, the only practicable course is to leave out of the calculation the whole of the capital liability. Then, there are lines of railway which are subsidiary to larger corporate interests, as, for example, the Sydney and Louisburg. In that instance, the stocks and bonds attaching to that road are not given in Table 4, for the reason that they are included in the total capitalization of the Dominion Coal Company, and it has been found impossible thus far to obtain a separation of accounts. Several railways, like the Albert Southern, have not been in operation for a long period of years, and both the property rights and the capital liability may be regarded as dead.

Without further reference to special conditions, let it be said that an earnest effort has been made to ascertain what deduction, for the reasons indicated, should be made from the total capital liability of Canadian railways. Without giving the details, the amount has been fixed at \$226,298,988. When this is subtracted from the \$1,410,297,687 given above, the aggregate capital liability is reduced to \$1,183,998,699.

Second, as to mileage: There are in the Dominion 2,043.84 miles of Government owned and operated railway, against which neither stocks nor bonds are outstanding. There are also 75.36 additional miles of line to which no capital liability is attached in Table 4. These two items make a total of 2,119.20 miles, which should be deducted, for the purpose of the present calculation, from the 24,731 given as the total railway mileage on a preceding page.

Dividing 22,612 miles of railway into a total capitalization of \$1,183,998,699, we have \$52,361 as the quotient. That is the actual outstanding capital liability per mile against railways in Canada.

## SESSIONAL PAPER No. 20b

It is quite impracticable to ascertain what has been the actual cost of Canadian railways. The cost as represented in stocks and bonds is one thing, and the actual cost quite another. Exchanges of ownership and the destruction of early records have, in many instances, utterly lost to reporting roads the facts with respect to primary expenditures. Nevertheless, during the current year an earnest effort will be made to gather together whatever data are available under that head.

To make an appraisalment of the physical value of existing lines would be a stupendous task, and it would also be exceedingly costly. It is doubtful if the results would justify the outlay. With an outstanding liability equal to \$52,361 per mile, there could not be any suspicion of general over-capitalization of railways in Canada. Taking the latest available statistics with regard to the capital obligations attaching to railways in other countries, the following comparison is instructive:—

	Capital liability.	Per mile.
	\$	\$
Great Britain.....	6,382,296,742	275,040
Germany.....	3,903,848,400	109,788
France.....	3,347,466,000	139,390
Belgium.....	430,800,000	169,806
United States.....	13,508,711,173	57,976
Victoria.....	210,244,578	60,225
New South Wales.....	22,721,478	136,876
Canada.....	1,183,998,699	52,361

The facts in relation to the cost of Government owned and operated railways in Canada are readily available, and they show the following situation:—

	Miles of line.	Capital cost.	Cost per mile.
		\$	\$
Intercolonial.....	1,450	92,273,074	63,636
Prince Edward Island.....	267	8,465,365	31,705
Temiskaming and N. Ontario.....	266	15,315,672	57,577
New Brunswick C. and Railway.....	58	1,964,640	33,873

## AID TO RAILWAYS.

No one may say to what extent the construction of railways in Canada has been aided. Assistance has taken three forms—cash subsidies, land grants and guarantees. The amount of cash paid by the Dominion and Provincial Governments, as well as by municipalities, has been definitely ascertained; but beyond that it is impracticable to carry the account. The number of acres of land granted and the total of guarantees given have been made up; but the precise money value of these concessions is unknown.

During the year 1910, cash subsidies to the amount of \$1,789,723 were paid, as follows:—

By the Dominion.....	\$1,382,192
By the Provinces.....	248,531
By Municipalities.....	159,000
	<hr/>
	\$1,789,723



The account respecting cash subsidies now stands as follows:—

Year.	Dominion.		Provinces.		Municipalities.	
	\$	cts.	\$	cts.	\$	cts.
1876.....	*18,564	352 37	4,203	240 43	5,426	505 70
1877.....	16,235	185 33	4,338	498 02	5,689	299 31
1878.....	26,438	914 96	14,292	002 29	7,224	578 63
1879.....	26,438	914 96	14,593	001 91	7,450	978 63
1880.....	32,761	920 65	17,639	206 60	8,313	944 63
1881.....	37,629	207 33	<sup>a</sup> 16,676	266 29	7,494	944 63
1882.....	37,731	208 33	17,044	628 91	8,809	944 63
1883.....	49,548	639 93	18,342	102 80	9,162	552 94
1884.....	†78,123	918 18	19,836	055 93	9,934	556 94
1885.....	92,762	967 17	19,137	719 93	12,472	450 43
1886.....	87,426	814 52	19,338	679 93	12,599	202 43
1887.....	91,228	674 03	21,204	993 01	12,812	836 43
1888.....	90,614	574 40	23,342	758 82	13,144	224 43
1889.....	91,888	491 21	24,036	306 80	13,461	224 43
1890.....	93,889	277 76	25,086	285 41	13,709	624 43
1891.....	96,529	524 07	25,731	965 43	13,817	509 43
1892.....	97,601	639 53	26,997	435 78	13,981	247 99
1893.....	100,422	165 09	28,229	355 49	14,017	956 99
1894.....	102,087	290 06	29,368	697 75	14,178	610 99
1895.....	†103,451	148 93	29,727	512 63	14,180	686 99
1896.....	101,961	763 91	30,055	946 30	14,494	756 99
1897.....	102,458	434 71	31,171	346 65	15,520	867 99
1898.....	103,878	261 66	31,495	555 48	15,660	667 99
1899.....	107,030	639 24	31,656	725 57	17,740	668 59
1900.....	107,760	795 70	31,310	170 06	15,884	542 16
1901.....	110,225	503 43	32,395	522 67	16,310	253 16
1902.....	112,224	091 13	33,145	320 84	16,465	601 03
1903.....	113,791	113 47	32,809	728 41	16,551	044 06
1904.....	115,875	668 31	34,496	917 84	17,157	810 19
1905.....	117,145	511 67	40,415	630 27	17,198	211 48
1906.....	118,474	316 04	43,278	022 12	17,125	163 98
1907.....	128,827	648 77	<sup>b</sup> 35,123	130 80	17,346	633 34
1908.....	133,049	376 07	35,191	414 80	17,430	945 04
1909.....	135,549	987 71	35,588	526 15	17,824	823 60
1910.....	d146,932	179 71	35,837	060 16	17,983	823 60

\*Included loan \$2,311,666 67 to Northern Railway; not reported after this year.

†Included loan \$29,880,912 to G. P. Railway; not reported later.

cEastern extension \$1,284,495 76 now included in I. C. Railway.

††Incorrect total of \$2,394,000 shown to the North Shore Railway.

<sup>a</sup>Decrease of \$1,044,000 by N. B. Government to St. John and Maine Railway.

<sup>b</sup>This amount does not include the cost of the Temiskaming and Northern Ontario Railway (\$10,570,549)

as formerly.

<sup>d</sup>This includes \$10,000,000 loaned to the Grand Trunk Pacific Railway Company under authority of Chap. 19

of the Statutes of 1909.



The cash aid given by municipalities is shown, by Provinces, in the following table:—

Year.	Ontario.		Quebec.		Nova Scotia.		New Brunswick.		British Columbia.		Manitoba.		Northwest Territories.		Totals.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1875	3,774,620	13	513,000	00	127,500	00	296,500	00	37,500	00	296,500	00	296,500	00	4,415,120	13
1876	4,660,505	70	513,000	00	310,500	00	296,500	00	37,500	00	296,500	00	296,500	00	5,384,005	70
1877	4,738,299	31	625,000	00	223,500	00	296,500	00	37,500	00	296,500	00	296,500	00	5,606,799	31
1878	5,085,434	01	1,323,141	62	175,000	00	296,500	00	37,500	00	296,500	00	296,500	00	6,877,078	63
1879	5,407,934	01	1,522,044	62	175,000	00	293,500	00	37,500	00	293,500	00	293,500	00	7,408,478	63
1880	5,988,300	01	1,864,141	62	175,000	00	293,500	00	37,500	00	293,500	00	293,500	00	8,310,944	63
1881	5,988,300	01	1,864,141	62	250,000	00	293,500	00	37,500	00	293,500	00	293,500	00	8,395,944	63
1882	6,673,300	01	1,864,141	62	250,000	00	293,500	00	37,500	00	293,500	00	293,500	00	9,080,944	63
1883	6,948,411	32	2,125,144	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	9,617,055	94
1884	7,178,411	32	2,195,144	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	9,875,055	94
1885	8,027,805	81	2,195,144	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	11,384,460	43
1886	8,027,805	81	2,255,986	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	11,310,862	43
1887	8,055,305	81	2,380,986	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	11,220,862	43
1888	8,055,305	81	2,495,144	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	11,225,739	43
1889	8,055,305	81	2,569,818	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	11,786,739	43
1890	8,055,305	81	2,626,318	62	250,000	00	296,500	00	37,500	00	296,500	00	296,500	00	11,786,739	43
1891	8,120,305	81	2,644,418	62	277,685	00	336,500	00	37,500	00	336,500	00	336,500	00	11,907,248	43
1892	10,261,244	37	2,735,714	62	336,500	00	336,500	00	37,500	00	336,500	00	336,500	00	13,136,248	43
1893	10,289,453	37	2,840,718	62	277,685	00	336,500	00	37,500	00	336,500	00	336,500	00	14,272,456	90
1894	10,391,607	37	2,840,718	62	277,685	00	336,500	00	37,500	00	336,500	00	336,500	00	14,374,610	90
1895	10,393,683	37	2,840,718	62	277,685	00	336,500	00	37,500	00	336,500	00	336,500	00	14,374,610	90
1896	10,480,753	37	2,840,718	62	277,685	00	336,500	00	37,500	00	336,500	00	336,500	00	14,463,756	90
1897	11,890,364	37	2,865,718	62	281,685	00	336,500	00	37,500	00	336,500	00	336,500	00	15,902,367	99
1898	11,916,164	37	2,865,718	62	281,685	00	336,500	00	37,500	00	336,500	00	336,500	00	15,902,367	99
1899	11,971,164	37	2,865,718	62	281,685	00	336,500	00	37,500	00	336,500	00	336,500	00	16,005,429	28
1900	12,050,164	37	2,865,718	62	370,559	17	336,500	00	37,500	00	336,500	00	336,500	00	16,173,303	45
1901	12,102,164	37	2,942,929	62	370,559	17	336,500	00	37,500	00	336,500	00	336,500	00	16,302,514	45
1902	12,163,164	37	3,118,519	20	370,559	17	336,500	00	37,500	00	336,500	00	336,500	00	16,539,104	45
1903	12,189,104	80	3,118,519	20	456,559	17	336,500	00	37,500	00	336,500	00	336,500	00	16,651,044	46
1904	12,862,147	80	3,125,727	17	471,898	10	336,500	00	37,500	00	336,500	00	336,500	00	17,346,634	36
1905	12,930,290	18	3,126,036	08	471,898	10	341,500	00	162,952	50	490,600	00	490,600	00	17,420,085	65
1906	12,961,290	18	3,126,036	08	471,898	10	341,500	00	171,952	50	490,600	00	490,600	00	17,576,538	15
1907	12,966,197	80	3,127,536	08	481,898	10	341,500	00	189,952	50	490,600	00	490,600	00	17,601,945	77
1908	12,983,079	24	3,137,536	08	481,898	10	341,500	00	189,952	50	490,600	00	490,600	00	17,637,827	21
1909	13,161,075	63	3,137,536	08	481,898	10	341,500	00	198,952	50	490,600	00	490,600	00	17,824,823	60
1910	13,311,075	63	3,137,536	08	481,898	10	341,500	00	198,952	50	490,600	00	490,600	00	17,983,823	60

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In order that the foregoing statement with respect to cash subventions may be better understood, the following divisions of the account are presented:—

DOMINION.	
Cash subsidies.....	\$78,410,272 58
Loans.....	25,576,533 33
Cost of lines handed over to C. P. R.....	37,785,319 97
Paid to Quebec Government .....	5,160,053 83
Total.....	\$146,932,179 71
PROVINCES.	
Cash subsidies.....	\$32,787,030 16
Loans.....	2,750,030 00
Subscriptions to shares.....	300,000 00
Total.....	\$35,837,060 16
MUNICIPALITIES.	
Cash subsidies.....	\$12,739,824 98
Loans.....	2,404,498 62
Subscriptions to shares.....	2,839,500 00
Total.....	\$17,983,823 60

## LAND GRANTS.

The account in relation to land grants stood as follows on June 30 last:—

	Acres.
By the Dominion.....	32,040,378
By the Province of Quebec.....	13,324,950
By the Province of British Columbia.....	8,119,221
By the Province of New Brunswick.....	1,647,772
By the Province of Nova Scotia.....	160,000
Total.....	55,292,321

An analysis of the land grants of the Dominion gives the following result:—

	Acres.
Alberta Railway and Irrigation Co. (formerly Northwest Coal and Navigation Co).....	1,114,368
Calgary and Edmonton Railway Co.....	1,895,445
Canadian Northern Railway Co. (from point on C.P. R. to Hudson Bay) Canadian Northern Railway Co. (formerly Lake Manitoba and Canal Co.).....	3,458,675
Canadian Pacific Railway Co. (main line).....	18,237,701
C. P. R. Pipestone Extension, Souris Branch.....	278,818
C. P. R. Souris Branch.....	1,422,966
Great Northwest Central Railway Co. (formerly Northwest Central Railway Co.).....	320,000
Manitoba and Northwestern Railway Co.....	1,501,376
Manitoba Southeastern Colonization Railway.....	1,399,640
Manitoba and Southeastern Railway Co.....	682,412
Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.....	1,630,097
Saskatchewan and Western Railway Co.....	98,880
Total.....	32,040,378

As has been said, it is quite impracticable to assign any money value to the above land grants. In the case of the Province of Quebec it has been the policy of Government to present to grantees the option of taking the land or receiving a sum equal to 52 cents per acre in lieu thereof. In practically every instance the cash option has been taken; so that of the 13,324,950 acres primarily granted by that Pro-

vince, but a small number, if any, has been actually alienated. On the other hand, as indicating the value of land grants by the Dominion, last year the Canadian Pacific Railway Company sold 975,030 acres of land at an average price of \$14.84 per acre.

#### GUARANTEES.

It would seem that within recent years a preference for aid in the form of guarantees, as against cash or land subventions, has arisen among the promoters of railway enterprises. At all events, the volume of such obligations has increased very rapidly since 1903, and on June 30 last the situation was as follows:—

#### DOMINION.

1. The Canadian Northern Railway Company, Cap. 7, 3 Edward VII (1903).

The guarantee is for the principal of £1,923,287 sterling, and interest thereon at the rate of 3 per cent per annum for fifty years.

2. The Canadian Northern Railway Company, Cap. 11, 7 and 8 Edward VII (1908).

The guarantee is for the principal of £1,622,586 19s 9d sterling debenture stock and interest thereon at the rate of 3½ per cent per annum for fifty years, from July 20, 1908, interest payable half-yearly.

3. The Grand Trunk Pacific Railway Company, Cap. 24, 4 Edward VII (1904).

The guarantee is for a sum equal to 75 per cent of the cost of construction of the Western Division of the National Transcontinental Railway, but not exceeding \$13,000 per mile in respect of the Prairie Section of the said railway. The amount of bonds issued and guaranteed is £7,200,000, of which £3,200,000 were issued in 1905, £2,000,000 in 1909, and £2,000,000 in 1910.

The amount represented by the above guarantees is £10,745,874 or \$52,439,865.

#### MANITOBA.

To the Canadian Northern Railway Company:

Main and branch lines in Manitoba.....	\$12,154,073 33
Winnipeg terminals.....	3,000,000 00
Ontario Division (line to Port Arthur).....	5,745,586 67
Total.....	<u>\$20,899,660 00</u>

#### ALBERTA.

The outstanding guarantees of this province on June 30, 1910, amounted to \$25,743,000, divided as follows:—

Canadian Northern Railway Company.....	\$11,960,000
Grand Trunk Pacific Branch Lines Co.....	6,383,000
Alberta and Great Waterways Co.....	7,400,000
Total.....	<u>\$25,743,000</u>

#### SASKATCHEWAN.

To the Canadian Northern Railway Company—at the rate of \$13,000 per mile on 730 miles of branch lines—\$9,490,000.

To the Grand Trunk Pacific Branch Lines Company—at the rate of \$13,000 per mile on 193 miles—\$2,509,000.

Total amount of guarantees—\$11,999,000.

#### ONTARIO.

To the Canadian Northern Ontario Railway Company—Guarantee of interest on bonds aggregating \$7,860,000.



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## NOVA SCOTIA.

Halifax and Southwestern—A loan of \$13,500 per mile, which, on a total of 372 miles, would amount to \$5,022,000, secured by mortgage, with the right to take over and sell or operate the property in case default is made in the terms of the covenant.

## BRITISH COLUMBIA.

Shuswap and Okanagan—Guarantee of interest on \$1,249,760 for 25 years at 4 per cent.

Victoria and Sidney—Guarantee of interest on \$300,000 for 25 years at 2 per cent.

Nakusp and Slooan—Guarantee of principal and interest on bonds aggregating \$647,072 for 25 years at 4 per cent.

Total guarantees—\$2,196,832.

## NEW BRUNSWICK.

On bonds of the New Brunswick Coal and Railway Company—\$700,000.

## QUEBEC.

On bonds of the Montreal and Western Railway Company—\$476,000.

Summarizing the foregoing statements with respect to guarantees, the result is as follows:—

Dominion.....	\$52,439,865
Manitoba.....	20,899,660
Alberta.....	25,743,000
Saskatchewan.....	11,999,000
Ontario.....	7,860,000
Nova Scotia.....	5,022,000
British Columbia.....	2,196,832
New Brunswick.....	700,000
Quebec.....	476,000
Total guarantees.....	\$127,336,357

## PUBLIC SERVICE OF RAILWAYS.

The public service of Canadian railways in 1910 was represented in the carrying of 35,894,575 passengers and 74,482,866 tons of freight. As compared with 1909, these figures show an increase of 3,211,267 passengers and 7,640,608 tons of freight.

The passenger and freight traffic of the Dominion for the past 36 years has been as follows:—

Year.	Passengers carried.	Tons of Freight, 2,000 lbs.	Year.	Passengers- carried.	Tons of Freight, 2,000 lbs.
1875.....	5,190,416	5,670,837	1893.....	13,618,027	22,003,599
1876.....	5,544,814	6,331,757	1894.....	14,462,498	20,721,116
1877.....	6,073,233	6,859,796	1895.....	13,987,580	21,524,421
1878.....	6,443,924	7,883,472	1896.....	14,810,407	24,266,825
1879.....	6,523,816	8,348,810	1897.....	16,171,338	25,300,331
1880.....	6,462,948	9,938,858	1898.....	18,444,049	28,785,903
1881.....	6,943,671	12,065,323	1899.....	19,133,365	31,211,753
1882.....	9,352,335	13,575,787	1900.....	21,500,175	35,946,183
1883.....	9,579,984	13,266,255	1901.....	18,385,722	36,999,371
1884.....	9,982,358	13,712,269	1902.....	20,679,974	42,376,527
1885.....	9,672,599	14,659,271	1903.....	22,148,742	47,373,417
1886.....	9,861,024	15,670,460	1904.....	23,640,765	48,097,519
1887.....	10,698,638	16,356,335	1905.....	25,288,723	50,893,957
1888.....	11,416,791	17,172,759	1906.....	27,989,782	57,966,713
1889.....	12,151,105	17,928,626	1907.....	32,137,319	63,866,135
1890.....	12,821,262	20,787,469	1908.....	34,044,992	63,071,167
1891.....	13,222,568	21,753,021	1909.....	32,683,309	66,842,258
1892.....	13,533,414	22,189,923	1910.....	35,894,575	74,482,866



## PASSENGER TRAFFIC.

As has been said, the number of passengers carried during the year 1910 was 35,894,575.

The number of passengers carried one mile was 2,466,729,664, an increase of 433,728,439 as compared with the preceding year.

The number of passengers carried one mile per mile of road was 99,742, representing an increase for 1910 in the density of passenger traffic of 15,400.

The number of passengers carried per mile of line was 1,451, an increase of 96 as compared with 1909. Since 1907 there has been an increase in railway mileage of 2,279 miles, while the number of passengers carried per mile of line has increased but 20—showing clearly that railway construction has proceeded more rapidly than has the development of passenger traffic.

The average revenue per passenger per mile was 1.866 cents. This rate was .055 below the figures for 1909.

The aggregate passenger revenue was \$46,018,879.56. This is strictly the result of ticket sales, apart from the earnings from the running of passenger trains, and which latter include mails, express and baggage. The total passenger earnings, representing income from all sources, was \$52,956,218.51. Details will be found in Table 7.

The average number of passengers per train was 59, an increase of 8 over 1909.

The average passenger journey was 69 miles, as compared with 62 in the preceding year.

The average revenue per passenger—that is, from ticket sales—was \$1.282. This was a gain over 1909 of .087, which is not surprising in view of the increased length of the average passenger journey.

Passenger trains ran a total distance of 35,022,541 miles, or 2,726,811 more than in 1909. Mixed trains ran 6,441,440 miles, as against 7,061,580 in the preceding year.

The earnings per passenger train mile—using the aggregate earnings from ticket sales, mails, express, baggage, &c., as one of the factors—were \$1.277, or .127 better than in 1909.

All the above figures point to a marked improvement in the passenger situation during the year 1910.

Following is a complete summary of facts relating to passenger traffic:—

	1907.	1908.	1909.	1910
Miles of railway.....	22,452	22,966	24,104	24,731
Number of passengers.....	32,137,319	34,044,992	32,683,309	35,894,575
Passengers carried one mile.....	2,049,549,813	2,081,960,864	2,033,001,225	2,466,729,664
Passengers one mile per mile of line.....	90,921	90,654	84,342	99,742
Passengers per mile of line.....	1,431	1,482	1,355	1,451
Average passenger journey (miles).....	64	61	62	69
Average number of passengers per train.....	56	54	51	59
Passenger train mileage.....	30,220,461	31,950,349	32,295,730	35,022,541
Mixed train mileage.....	5,971,414	6,210,807	7,061,580	6,441,440
Earnings from ticket sales.....	\$39,184,437	\$39,992,503	\$39,073,488	\$46,018,880
Earnings from passenger service.....	\$45,730,632	\$46,854,158	\$45,282,326	\$52,956,219
Average receipts per passenger.....	\$1.219	\$1.174	\$1.195	\$1.282
Average receipts per passenger per mile (cents).....	1.911	1.920	1.921	1.866

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## FREIGHT TRAFFIC.

The volume of freight traffic in 1910 was 74,482,866 tons—a gain of 7,640,608 tons over 1909, or 11.4 per cent.

The number of tons hauled one mile was 15,712,127,701, as compared with 13,160,567,550 in the preceding year.

The number of tons hauled one mile per mile of line was 635,321. This represented a betterment in the density of freight traffic over 1909 of 89,330 tons.

The average revenue per ton per mile, which is accepted as representing the freight rate earned by all railways combined, was .739 cent. This was .012 higher than the rate for 1909.

Revenue from freight amounted to \$116,229,894.06—an increase of \$20,515,110.65 over 1909. This was equal to 21.4 per cent. The gross freight revenue, which included earnings from other sources than the hauling of freight, was \$117,497,604.03.

The revenue from freight was equal to \$4,699.76 per mile of line. This represented the substantial increase of \$728.85 per mile over the result for 1909.

The average number of tons hauled per freight train was 311—a gain of 33 tons over the preceding year.

The average number of loaded cars per freight train was also increased from 16.37 in 1909 to 18.15 in 1910.

The average number of tons per loaded freight car was 17.13, as against 16.98 in 1909.

The average haul of freight in 1910 was 211 miles—an increase in distance of 14 miles over 1909.

It is obvious from the figures in the five preceding paragraphs that (1) the freight earnings per mile of line, (2) the train load, (3) the loaded cars per train, (4) the car load, and (5) the length of the average haul, showed material increases in 1910.

Revenue freight train mileage increased from 40,304,900 in 1909 to 50,184,108 in 1910. Included in this latter figure are 6,441,440 of mixed train mileage.

In consonance with the expansion of freight traffic in 1910, the mileage of loaded cars increased from 775,543,414 to 910,858,711.

Summarizing the foregoing data into tabular form, and carrying the comparison back to 1907, the result is as follows:—

	1907.	1908.	1909.	1910.
Tons hauled.....	63,866,135	63,071,167	66,842,258	74,482,866
Tons hauled one mile.....	11,687,711,830	12,961,512,519	13,160,567,550	15,712,127,701
Tons hauled one mile per mile of line.....	518,486	504,378	545,991	635,321
Average haul, miles.....	183	206	197	211
Freight train mileage.....	38,923,890	40,476,370	40,304,906	50,184,108
Mixed train mileage.....	5,971,414	6,210,807	7,061,580	6,441,440
Revenue from freight.....	\$94,995,087	\$93,746,655	\$95,714,783	\$116,229,894
Average tons per train.....	260	278	278	311
Average cars per train.....	16.92	16.04	16.37	18.15
Average tons per car.....	15.37	17.33	16.98	17.13
Average receipts per ton per mile, cent.....	.815	.723	.727	.739

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Following is an analysis of the commodities which constituted the freight traffic of 1910 and the three preceding years:—

	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.
<b>Products of agriculture—</b>				
Grain.....	5,776,731	5,270,935	6,837,506	7,435,573
Flour.....	1,402,356	1,565,008	1,758,894	1,916,934
Other mill products.....	654,179	836,877	1,156,071	1,037,282
Hay.....	803,918	643,695	861,265	1,084,966
Tobacco.....	10,042	23,235	26,462	40,880
Cotton.....	22,164	70,203	122,300	84,928
Fruit and vegetables.....	562,716	803,777	845,930	969,122
Other products of agriculture.....	289,525	183,237	354,535	321,666
<b>Products of animals—</b>				
Live stock.....	1,118,141	1,156,772	1,206,221	1,314,781
Dressed meats.....	400,900	455,580	554,984	546,791
Other packing house products.....	463,647	441,841	436,529	277,739
Poultry game and fish.....	128,432	151,100	175,081	154,820
Wool.....	23,472	33,318	37,236	28,814
Hides and leather.....	154,157	141,341	202,968	199,853
Other products of animals.....	180,517	89,407	194,468	242,208
<b>Products of mines—</b>				
Anthracite coal.....	1,635,628	3,735,141	4,600,514	7,498,509
Bituminous coal.....	11,805,060	12,320,584	11,647,728	9,166,572
Coke.....	547,303	845,702	1,061,829	1,384,254
Ores.....	2,209,860	2,953,353	3,147,487	3,636,607
Stone, sand, &c.....	2,083,336	2,538,333	3,096,416	4,084,968
Other products of mines.....	178,985	243,054	377,087	381,112
<b>Products of forests—</b>				
Lumber.....	7,542,475	10,317,541	7,759,393	7,302,037
Other products of forests.....	2,687,160	2,594,685	3,835,614	5,766,903
<b>Manufactures—</b>				
Petroleum and other oils.....	270,810	390,331	464,953	500,167
Sugar.....	232,620	451,641	701,319	617,231
Naval stores.....	1,674	3,742	22,509	37,007
Iron, pig and bloom.....	304,136	583,948	593,950	889,881
Iron and steel rails.....	190,380	628,988	446,678	717,081
Castings and machinery.....	231,159	858,914	897,849	1,189,214
Bar and sheet metal.....	87,958	353,802	337,866	568,901
Cement, brick and lime.....	1,393,792	1,421,678	1,789,994	2,254,934
Agricultural implements.....	223,664	281,834	306,724	434,928
Wagons, carriages, tools, &c.....	42,129	96,197	119,463	173,137
Wines, liquors and beers.....	191,576	209,912	238,808	245,626
Household goods and furniture.....	256,208	269,299	301,401	388,631
Other manufactures.....	4,448,535	1,105,433	1,681,078	1,997,541
Merchandise.....	2,309,084	2,008,267	2,393,285	2,518,190
Miscellaneous.....	5,533,426	6,935,135	6,234,372	7,073,078

Separating the foregoing items into classes, and comparing the figures with those of preceding years the result is as follows:—

	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.
Products of agriculture.....	9,521,661	9,396,967	11,963,263	12,891,351
Products of animals.....	2,469,266	2,472,359	2,807,487	2,765,006
Products of mines.....	18,460,172	22,636,227	23,931,061	26,152,022
Products of forests.....	10,229,635	12,912,226	11,535,007	13,068,940
Manufactures.....	7,974,641	6,655,719	7,902,592	10,014,279
Merchandise.....	2,309,084	2,008,067	2,393,285	2,518,190
Miscellaneous.....	5,533,426	6,938,135	6,234,372	7,073,078
<b>Totals.....</b>	<b>56,497,885</b>	<b>63,019,900</b>	<b>66,827,067</b>	<b>74,482,866</b>

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In order that the relationship of each of these classes to the whole volume of freight traffic may be seen at a glance, the following table of percentages is presented:—

	1907.	1908.	1909.	1910.
Products of agriculture.....	16·85	14·91	17·91	17·31
Products of animals.....	4·37	3·92	4·21	3·71
Products of mines.....	32·68	35·02	35·81	35·11
Products of forests.....	18·11	20·49	17·35	17·54
Manufactures.....	14·11	10·56	11·82	13·44
Merchandise.....	4·08	3·18	3·58	3·39
Miscellaneous.....	9·79	11·02	9·32	9·50

It will be observed that the first four classes, representing commodities moved for the most part in bulk, made up 73·67 per cent of the whole. The remaining 26·33 per cent showed a betterment over last year of 1·61 per cent. The chief gain was in manufactures.

Of the 74,482,866 tons of freight hauled, 42,279,812 were returned as 'originating on this road,' and 32,203,054 as received from connecting roads.

## EARNINGS AND OPERATING EXPENSES.

The gross earnings of railways for the year 1910 were \$173,956,217·13—a gain of \$28,899,880·94 over 1909.

The operating expenses were \$120,405,440·42, or \$15,805,355·99 more than for the preceding year.

The ratio of operating expenses to gross earnings was 69·2. This result was 2·9 better than for 1909, and the lowest since 1902.

The following table gives the earnings and operating expenses for each year since 1875:—

Year.	Earnings.	Operating expenses.	Percentage of operating expenses to earnings.
	\$	\$	
1875.....	19,470,539	15,775,532	81·1
1876.....	19,358,084	15,802,721	81·8
1877.....	18,742,053	15,290,091	81·1
1878.....	20,520,078	16,100,102	78·4
1879.....	19,925,066	16,188,282	81·2
1880.....	23,561,447	16,840,705	71·0
1881.....	27,987,508	20,121,418	71·9
1882.....	29,027,789	22,390,708	77·1
1883.....	33,244,586	24,691,667	74·3
1884.....	33,421,705	25,595,341	76·5
1885.....	32,227,469	24,015,351	74·5
1886.....	33,389,381	24,117,582	72·4
1887.....	38,841,609	27,624,683	71·1
1888.....	42,159,152	30,652,046	72·7
1889.....	42,149,615	31,038,045	73·6
1890.....	46,843,826	32,913,350	70·2
1891.....	48,192,099	34,960,449	72·5
1892.....	51,685,768	36,488,228	70·5
1893.....	52,042,396	36,616,033	70·3
1894.....	49,552,528	35,218,432	71·7
1895.....	46,785,486	32,749,668	69·9
1896.....	50,545,569	35,042,654	69·3
1897.....	52,353,276	35,168,665	67·1
1898.....	59,715,105	39,137,549	65·5
1899.....	62,243,784	40,706,217	65·3
1900.....	70,740,270	47,699,798	67·4
1901.....	72,898,749	50,368,726	69·0
1902.....	83,666,503	57,343,592	68·3
1903.....	96,064,526	67,481,523	70·2
1904.....	100,219,436	74,563,161	74·4
1905.....	106,467,198	79,977,573	75·2
1906.....	125,322,865	87,129,434	69·5
1907.....	146,738,214	103,748,672	70·7
1908.....	146,918,314	107,304,143	73·0
1909.....	145,056,336	104,600,084	72·1
1910.....	173,956,217	120,405,440	69·2

## EARNINGS.

The net earnings for 1910 were \$53,550,776.71, as compared with \$40,456,251.76 for 1909. This was equal to a betterment of 32.3 per cent.

These net earnings were equal to \$2,165.83 per mile of line, or \$486.93 more than for 1909. In view of the added mileage during the year, which could not be expected to have the earning power of mileage which had been in operation for many years, this result must be regarded as highly satisfactory. It must also be borne in mind that in 1910 there were 24 railways in Canada which showed a deficit, or managed merely to make ends meet. These were for the most part small lines, practically subsidiary to trunk roads, and in some instances could scarcely be regarded as commercial railways.

Twelve roads showed net earnings amounting to \$52,041,937, or 97 per cent of the total for all lines in Canada.

The gross earnings per mile of railway were \$7,033.93—an increase as compared with the preceding year of \$1,016.

The earnings per passenger train mile were \$1.277, and per freight train mile \$2.316.

A comparison of earnings per passenger train mile and freight train mile for the past four years yields the following result:—

Earnings.	1907.	1908.	1909.	1910.
	\$	\$	\$	\$
Passenger train mile.....	1.263	1.228	1.150	1.277
Freight train mile.....	2.069	2.008	2.041	2.316

The earnings per train mile—using the aggregate income and the total mileage of freight, passenger and mixed trains as factors—were \$2.036. They were \$1.816 in 1909.

The gross revenue for 1910, compared with 1909, came from the following sources:—

	1909.	1910.
	\$ cts.	\$ cts.
Passengers.....	39,073,488 84	46,018,879 56
Mails.....	1,723,180 97	1,799,887 80
Express.....	3,561,170 96	4,143,837 52
Baggage, parlour cars, &c.....	924,485 50	993,613 63
Freight.....	96,685,076 23	117,497,604 03
Station and train privileges.....	493,895 13	679,061 12
Telegraphs, rents, &c.....	2,595,038 56	2,823,333 47
	145,056,336 19	173,956,217 13



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The proportion which each of the earning divisions bore to the total is shown in the following table:—

	1909.		1910.	
	\$ cts.	Per cent.	\$ cts.	Per cent.
Passenger service.....	15,282,326 27	31.21	52,956,218 51	30.44
Freight service.....	96,685,076 23	66.65	117,497,604 03	67.54
Station and train privileges, &c.....	493,895 13	.35	679,061 12	.39
Telegraph, rents and other sources. .	2,595,038 56	1.79	2,826,453 21	1.63
Total.....	145,056,336 19	.....	173,956,217 13	.....

The significance of the above proportions will be appreciated when it is pointed out that in the United States, for example, the earnings from freight reach 70.5; while in Great Britain the ratio falls as low as 50.5.

Following is an analysis of the several items which make up the earnings from passenger service:—

	1907.	1908.	1909.	1910.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Passengers.....	39,181,437 64	39,992,503 11	39,073,488 84	46,018,879 56
Mails.....	1,626,704 64	1,670,120 90	1,723,180 97	1,799,887 80
Express.....	3,277,695 09	3,486,300 63	3,561,170 96	4,143,837 52
Other sources.....	1,641,814 92	1,705,234 33	924,485 50	993,613 63
Total.....	45,730,652 29	48,854,158 97	45,282,326 27	52,956,218 51

It will be observed that there has been a steady growth in the earnings from the carrying of mails and express matter.



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Owing to the adoption of entirely new methods of accounting in 1907, it is not practicable to carry comparisons with respect to earnings back of that year. The amounts credited to the several sources of revenue in preceding years, and the ratio they bore to the total, are shown in the following table:—

Year.	Passengers.	Per cent.	Freight.	Per cent.	Mail and Express.	Per cent.	Other Sources.	Per cent.	Total
	\$		\$		\$		\$		\$
1875.....	6,410,934	32.92	12,073,570	62.00	693,250	3.56	292,784	1.52	19,470,539
1876.....	6,254,866	32.25	12,211,158	63.08	703,994	3.63	188,064	0.96	19,358,084
1877.....	6,458,493	34.46	11,351,264	60.40	744,741	3.97	217,554	1.16	18,742,053
1878.....	6,386,325	31.12	13,129,191	63.98	795,707	3.87	208,763	1.01	20,520,078
1879.....	6,459,598	32.41	12,509,093	62.77	789,926	3.96	166,448	0.83	19,925,066
1880.....	7,076,339	30.03	15,506,935	65.81	851,258	3.18	102,075	0.43	23,561,447
1881.....	8,223,254	29.34	18,666,982	66.69	946,159	3.37	145,332	0.51	27,987,508
1882.....	10,018,477	34.51	17,729,945	61.07	1,037,460	3.57	235,857	0.81	29,027,789
1883.....	10,538,119	31.69	21,320,208	64.13	1,108,208	3.33	261,423	0.78	33,244,586
1884.....	11,204,036	33.70	20,763,243	62.12	1,155,044	3.45	299,880	0.89	33,421,705
1885.....	10,559,796	32.76	19,962,058	61.94	1,283,307	3.98	422,306	1.31	32,227,469
1886.....	10,261,691	30.73	21,183,967	63.44	1,432,360	4.02	511,362	1.53	33,389,381
1887.....	11,867,597	30.55	24,581,047	63.28	1,575,157	4.05	771,992	1.98	38,841,609
1888.....	12,744,636	30.22	26,410,084	62.62	1,627,731	3.85	1,376,699	3.26	42,159,152
1889.....	13,242,708	31.41	26,671,049	63.27	1,681,162	3.98	554,694	1.29	42,149,615
1890.....	13,731,768	29.31	29,921,788	63.87	1,757,977	3.96	1,423,592	3.25	46,843,826
1891.....	14,286,408	29.64	30,548,645	63.38	1,904,961	3.95	1,452,083	3.01	48,192,099
1892.....	14,788,465	28.61	33,230,121	64.28	1,995,059	3.85	1,672,121	3.23	51,685,768
1893.....	15,087,299	29.12	32,935,028	63.28	2,151,769	4.13	1,868,298	3.59	52,042,396
1894.....	15,452,420	31.18	29,982,482	60.50	2,182,942	4.40	1,934,682	3.94	49,552,528
1895.....	13,311,440	28.42	29,545,490	63.15	2,198,460	4.43	1,730,096	3.68	46,745,486
1896.....	13,747,773	27.19	32,368,082	64.03	2,396,082	4.07	2,033,069	4.02	50,545,569
1897.....	13,929,346	26.48	33,522,102	62.88	2,624,573	5.01	2,278,106	4.35	52,353,276
1898.....	15,622,311	26.16	38,508,175	64.48	2,732,004	4.59	2,852,613	4.77	59,715,105
1899.....	15,929,583	25.59	40,101,036	64.42	2,842,681	4.56	3,370,483	5.41	62,243,784
1900.....	18,581,452	26.26	45,643,699	64.52	3,012,486	4.25	3,502,632	4.95	70,740,270
1901.....	19,396,302	26.60	46,665,103	64.01	3,105,457	4.25	3,731,885	5.12	72,898,749
1902.....	22,600,090	27.01	53,986,672	64.52	3,273,302	3.91	3,806,437	4.54	83,666,503
1903.....	24,862,109	25.88	63,089,448	65.67	3,396,145	3.53	4,716,823	4.91	96,064,526
1904.....	26,901,831	26.84	64,673,919	64.53	4,031,662	4.02	4,612,022	4.61	100,219,436
1905.....	28,959,649	27.20	68,203,320	64.13	3,961,769	3.07	5,342,459	5.01	106,467,198
1906.....	33,392,188	26.64	81,433,115	64.97	4,510,649	3.59	5,986,912	4.77	125,322,865

## OPERATING EXPENSES.

The operating expenses for 1910 were \$120,405,440.42, as against \$104,600,084.43 in 1909. This increase of \$16,805,355.99 was equal to 15.1 per cent.

The operating expenses represented \$4,868.60 per mile of line—an increase of \$529.07 over the preceding year.

Setting down the gross earnings and operating expenses per mile side by side, the result for the past four years is as follows:—

	Gross earnings per mile.	Operating expenses per mile.	Net earnings per mile.
	\$ cts.	\$ cts.	\$ cts.
1907.....	6,535 64	4,620 90	1,914 73
1908.....	6,397 21	4,673 30	1,724 90
1909.....	6,017 89	4,339 53	1,678 40
1910.....	7,033 93	4,868 60	2,165 83

The cost of running a train one mile—which is ascertained by dividing the total train mileage into the operating expenses—was \$1.409.

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Again adopting parallel columns for purposes of convenient comparison, the earnings per train mile, and operating expenses per train mile, since 1899, have been as follows:—

	Earnings per train mile.	Expenses per train mile.
	\$	\$
1899.....	1.192	0.779
1900.....	1.282	0.864
1901.....	1.366	0.944
1902.....	1.501	1.028
1903.....	1.591	1.117
1904.....	1.634	1.216
1905.....	1.614	1.213
1906.....	1.723	1.198
1907.....	1.953	1.381
1908.....	1.869	1.364
1909.....	1.816	1.309
1910.....	2.036	1.409

It will be seen that while the earnings per train mile have increased 70.8 per cent during the past twelve years, the cost of running a train one mile has, within the same period, increased 80.8 per cent.

The distribution of operating expenses in 1910 and the preceding year was as follows:—

Operating Expenses.	1909.		1910.		Per cent.
	\$	cts.	\$	cts.	
Way and structures.....	21,153,274	46	27,035,603	46	22.45
Equipment.....	21,510,303	59	26,002,301	30	21.59
Traffic expenses.....	3,798,824	57	4,366,176	92	3.63
Transportation.....	54,284,587	41	58,928,170	74	48.94
General expenses.....	3,853,094	40	4,073,188	00	3.39

The above figures show quite clearly that the expenditure for the physical up-keep of railways was increased during 1910. The outlay on maintenance of way and structures and equipment was larger by \$10,374,326.71, or 3.26 per cent, than in 1909. There was a reduction of 2.95 per cent in transportation, which rather points to economies in the hauling of traffic.

A comparison in detail of operating expenses, as between 1909 and 1910, is here given:—

Operating Expenses.	1909.		1910.	
	Amount.	Per cent.	Amount.	Per cent.
	\$	cts.	\$	cts.
Maintenance of Way and Structure—				
Superintendence.....	759,240	98	839,925	47
Ballast.....	198,796	80	415,078	44
Ties.....	2,678,384	80	3,436,727	46
Rails.....	1,343,471	77	1,753,740	37
Other track material.....	1,084,342	40	1,141,231	29
Roadway and track.....	8,469,429	03	11,683,918	50
Removal of snow and ice.....	1,139,937	37	968,916	50
Tunnels.....	18,413	27	17,528	99
Bridges, trestles and culverts.....	1,603,291	03	2,048,471	72
Over and under grade crossings.....	37,179	87	31,097	05
Grade crossings, fences, &c.....	528,111	60	614,400	97
Snow fences and sheds.....	91,538	47	81,225	86
Signals and interlocking plants.....	131,419	79	155,668	13
Telegraph and telephone lines.....	246,934	48	438,160	47
Electric power transmission.....	4,646	36	116,325	48
Buildings, fixtures and grounds.....	2,241,319	79	2,461,761	72
Docks and wharfs.....	187,879	64	167,519	61
Roadway tools and supplies.....	238,798	60	267,462	06
Injuries to persons.....	42,563	21	66,233	81
Stationery and printing.....	40,519	73	47,019	92
Other expenses.....	25,741	90	19,439	05
Maintaining joint tracks, yards, &c., net balance.....	32,984	57	120,340	85
Maintenance of Equipment				
Superintendence.....	497,292	54	565,442	79
Steam locomotives, repairs.....	9,427,704	22	10,876,301	12
Steam locomotives, renewals.....	411,781	23	458,978	33
Electric locomotives, repairs.....	11,060	55	.....	.....
Passenger train cars, repairs.....	2,595,472	23	3,486,546	88
Passenger train cars, renewals.....	158,959	43	229,517	21
Freight train cars, repairs.....	5,893,635	61	7,243,600	61
Freight train cars, renewals.....	879,717	84	1,001,559	92
Work equipment, repairs.....	454,543	08	698,592	58
Work equipment renewals.....	87,618	41	141,530	79
Floating equipment, repairs.....	44,111	84	137,694	15
Shop machinery and tools.....	761,738	82	777,666	28
Power plant equipment.....	7,119	51	2,218	52
Injuries to persons.....	33,614	04	41,122	58
Stationery and printing.....	64,883	49	71,196	77
Other expenses.....	121,201	13	93,254	29
Maintaining joint equipment at terminals—Cr.....	4,298	56	.....	.....
Equipment loaned and borrowed—Dr.....	60,653	23	41,117	49
Traffic expenses—				
Superintendence.....	789,829	20	873,134	66
Outside agencies.....	1,630,331	55	1,980,700	23
Advertising.....	698,539	25	804,392	81
Traffic associations.....	74,397	04	83,673	99
Fast freight line.....	303,285	09	224,655	69
Industrial and immigration bureaus.....	18,856	06	36,954	96
Stationery and printing.....	278,799	24	356,373	61
Other expenses.....	4,787	14	6,290	97
Transportation expenses—				
Superintendence.....	1,258,246	56	1,327,856	06
Despatching trains.....	794,148	07	796,991	87
Station employees.....	7,144,573	81	8,315,042	55
Weighing and car service association.....	46,049	36	56,701	82
Coal and ore docks.....	19,909	99	50,177	08
Station supplies and expenses.....	798,021	05	853,102	92
Yardmasters and their clerks.....	374,334	16	405,805	05
Yard conductors and brakemen.....	1,533,070	52	1,849,942	79
Yard, switch and signal tenders.....	183,210	94	193,013	69
Yard supplies and expenses.....	71,682	94	57,503	26
Yard enginemen.....	1,144,827	42	1,299,915	93
Engine house expenses—yard.....	337,421	60	377,954	92
Fuel for yard locomotives.....	1,433,354	45	1,737,575	56
Water for yard locomotives.....	80,869	73	86,510	94
Lubricants for yard locomotives.....	31,159	05	32,057	60
Other supplies for yard locomotives.....	34,274	79	40,807	38
Operating joint yards, &c., balance—Dr.....	424,953	72	477,543	27

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	1907.	Per cent.	1908.	Per cent.	
	\$	cts.	\$	cts.	
Maintenance of ways and structures—					
Repairs of roadway.....	11,160,086	67	11.79	10,640,542	68
Renewals of rails.....	1,205,088	24	1.27	1,604,594	76
Renewals of ties.....	2,230,575	56	2.35	2,204,083	47
Repairs and renewals—bridges and culverts.....	1,408,552	02	1.48	1,465,753	45
"    "    fences, crossings, &c.....	481,129	18	.50	519,671	89
"    "    buildings, &c.....	2,141,109	98	2.26	2,690,915	90
"    "    docks and wharfs.....	103,280	37	.10	167,017	45
"    "    telegraph.....	265,183	58	.28	294,301	15
Stationery and printing.....	30,599	20	.03	43,924	32
Other expenses.....	78,663	70	.08	1,122,793	11
Maintenance of equipment—					
Superintendence.....	591,196	08	.62	621,032	61
Repairs and renewals of locomotives.....	7,999,802	52	8.45	8,008,613	01
"    "    passenger cars.....	2,473,908	84	2.61	2,723,846	82
"    "    freight cars.....	6,933,574	61	7.32	6,855,843	98
"    "    work cars.....	146,148	39	.15	608,109	17
"    "    marine equipment.....	33,221	35	.03	52,181	21
"    "    shop machinery and tools.....	738,833	13	.78	779,160	38
Stationery and printing.....	74,466	22	.07	77,384	68
Other expenses.....	815,751	04	.86	523,535	96
Conducting transportation—					
Superintendence.....	1,611,297	91	1.70	1,956,260	03
Engine and roundhouse men.....	7,814,573	02	8.25	9,471,240	67
Fuel for locomotives.....	15,137,504	48	15.99	17,718,468	24
Water supply for locomotives.....	656,730	03	.69	764,790	58
Oil, tallow and waste for locomotives.....	409,397	18	.43	383,670	36
Other supplies for locomotives.....	195,970	04	.20	313,146	02
Train service.....	6,228,136	56	6.58	8,155,855	59
Train supplies and expenses.....	1,873,515	88	1.97	2,136,581	33
Switchmen, flagmen, &c.....	2,013,294	16	2.12	1,690,242	28
Telegraph expenses.....	2,562,478	44	2.70	1,757,495	05
Station service.....	5,634,176	10	5.95	6,748,608	03
Station supplies.....	671,972	51	.71	765,240	87
Switching charges—balance.....	114,516	96	.12	319,186	77
Car mileage—balance.....	1,156,891	46	1.22	1,467,775	90
Hire of equipment—balance.....	106,008	61	.11	115,250	52
Loss and damage.....	892,937	26	.94	1,232,518	70
Injuries to persons.....	642,248	43	.67	758,011	23
Clearing wrecks.....	426,784	63	.45	372,627	40
Operating marine equipment.....	918,769	17	.97	1,138,272	64
Advertising.....	451,673	54	.47	571,387	92
Outside agencies.....	1,180,134	05	1.24	1,500,272	23
Commissions.....	77,509	43	.08	365,588	35
Stock yards and elevators.....	185,304	78	.19	171,887	17
Rents for tracks, terminals, &c.....	542,199	81	.57	1,333,401	74
Rents for buildings, &c.....	202,031	61	.21	135,834	45
Stationery and printing.....	603,426	93	.63	740,851	59
Other expenses.....	236,885	82	.25	295,729	67
General expenses—					
Salaries of general officers.....	723,956	74	.76	775,732	94
Salaries of clerks, &c.....	918,157	19	.97	1,085,738	37
General office expenses and supplies.....	195,204	97	.26	237,571	05
Insurance.....	509,547	71	.53	615,638	68
Law expenses.....	396,383	18	.41	445,076	69
Stationery and printing.....	163,863	19	.17	161,271	64
Other expenses.....	265,972	77	.28	386,499	27

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Owing to a change in classification, the details of operating expenses for 1907 and 1908 cannot be compared with the figures for 1909 and 1910: but the following statement will enable comparisons to be made in many essential items:—

	1909.		1910.		
	Amount.	Per cent.	Amount.	Per cent.	
	\$	cts.	\$	cts.	
Transportation expenses—					
Motormen.....	10,599	40	..	..	
Road enginemen.....	6,305,369	08	6·02	6,891,165 42	5·72
Engine house expenses—road.....	2,075,177	82	1·98	2,125,418 22	1·77
Fuel for road locomotives.....	16,111,095	45	15·40	16,832,817 13	13·97
Water for road locomotives.....	746,594	70	·71	768,167 84	·63
Lubricants for road locomotives.....	245,976	65	·23	270,872 01	·22
Other supplies.....	287,462	54	·27	306,586 55	·25
Operating power plant.....	28,515	15	·02	175 48	·00
Road trainmen.....	6,584,565	63	6·29	7,247,121 40	6·01
Train supplies and expenses.....	2,201,549	18	2·10	2,428,153 75	1·94
Interlockers, block and other signals—operation of.....	223,370	27	·21	230,629 58	·19
Crossing flagmen and gatemen.....	117,726	84	·11	128,315 59	·10
Drawbridge operation.....	37,313	04	·03	41,167 50	·03
Clearing wrecks.....	330,212	24	·31	314,005 59	·26
Telegraph and telephone—operation.....	216,322	74	·20	237,189 55	·19
Operating floating equipment.....	331,446	35	·31	390,301 92	·32
Express service.....	6,532	66	·00	6,717 25	·00
Stationery and printing.....	479,151	53	·46	575,269 34	·48
Other expenses.....	238,914	58	·21	270,420 72	·22
Loss and damage—freight.....	1,004,774	74	·96	865,688 58	·71
"          "          baggage.....	21,973	64	·02	15,007 79	·01
Damage to property.....	163,483	71	·15	172,429 79	·14
"          "          stock on right of way.....	59,626	02	·05	57,281 26	·05
Injuries to persons.....	637,011	14	·63	638,205 05	·54
Operating joint tracks—Dr.....	76,728	69	·07	88,462 03	·07
General expenses—					
Salaries and expenses of general offices.....	739,028	29	·07	754,158 00	·62
"          "          clerks and attendants.....	1,126,730	58	1·06	1,197,850 70	1·00
General office supplies and expenses.....	227,096	50	·21	193,026 52	·16
Law expenses.....	480,924	76	·46	511,659 98	·42
Insurance.....	593,060	31	·56	654,633 93	·54
Relief department expenses.....	29,941	71	·02	28,558 43	·02
Pensions.....	188,282	26	·18	181,255 41	·15
Stationery and printing.....	152,910	01	·14	177,661 48	·14
Other expenses.....	296,749	50	·27	360,756 97	·30
General administration joint tracks, &c.—Dr.....	18,370	48	·02	13,626 58	·01

Following is a summary of some of the more important items relating to earnings and operating expenses:—

	1907.	1908.	1909.	1910.
	\$	\$	\$	\$
Gross earnings.....	146,738,214	146,918,313	145,056,336	173,956,217 13
Net earnings.....	42,989,537	39,614,171	40,456,251	53,550,776 71
Gross earnings per mile.....	6,535 64	6,397 21	6,017 89	7,033 93
Net earnings per mile.....	1,914 73	1,724 90	1,678 40	2,165 83
Earnings per passenger.....	1·219	1·175	1·195	1·282
"          "          ton.....	1·472	1·486	1·432	1·560
"          "          passenger train mile.....	1·263	1·228	1·150	1·277
"          "          freight train mile.....	2·069	2·008	2·041	2·316
"          "          train mile, all trains.....	1·875	1·791	1·816	2·036
Operating expenses.....	103,748,672	107,304,143	104,600,084	120,405,440 42
"          "          per mile.....	4,620 90	4,672 30	4,339 53	4,868 60
Cost of running trains one mile.....	1·381	1·364	1·309	1·409



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## EQUIPMENT.

Following is a statement with respect to equipment on June 30, 1910:—

	Number.	Increase.
Locomotives.....	4,079	110
Cars in passenger service.....	4,320	138
Cars in freight service.....	119,713	1,934
Cars in company's service.....	8,648	789

It will be seen there was a total of 132,681 cars in service. In addition, the returns show there were 71 locomotives and 1,729 cars under lease.

The growth of available equipment during the past four years, omitting cars in company's service, is shown in the following table:—

	1907.	1908.	1909.	1910.
Locomotives.....	3,504	3,872	3,969	4,079
Freight cars.....	107,407	115,709	117,779	119,713
Passenger cars.....	3,642	4,026	4,192	4,320

The motive power has been assigned to the following services:—

Locomotives.	1907.	1908.	1909.	1910.
Passenger.....	964	1,122	1,056	1,090
Freight.....	2,206	2,392	2,539	2,601
Switching.....	334	358	374	388

The cars in passenger service have been of the following classes:—

Cars in Passenger Service.	1907.	1908.	1909.	1910.
First class.....	1,300	1,493	1,560	1,564
Second class.....	472	487	471	512
Combination.....	405	422	429	435
Emigrant.....	272	303	317	318
Dining.....	105	114	127	123
Parlour.....	63	63	60	69
Sleeping.....	212	236	261	283
Baggage, express and postal.....	782	873	926	979
Other.....	31	35	41	37
Total.....	3,642	4,026	4,192	4,320

The cars in freight service were divided, as to classes, as follows:—

Cars in Freight Service.	1907.	1908.	1909.	1910.
Box.....	68,149	72,863	74,477	75,983
Flat.....	20,477	21,759	21,188	20,769
Stock.....	4,817	5,047	5,518	5,528
Coal.....	10,358	11,616	11,721	12,680
Tank.....	132	197	197	195
Refrigerator.....	1,917	2,423	2,466	2,539
Other.....	1,557	1,804	2,212	2,019
Total.....	107,407	115,709	117,779	119,713



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The 8,648 cars in company's service consisted of 89 officers' and pay, 2,645 gravel, 127 derrick, 1,895 caboose and 3,892 other cars.

The aggregate capacity of cars of the various classes in freight service is shown in the following statement:—

	1907.		1908.		1909.		1910.	
	Number	Capacity in tons.	Number.	Capacity in tons.	Number.	Capacity in tons.	Number.	Capacity in tons.
Box.....	66,934	1,848,980	72,862	2,048,227	74,479	2,130,145	75,983	2,211,963
Flat.....	20,118	535,167	21,781	592,496	21,220	584,455	20,769	576,198
Stock.....	4,731	122,550	5,047	133,578	5,561	150,800	5,528	151,565
Coal.....	10,060	291,638	11,616	362,233	11,721	379,981	12,680	438,178
Tank.....	132	2,632	197	4,000	197	4,012	195	3,962
Refrigerator.....	1,745	48,745	2,423	69,000	2,465	71,085	2,539	73,520
Other.....	1,820	59,200	1,941	67,410	2,273	64,835	2,019	58,720
Total.....	105,540	2,908,903	115,867	3,277,394	117,916	3,385,313	119,713	3,514,106

As indicating the tendency toward heavier units in the handling of freight traffic, it may be pointed out that the average capacity of box cars in 1907 was 27.6 tons, as compared with 29.1 in 1910. The returns also make it clear that the tractive power of locomotives has been materially increased within the same period.

The available supply of rolling stock per 1,000 miles of line has been computed as follows:—

Per 1,000 miles of line.	1907.	1908.	1909.	1910.
Locomotives.....	156	169	165	165
Freight cars.....	4,783	5,039	4,887	4,840
Passenger cars.....	162	175	174	174

The service performed by each freight car in 1910 was equivalent to the moving of 622 tons. This was better by 55 tons than the performance of 1909, and by 77 tons as compared with 1908. In this result is seen the effect of heavier units and the steady extension of double trackage.

Of the 132,681 cars of all classes, 125,831 were fitted with train brake, and 128,321 with automatic couplers.

#### TRAIN, CAR AND LOCOMOTIVE MILEAGE.

The mileage of revenue trains in 1910 was 85,409,241, as compared with 79,662,216 in 1909.

The mileage of non-revenue trains was 4,581,534. The special train mileage for the year amounted to 202,592.

Train mileage for the past four years has been classified as follows:—

	1907.	1908.	1909.	1910.
Passenger trains.....	30,220,461	31,950,349	32,295,730	35,022,541
Freight trains.....	38,923,890	40,476,370	40,304,906	43,742,668
Mixed trains.....	5,971,414	6,201,807	7,061,580	6,441,440
Special trains.....				202,592
Total.....	75,115,765	78,637,526	79,662,216	85,409,241

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The ratio of the different classes of train mileage is shown in the following summary:—

	1907.	1908.	1909.	1910.
Passenger trains.....	40.23	40.63	40.54	40.00
Freight trains.....	51.81	51.47	50.59	51.21
Mixed trains.....	7.90	7.90	8.87	7.54
Special trains.....				2.5

Following is a complete record of train mileage since 1875:—

Year.	Passenger Trains.	Freight Trains.	Mixed Trains.	Special Trains.	Total Train Mileage.	Engine Mileage.
1875.....	5,206,353	10,910,181	1,563,644		17,680,178	19,633,026
1876.....	5,837,461	9,616,148	2,650,019		18,103,628	21,001,052
1877.....	6,271,980	11,403,517	1,775,316		19,450,813	22,231,840
1878.....	6,225,327	9,981,786	3,462,334		19,669,447	24,091,600
1879.....	6,987,919	6,510,636	7,068,450		20,731,689	24,735,862
1880.....	7,312,168	10,775,380	4,157,292		22,427,449	26,575,969
1881.....	8,208,957	15,163,634	2,099,487		27,301,306	34,265,003
1882.....	15,074,891	15,638,013	2,357,393		27,846,411	33,374,847
1883.....	9,651,427	16,123,387	10,951,424		34,416,092	47,688,528
1884.....	9,315,694	15,710,630	4,254,595		29,758,676	37,390,874
1885.....	9,511,455	16,382,553	4,729,681		30,623,689	38,749,239
1886.....	9,214,131	15,914,127	5,182,557		30,481,086	37,359,494
1887.....	10,838,993	17,997,819	4,539,900		33,638,748	43,276,468
1888.....	11,859,681	20,651,834	4,763,318		37,391,206	46,489,229
1889.....	12,900,483	20,739,391	5,179,506		38,819,380	47,708,158
1890.....	14,362,870	22,428,249	5,058,210		41,849,329	49,512,630
1891.....	14,987,647	25,592,370	4,819,161		43,399,178	56,950,343
1892.....	15,237,093	24,399,044	4,812,361		44,448,468	56,991,253
1893.....	15,839,978	23,220,761	5,305,214		44,385,953	57,587,382
1894.....	16,542,860	21,423,496	5,803,673		43,770,029	57,401,514
1895.....	15,332,276	19,939,699	5,389,915		40,661,890	51,339,885
1896.....	15,846,645	23,299,776	5,354,181		44,500,602	55,786,960
1897.....	17,237,974	23,595,000	4,947,877		45,780,851	54,729,490
1898.....	19,305,603	26,868,366	4,514,424		50,688,283	60,103,944
1899.....	20,093,378	26,922,348	5,199,481		52,215,207	64,582,807
1900.....	20,922,098	24,662,906	9,592,867		55,177,871	67,712,252
1901.....	19,115,472	23,888,302	10,345,620		53,349,394	68,621,424
1902.....	21,104,036	24,891,813	9,734,007		55,729,856	70,275,615
1903.....	22,095,705	28,840,434	9,446,781		60,382,920	77,178,493
1904.....	23,502,876	28,278,310	9,530,816		61,312,002	80,508,064
1905.....	25,428,018	34,372,998	6,133,098		65,934,114	84,335,732
1906.....	28,071,648	39,045,168	5,606,666		72,723,482	94,180,788
1907.....	30,220,461	38,923,890	5,971,414		75,115,765	100,154,966
1908.....	31,950,349	40,476,370	6,210,807		78,637,526	100,622,241
1909.....	32,295,730	40,304,906	7,061,580		79,662,216	97,865,325
1910.....	35,022,541	43,742,668	6,441,440	202,592	85,409,241	106,019,475

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The relationship of train mileage to traffic, and earnings therefrom, is shown in the following table:—

Year.	Freight	Freight Train	Number of	Earnings per	Average
	Earnings.	Mileage.	Tons	Freight	
	\$	Mileage.	Tons.	\$ cts.	\$ cts.
1875	12,073,570	12,473,825	5,670,837	.988	2.129
1876	12,211,158	12,266,167	6,331,757	.995	1.928
1877	11,321,264	13,178,833	6,859,796	.859	1.650
1878	13,129,191	13,444,120	7,883,472	.977	1.665
1879	12,509,093	13,379,086	8,348,810	.922	1.408
1880	15,506,935	14,932,672	9,938,858	1.038	1.560
1881	18,666,982	17,263,121	12,065,323	1.081	1.547
1882	17,729,945	18,013,406	13,575,787	.984	1.305
1883	21,320,208	27,074,761	13,266,255	.787	1.607
1884	20,763,243	19,965,225	13,712,269	1.039	1.514
1885	19,962,058	21,112,234	14,659,271	.946	1.371
1886	21,183,967	21,096,684	15,670,460	1.004	1.351
1887	24,581,047	22,537,719	16,365,335	1.091	1.502
1888	26,410,084	25,415,152	17,172,759	1.039	1.537
1889	26,671,049	25,918,897	17,928,626	1.029	1.487
1890	29,921,788	27,486,459	20,787,469	1.089	1.439
1891	30,584,645	28,411,531	21,753,021	1.075	1.404
1892	33,230,121	29,211,375	22,189,923	1.138	1.502
1893	32,935,028	28,525,975	22,033,599	1.155	1.496
1894	29,982,482	27,227,169	20,721,116	1.101	1.446
1895	29,545,490	25,329,614	21,524,421	1.166	1.372
1896	32,368,082	28,653,957	24,266,825	1.130	1.333
1897	33,522,102	28,542,877	25,300,331	1.174	1.324
1898	38,508,175	31,382,790	28,785,903	1.227	1.340
1899	40,101,036	32,121,829	31,211,753	1.248	1.284
1900	45,643,699	34,255,773	33,946,183	1.332	1.269
1901	46,665,103	33,233,922	36,999,371	1.363	1.261
1902	53,986,672	34,625,820	42,376,527	1.559	1.273
1903	63,089,148	38,287,215	47,373,417	1.648	1.331
1904	64,673,919	30,809,126	48,097,519	1.711	1.344
1905	68,203,320	40,506,096	50,893,957	1.684	1.340
1906	81,433,115	44,651,834	57,966,713	1.824	1.405
1907	94,995,087	44,895,304	63,866,135	2.116	1.472
1908	93,746,655	46,687,177	63,071,167	2.008	1.486
1909	95,714,783	47,366,436	66,842,258	2.041	1.432
1910	116,229,894	50,184,108	74,482,866	2.316	1.560

Car mileage for the past three years has been as follows:—

Car Mileage.	1908.	1909.	1910.
Loaded freight cars.....	748,924,820	775,543,414	910,858,711
Empty freight cars.....	284,944,529	281,175,615	280,255,329
Caboose cars.....		37,644,038	45,367,459
Total.....	1,033,869,349	1,094,363,067	1,236,481,499

The average number of loaded freight cars per train in 1910 was 18.15 and the average load per car was 17.13.

The aggregate locomotive mileage for the year was 106,019,475, as against 97,865,325 in 1909.

The locomotive mileage was distributed as follows:—

Class of Locomotive.	1907.	1908.	1909.	1910.
	Miles.	Miles.	Miles.	Miles.
Freight.....	43,824,909	42,291,082	43,280,549	47,239,088
Passenger.....	29,110,258	30,504,171	32,282,534	34,758,088
Mixed.....	7,492,278	7,410,971	7,237,422	8,211,350
Switching.....	14,816,272	14,941,179	14,832,834	15,581,077
Special.....	4,911,249	5,474,838	231,986	229,872
Total.....	100,154,966	100,622,241	97,865,325	106,019,475

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Locomotive mileage attaching to construction work was erroneously returned as 'special' in 1907 and 1908, but has been since omitted.

## FUEL CONSUMED BY LOCOMOTIVES.

The consumption of fuel by locomotives in 1910 amounted to 6,252,054 tons. Despite the fact that the mileage was considerably greater, this volume of fuel was actually 547,094 tons less than for the preceding year. The returns do not disclose any particular reason for this somewhat surprising result.

Following is a concise statement of the fuel consumed by the various classes of locomotives, together with the mileage:—

Class of Locomotive.	COAL.		WOOD.		Total.	Miles. Run.
	Anthracite.	Bituminous.	Hard.	Soft.	Tons.	
	Tons.	Tons.	Cords.	Cords.		
Freight.....	73	3,585,221	1,136	22,255	3,597,541	47,239,088
Passenger.....	376	1,628,383	742	14,405	1,636,454	34,758,088
Mixed.....	4,128	383,009	521	2,418	388,693	8,211,350
Switching.....	323	617,025	72	5,817	620,303	15,581,077
Special.....		9,051		23	9,063	229,872
Total.....	4,900	6,222,689	2,471	44,918	6,252,054	106,019,175

NOTE.—One and one-half cords of hard wood and two cords of soft wood, calculated as one ton of coal.

A comparison of the consumption of fuel by the several classes of locomotives during the past four years gives the following result:—

Class of Locomotive.	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.
Freight.....	3,194,510	3,318,283	3,833,010	3,597,541
Passenger.....	1,331,178	1,446,919	1,834,700	1,636,454
Mixed.....	303,549	350,921	410,800	388,693
Switching.....	557,576	598,092	743,977	620,303
Construction.....	223,141	256,576	9,621	9,063
Total.....	5,608,954	5,970,791	6,832,108	6,252,054

The volume of fuel consumed, and the cost thereof, have been as follows since 1907:—

Year.	Tons.	Cost.
1907.....		\$
1908.....	5,608,954	15,137,504
1909.....	5,970,791	17,718,468
1909.....	6,832,108	17,544,449
1910.....	6,252,054	18,570,393

Of the above cost, in 1910, \$16,832,817 was charged to road locomotives and \$1,737,576 to yard locomotives.

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The fuel consumed by each class of locomotive per 100 miles run, and the cost, are shown in the following statement:—

Class of Locomotive.	Fuel consumed per 100 miles.				Cost of Fuel per 100 miles.			
	1907.	1908.	1909.	1910.	1907.	1908.	1909.	1910.
	Tons.	Tons.	Tons.	Tons.	\$	\$	\$	\$
Freight.....	7.29	7.84	8.85	7.62	19.61	23.20	22.65	22.48
Passengers.....	4.57	4.74	5.68	4.71	12.29	14.03	14.54	13.89
Mixed.....	4.05	4.73	5.67	4.73	10.89	14.00	14.51	13.95
Switching.....	3.76	4.00	5.01	3.98	10.11	11.84	12.82	11.74
Construction.....	4.54	4.69	4.14	3.94	12.21	13.88	10.59	11.62

## ACCIDENTS.

615 persons were killed and 2,139 injured by the railways of Canada in 1910. This was an increase of 110 in the number killed and a decrease of 47 in the number injured, as compared with 1909.

Of the above, 524 were killed and 1,441 injured as the result of the movement of trains, and 91 killed and 698 injured from other causes.

One passenger in every 598,243 was killed and one in every 132,943 injured from the movement of trains.

The record for the year, succinctly stated, was as follows:—

	Movement of trains.		Non-movement of trains.	
	Killed.	Injured.	Killed.	Injured.
Passengers.....	60	270	2	9
Employees.....	214	926	51	679
Trespassers.....	175	148		
Non-trespassers.....	74	77		
Postal clerks, &c.....	1	20	8	10
Total.....	524	1,441	91	698

Grand total: 615 killed and 2,139 injured.

Details with regard to accidents, by railways, will be found in Table No. 16.

Comparing the accidents resulting from the movement of trains during the past four years the figures are as follows:—

	Killed.				Injured.			
	1907.	1908.	1909.	1910.	1907.	1908.	1909.	1910.
Passengers.....	70	28	36	60	352	345	281	270
Employees.....	249	224	182	214	1,126	1,793	897	926
Trespassers.....	195	156	190	175	125	120	95	148
Non-trespassers.....	70	22	67	74	88	59	89	77
Postal clerks, &c.....	3	16		1	7	3	25	20
Other persons.....	11	3	3		454	27	17	
Total.....	598	449	478	524	2,152	2,347	1,404	1,441



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Causes—Accidents to Passengers.	Killed.				Injured.			
	1907.	1908.	1909.	1910.	1907.	1908.	1909.	1910.
Collisions.....	26	2	6	2	93	88	83	31
Derailments.....	21	8	1	44	127	131	99	126
Parting of trains.....	2	1	1	1	3	1	1	2
Falling from trains, &c.....	2	6	11	3	36	20	11	28
Jumping on or off.....	10	6	14	8	38	50	57	43
Struck at highways.....	4	1	1	1	7	1	1	1
“ stations.....	4	3	1	1	3	5	5	4
“ other points.....	4	2	1	1	1	1	1	2
Other causes.....	3	1	2	1	44	49	25	33
Total.....	70	28	36	60	352	345	281	270

Accidents to employees resulted from the following causes:—

Causes—Accidents to Employees.	Killed.				Injured.			
	1907.	1908.	1909.	1910.	1907.	1908.	1909.	1910.
Coupling or uncoupling.....	34	20	18	17	141	183	125	139
Collisions.....	46	25	40	19	135	80	86	56
Derailments.....	12	15	15	47	56	60	65	58
Parting of trains.....	2	1	1	1	16	11	9	6
Locomotives or cars breaking down	1	1	1	1	6	16	6	19
Falling from trains or cars.....	32	32	28	23	186	185	142	165
Jumping on or off.....	7	8	9	24	66	108	95	98
Struck by trains, &c.....	85	81	53	62	130	116	88	78
Overhead obstructions.....	2	3	1	1	13	14	11	25
Other causes.....	28	16	18	21	377	340	270	282
Total.....	249	224	182	214	1,126	1,113	897	926

The foregoing accidents were distributed among employees as follows:—

Employees.	Killed.				Injured.			
	1907.	1908.	1909.	1910.	1907.	1908.	1909.	1910.
Trainmen.....	149	109	113	103	791	790	693	610
Trackmen.....	53	36	37	70	104	307	71	136
Switch tenders, watchmen, &c.....	7	11	3	9	47	40	27	25
Stationmen.....	3	4	2	2	3	66	10	6
Shopmen.....	9	11	7	4	16	284	16	41
Telegraph employees.....	2	2	2	2	3	4	3	3
Other employees.....	28	51	20	26	167	312	77	105
Total.....	249	224	182	214	1,121	1,793	897	926

During the past year one trainman in every 199 was killed and one in every 33 injured.

One trackman in every 550 was killed in 1910 and one in every 98 injured.

It would seem, however, that the vocation of switch tender was relatively the most hazardous in 1910, since one of that class to every 181 employed during the year was killed and one in every 65 injured.



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Accidents from causes other than the movement of trains, locomotives or cars, occurred to the following classes:—Passengers, 2 killed, 9 injured; stationmen, 1 killed, 68 injured; shopmen, 1 killed, 218 injured; trackmen, 56 killed, 169 injured; other employees, 23 killed, 224 injured; and other persons, 8 killed and 10 injured.

## ACCIDENTS AT HIGHWAY CROSSINGS.

Special care was taken during the year to secure further data with respect to accidents at highway crossings, and the figures thus gathered are added to those for the two preceding years:—

Accidents at Highway Crossings.	KILLED.			INJURED.		
	1908.	1909.	1910.	1908.	1909.	1910.
Urban.....	30	33	28	35	41	45
Rural.....	21	43	35	33	31	16
Total.....	51	76	63	68	72	61

The record in relation to railway accidents from the movement of trains since 1888 is as follows:—

YEARS.	PASSENGERS.		EMPLOYEES.		OTHERS.		TOTAL.		PASSENGERS.	
	Killed	Injured.	Killed	Injured.	Killed	Injured.	Killed	Injured.	One killed in every	One injured in every
1888.....	20	70	107	619	104	86	213	775	534,931	152,837
1889.....	37	103	89	637	84	135	210	875	328,408	117,971
1890.....	11	52	83	682	124	101	218	835	1,165,569	246,562
1891.....	13	105	65	582	118	131	193	818	1,017,120	125,929
1892.....	14	43	110	697	109	139	233	879	966,672	314,730
1893.....	11	57	72	331	133	120	216	708	1,238,002	238,912
1894.....	12	64	67	521	132	107	211	694	1,205,208	225,976
1895.....	9	47	51	489	127	122	187	658	1,554,175	297,608
1896.....	11	62	46	446	104	111	161	619	1,346,400	238,877
1897.....	7	70	76	579	130	158	213	807	2,310,191	231,019
1898.....	5	72	98	862	167	163	270	1,097	3,688,809	256,167
1899.....	20	119	119	882	145	184	284	1,185	956,668	160,784
1900.....	7	131	123	941	195	245	325	1,303	3,071,453	164,123
1901.....	16	134	118	970	183	213	317	1,317	1,149,108	137,207
1902.....	19	177	146	930	165	221	330	1,328	1,088,419	116,836
1903.....	53	258	186	956	181	239	420	1,453	417,900	85,848
1904.....	25	232	192	214	178	259	395	705	945,630	101,899
1905.....	35	244	206	920	227	193	468	1,357	722,535	103,642
1906.....	16	231	139	893	206	241	361	1,365	1,749,361	121,168
1907.....	70	352	249	1,126	268	220	587	1,698	459,104	91,299
1908.....	28	345	221	1,113	197	209	449	2,347	1,215,893	98,681
1909.....	36	281	182	897	260	226	478	1,404	907,869	116,311
1910.....	60	270	214	926	250	245	524	1,441	598,243	132,943

## HIGHWAY CROSSINGS.

Inquiries were continued during the year with respect to highway crossings, and complete returns were again received. The object has been to definitely ascertain (1) the total number of such crossings, (2) the number protected, (3) how protected, and (4) the number of such protected or unprotected crossings in the country or in cities and towns.

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The facts for 1909 and 1910 were as follows:—

	PROTECTED CROSSINGS.		UNPROTECTED CROSSINGS.	
	1909.	1910.	1909.	1910.
Urban.....	587	630	1,767	1,902
Rural.....	492	557	15,426	16,923
Total.....	1,079	1,187	17,193	18,825

It will be seen that there has been an appreciable increase during the year in the number of protected highway crossings.

The facts with regard to the various methods of protection are given in the following statement:—

Crossings—How Protected.	1909.		1910.	
	Rural.	Urban.	Rural.	Urban.
By gates.....	34	153	28	133
By overhead bridges.....	190	110	220	125
By subways.....	213	166	229	171
By bells.....	39	77	64	83
By watchmen.....	16	101	16	118
Total.....	492	587	557	630

It is encouraging to observe that a substantial increase has taken place in the number of crossings permanently protected—in fact, eliminated—by the construction of subways and overhead bridges. There was also during the year a material betterment in the number of highway intersections at which bells were installed.

### RAILWAY EMPLOYEES.

There were 123,768 employees in the service of railways in Canada on June 30, 1910—a decrease of 1,427 as compared with the returns of 1909.

In view of the fact that 1910 was a year of marked expansion in railway operations, the foregoing number of employees may create surprise. An explanation, however, is found in the method of computing numbers. Railways are required to make a return of the number of employees actually in service on June 30, and this has led to wide fluctuations. It is not a satisfactory plan; but it is perhaps the only one which could be adopted without casting a most burdensome, difficult and expensive task on reporting railways.

In 1910 there were 16,709 employees engaged in outside operations, to whom was paid during the year \$5,169,922.58 in wages.

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A better index of the labour situation is to be found in the figures relating to cost. These apply to the whole year. For the past four years the record is as follows:—

Employees.	1907.	1908.	1909.	1910.
	\$	\$	\$	\$
Salaries and wages.....	58,719,493	60,376,607	63,216,662	67,167,793

Here an ascending scale of cost is shown, representing an advance of 14.4 per cent within four years; and in this calculation definite factors are being dealt with applicable to the whole year, rather than those which relate to a specific date.

The record of numbers and classes of employees is as follows:—

Railway Employees.	1907.		1908.		1909.		1910.	
	No.	Per 100 miles of line.	No.	Per 100 miles of line.	No.	Per 100 miles of line.	No.	Per 100 miles of line.
General officers.....	336	2	318	1	328	1	372	2
Other officers.....	461	2	526	2	574	2	718	3
General office clerks.....	4,214	19	4,795	21	5,967	25	6,835	28
Station agents.....	2,536	11	2,522	11	2,624	11	2,879	12
Other stationmen.....	11,829	53	8,908	39	10,739	45	12,578	51
Enginemen.....	4,351	19	3,868	17	4,104	17	4,419	18
Firemen.....	4,760	21	4,206	18	4,330	18	4,885	20
Conductors.....	2,911	13	2,719	12	2,831	12	3,323	13
Other trainmen.....	8,261	36	7,507	33	8,178	34	7,946	32
Machinists.....	2,486	11	2,759	12	3,294	14	2,935	12
Carpenters.....	3,215	14	3,190	14	3,377	14	4,348	17
Other shopmen.....	12,579	56	11,873	52	13,858	57	15,387	62
Section foremen.....	3,903	17	4,017	17	4,216	17	4,539	18
Other trackmen.....	30,614	136	20,068	87	28,401	118	30,131	122
Switch tenders, &c.....	2,364	11	1,849	8	1,624	7	1,628	7
Telegraph operators.....	2,987	13	2,686	12	2,899	12	2,985	12
Employees—Floating equipment.....	5,426	24	7,273	32	9,324	39	292	1
All other employees.....	20,779	93	17,320	75	18,527	77	17,568	71
Total.....	124,012	551	106,404	463	125,195	520	123,768	501

The average daily compensation of employees, by classes, is shown in the following table:—

Employees.	1907.	1908.	1909.	1910.
	\$	\$	\$	\$
General officers.....	11 74	11 59	11 73	10 72
Other officers.....	4 11	4 63	4 59	4 73
General office clerks.....	1 70	1 81	1 81	1 94
Station agents.....	1 91	2 04	2 09	2 16
Other stationmen.....	1 56	1 71	1 65	1 65
Enginemen.....	3 89	4 53	4 13	4 12
Firemen.....	2 42	2 50	2 52	2 53
Conductors.....	3 20	3 30	3 31	3 30
Other trainmen.....	1 92	2 06	2 13	2 12
Machinists.....	2 41	2 68	2 89	4 40
Carpenters.....	2 09	2 19	2 23	2 52
Other shopmen.....	1 99	2 16	2 33	2 19
Section foremen.....	2 06	2 25	2 15	2 18
Other trackmen.....	1 45	1 57	1 59	1 58
Switch tenders, &c.....	1 84	1 81	2 00	1 57
Telegraph operators.....	1 88	2 07	2 09	2 20
Employees—floating equipment.....	1 18	1 10	1 26	2 19
All other employees.....	1 81	1 87	1 95	1 95

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The salaries and wages paid during the past four years were distributed in operating expenses as follows:—

	1907.	1908.	1909.	1910.
	\$	\$	\$	\$
Way and structures.....	15,398,885	14,715,572	14,249,186	16,502,902
Equipment.....	12,161,917	13,008,104	14,623,930	14,775,782
Traffic expenses.....			5,353,607	1,313,980
Transportation expenses.....	27,398,553	28,479,096	24,656,585	32,091,952
General expenses.....	3,760,138	4,173,835	4,333,354	2,483,177
Total.....	58,719,493	60,386,607	63,216,662	67,167,793

## TAXATION.

The tax bill of Canadian railways amounted to \$1,792,648.83 in 1910, an increase of \$211,312.24 as compared with the preceding year.

Following is a statement, by provinces, of the railway taxes collected during the years 1909 and 1910:—

Provinces.	1909.		1910.	
	\$	cts.	\$	cts.
Nova Scotia.....	926	54	16,762	66
New Brunswick.....	782	79	1,298	35
Prince Edward Island.....	100	00	100	00
Quebec.....	362,974	16	337,490	05
Ontario.....	764,620	56	747,004	78
Manitoba.....	128,082	84	92,476	48
Alberta.....	98,038	39	87,423	93
Saskatchewan.....	48,869	56	161,575	45
British Columbia.....	154,025	07	220,687	32
Yukon.....	6,020	90	5,896	64
Outside operations.....	16,895	78	121,933	17
Total.....	1,581,336	59	1,792,648	83

Following are the statutory conditions governing the taxation of railways in the various provinces:—

*Ontario.*—Section 6 of ‘An Act to Supplement the Revenues of the Crown,’ assented on April 14 last, provides:

‘Every company owning, operating or using a railway shall pay a tax of \$60 per mile for one track, and, where the line consists of two or more tracks, of \$20 per mile for each additional track owned, operated or used in any organized county; and of \$40 per mile for one track, and, where the line consists of two or more tracks, of \$10 per mile for each additional track, in territory without county organization: provided that a company owning, operating or using a railway which, either by itself or in conjunction with any other railway leased by it or to which it is leased or with which it is amalgamated or together with which it forms one system does not exceed 150 miles in length from terminus to terminus, shall in lieu of the said tax pay a tax of \$15 per mile for one track and, where the line consists of two or more tracks, of \$5 per mile for each additional track, and where the railway or system does not exceed 30 miles in length from terminus to terminus a tax of \$10 per mile for one track and \$5 per mile for each additional track.

'Every company owning, operating or using a street railway or part thereof in a city for carrying passengers shall pay for each mile of track within the city a tax of: (a) \$20 when such mileage does not exceed 20 miles; (b) \$35 when such mileage exceeds 20 miles but does not exceed 30 miles; (c) \$45 when such mileage exceeds 30 miles but does not exceed 50 miles, and (d) \$60 when such mileage exceeds 50 miles. The mileage shall be computed on the single track, each mile of double track being counted as two miles of single track; but in calculating the mileage switches or sidings, tracks into car stables or car sheds, Y's and curves laid at street corners and portions of track not in general use for passenger traffic shall not be counted.'

The municipalities also impose taxes on railways in Ontario.

*Quebec.*—Section 8 of 'The Act to impose taxes on Commercial Corporations, &c.' reads:

'Every railway company owning, operating or using in whole or in part in this province, a steam or electric railway, shall pay upon each main line thirty dollars per mile for one track, and, where the line consists of two or more tracks, fifteen dollars per mile for each additional track owned, operated or used as aforesaid; upon each branch line twenty dollars per mile for one track, and, where the line consists of two or more tracks, ten dollars per mile for each additional track.'

A municipal tax also exists in the province of Quebec.

*Nova Scotia and New Brunswick.*—In neither of these provinces are railways subject to any form of taxation.

*Manitoba.*—Section 5 of the Act relating to Railway Taxation enacts:

'In order to supplement the Revenue of the Crown in the province of Manitoba every railroad company at present owning or operating, or which may hereafter own or operate, any line or lines of railroad within the said province shall annually pay to the Crown in the province a part or portion of the gross earnings of such railway companies in the province of Manitoba as follows:—In and for the year 1900, 1901 and 1902, two per cent of the gross earnings of such companies. In each and every year after the year 1902 such sums as may be determined by the Lieutenant Governor in Council not exceeding, however, three per cent of the gross earnings of the companies.'

*Saskatchewan.*—Section 3 of the 'Act respecting the Taxation of the Earnings of Railway Companies' provides as follows:—

'Every railway company at present owning or operating or which may hereafter own or operate any line or lines of railway situated or partly situated within Saskatchewan shall during the year one thousand nine hundred and eight and annually thereafter pay to the Crown in this province such part or portion of its gross earnings derived from the said line or lines of railway or such portions thereof as are within Saskatchewan as may be determined by the Lieutenant Governor in Council not to exceed the following:—(a) In respect of that part of the railway or branch of railway in operation for seven years or more three per cent of the gross earnings derived from the operation of the same; (b) In respect of that part of the railway or branch of railway in operation for five years or more and less than seven years one and one-half per cent of such gross earnings: Provided that no tax shall be payable hereunder on the gross earnings of any railway or branch thereof until such railway or branch has been in operation for five years.'

*Alberta.*—Railways are taxed on a rate of one per cent upon their actual value. Pending an inquiry as to the facts in that regard, the value is assumed by law to be \$20,000 per mile. On that basis taxes have been levied during the past two years.



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## ELECTRIC RAILWAYS.

The year 1910 was marked by progress in electric railway interests. Mileage, capital, earnings and traffic showed substantial increases.

The number of reporting corporations increased during the year from 48 to 52. One or two additions came from the western provinces, where the development of centres of population is creating a growing need for local transportation facilities.

The classifications and schedules which were made effective in 1908 are now thoroughly understood by accountants, and may be counted upon to produce satisfactory and helpful statistics as the work proceeds.

It is regretted that a report from Edmonton was not received this year. The new line in that city has been in operation since 1909.

## MILEAGE.

A comparison of mileage for 1910 with the returns for 1909 gives the following result:—

Length of Tracks.	1909.	1910.
	Miles.	Miles.
Length of first main track.....	988.97	1,049.07
Length of second main track.....	215.05	242.39
Total length of main track.....	1,204.02	1,291.46
Length of sidings and turnouts.....	83.62	91.39
Total, computed as single track.....	1,287.65	1,382.85

It will be seen that there was an addition of 60.10 miles of first main track during the year, and of 95.20 miles of total track.

The record of first main track mileage since 1901 is as follow:—

1901.....	674.58*
1902.....	557.59
1903.....	759.36
1904.....	766.50
1905.....	793.12
1906.....	813.74
1907.....	814.52
1908.....	992.03
1909.....	988.97
1910.....	1,047.07

\*Improperly included double track and sidings.

## CAPITAL LIABILITY.

The capital obligations of electric railway companies increased from \$91,604,989 in 1909 to \$102,044,979 in 1910. The expansion in this respect since 1907 amounts to \$27,386,157.

Following is a statement of the facts for the past four years:—

	1907.	1908.	1909.	1910.
	\$	\$	\$	\$
Stocks.....	43,491,746	50,295,266	51,946,433	58,653,826
Funded debt.....	31,166,976	37,114,619	39,658,556	43,391,153
Total.....	74,658,722	87,409,885	91,604,989	102,044,979



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The subsidies received from governments and municipalities amount to \$493,346. This sum is not included in the above figures, for the reason it could not properly be regarded as a liability.

## EARNINGS AND OPERATING EXPENSES.

The gross earnings for 1910 were \$17,100,789.48, an increase of \$2,275,852.93 as compared with 1909.

The sources of income for 1910 were as follow:—

## CAR EARNINGS—

	\$	cts.
Passengers.....	16,145,994	72
Freight.....	575,536	84
Mail and express.....	68,604	11
Other car earnings.....	51,241	07
Total car earnings.....	16,821,376	74

## MISCELLANEOUS EARNINGS—

	\$	cts.
Advertising.....	45,659	15
Rent of buildings, &c.....	18,465	22
Rent of tracks.....	17,302	28
Rent of equipment.....	17,045	21
Sale of power.....	29,217	55
Other earnings.....	151,723	33
Total miscellaneous earnings.....	279,412	74
Gross earnings from operation.....	\$17,100,789.	48

Following is a comparison of gross car earnings since 1907:—

Gross Car Earnings.	1907.	1908.	1909.	1910.
	\$	\$	\$	\$
Passenger.....	12,013,421	13,233,724	14,080,755	16,125,944 72
Freight.....	344,367	346,021	386,092	575,536 84
Mails and express.....	41,951	54,883	110,452	68,604 11
Other earnings.....	233,190	372,421	34,185	51,241 07
Total.....	12,630,430	14,007,049	14,611,484	16,821,376 74

In the preparation of a balance sheet for the year it is impracticable to separate certain accounts and thus make the figures agree closely with those given in the foregoing statement. The difficulty arises chiefly with those companies which operate jointly electric railway and electric lighting plants, and in connection with the sale of power, &c. Bearing this in mind, the following balance sheet will be understood:—

	\$	cts.	\$	cts.
EARNINGS AND INCOME—				
Gross earnings from operation.....			17,076,123	62
Miscellaneous income.....			1,382,692	15
			18,458,815	77
Operating expenses.....	10,121,780	67		
DEDUCTIONS FROM INCOME—				
Taxes.....	1,311,953	65		
Interest on funded debt.....	1,449,152	48		
Interest, floating debt.....	156,546	16		
Other deductions.....	36,106	97		
			13,075,539	93
Net income.....			5,383,275	84

The direct difference between earnings and operating expenses was \$8,337,035.10, to which might properly be added \$1,544,892.65 as the aggregate of deficits returned by fourteen corporations. In other words, actual net earnings of \$9,572,315.31 were reduced by that sum.

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A comparison of deductions from income for 1909 and 1910 gives the following result:—

	1909.	1910.
	\$	\$
Taxes.....	843,959 12	1,311,953 65
Interest on funded debt.....	1,213,142 24	1,449,152 48
Interest on floating debt.....	104,573 13	156,546 16
Other deductions.....	36,631 99	36,106 97
Total.....	2,198,306 48	2,953,759 26

Operating expenses for the year aggregated \$10,139,070.39, and were distributed as follows:—

	\$	cts.
Maintenance of way and structures.....	797,895	03
equipment.....	1,532,542	87
Operation of power plant.....	1,586,927	37
cars.....	4,814,761	63
General.....	1,406,933	49
Total.....	10,139,070	39

Operating expenses for 1910 were equal to 59.29 per cent of gross earnings, as against 59.93 in 1909.

Following is a comparison of operating expenses in detail for 1909 and 1910:—

	1909.		1910.	
	\$	cts.	\$	cts.
Maintenance of way and structures—				
Track and roadway.....	386,646	54	590,363	28
Electric line.....	94,249	33	152,874	47
Buildings and fixtures.....	50,241	32	54,657	28
Maintenance and equipment—				
Steam plant.....	18,008	61	38,305	93
Electric plant.....	36,682	74	45,148	10
Cars.....	405,497	36	692,276	38
Electric equipment of cars.....	321,050	88	481,301	83
Miscellaneous equipment.....	48,317	04	58,815	63
Miscellaneous shop expenses.....	39,608	67	202,591	58
Transportation—Operation of power plant—				
Power plant wages.....	127,015	19	178,389	69
Fuel for power.....	184,719	72	271,410	36
Water for power.....	20,818	00	21,398	33
Lubricants and waste for power plant.....	8,262	43	10,538	93
Miscellaneous supplies and expenses.....	26,124	49	17,916	34
Hired power.....	686,128	63	1,087,273	72
Transportation—Operation of cars—				
Superintendence.....	130,475	58	192,567	60
Wages of conductors.....	1,181,244	60	1,749,916	70
Wages of motormen.....	1,150,002	77	1,697,096	68
Wages, miscellaneous car service employees.....	121,009	71	152,950	35
Wages, car house employees.....	307,351	76	393,998	76
Car service supplies.....	53,713	15	94,486	16
Miscellaneous car service expenses.....	75,940	59	183,526	94
Hired equipment.....	25,988	40	42,136	56
Cleaning and sanding track.....	26,703	64	65,200	30
Removal of snow and ice.....	100,154	28	238,881	58
General—				
Salaries of general officers.....	153,665	61	236,575	70
Salaries of clerks.....	154,213	54	202,712	98
Printing and stationery.....	28,157	11	33,634	34
Miscellaneous office expenses.....	32,422	53	44,336	11
Store expenses.....	20,133	95	33,841	10
Stable expenses.....	17,059	38	30,817	44
Advertising and attractions.....	55,343	96	47,411	04
Miscellaneous general expenses.....	151,399	58	133,752	32
Damages.....	201,877	48	342,120	26
Legal expenses—damages.....	19,147	15	8,784	32
Miscellaneous legal expenses.....	26,761	29	54,336	64
Rent of land and buildings.....	15,628	20	20,936	74
Rent of track and terminals.....	73,087	18	98,753	70
Insurance.....	85,235	41	118,930	80

## PUBLIC SERVICE.

There were carried by electric railways during the year 360,964,876 passengers, to which might be added 99,227,824 transfer passengers, making a total of 460,192,700.

There were also 852,294 tons of freight hauled. The figures in this regard were not available in 1909 owing to an omission in the schedule; but, as compared with 1908, the freight traffic showed an increase of 119,819 tons.


The following statement shows the growth in passenger traffic since the year 1901:—

1901.....	120,934,656
1902.....	137,681,402
1903.....	155,662,812
1904.....	181,689,998
1905.....	203,467,317
1906.....	237,655,074
1907.....	273,999,404
1908.....	299,099,309
1909.....	314,026,671
1910.....	360,964,876

The conduct of the above traffic involved a car mileage of 65,249,166, of which 889,561 miles were attached to freight, mail and express. The total car mileage in 1909 was 60,152,846.

## EQUIPMENT.

The following comparison will show the additions made to equipment during the year 1910:—

	1909.	1910.
Passenger, closed.....	1,689	1,795
"    open.....	1,017	994
"    combination.....	337	337
Freight.....	152	282
Mail, express and baggage.....	20	25
Combination, passenger and freight.....	7	7
Work.....	85	87
Snow ploughs.....	54	62
Sweepers.....	90	97
Miscellaneous.....	93	103
 Total.....	3,544	3,789

## EMPLOYEES.

The number of employees grew from 10,557 in 1909 to 11,390 in 1910, an increase of 833.

The aggregate of salaries and wages paid during the year was \$6,316,777.20, which was equivalent to 62.30 per cent of the total operating expenses.

Following was the distribution of employees, by divisions, in 1909 and 1910:—

	1909.	1910.
General administration—		
General officers.....	132	150
General office clerks.....	413	553
Maintenance—		
Superintendents.....	72	71
Other employees.....	3,548	3,633
Transportation—		
Superintendents.....	100	102
Other employees.....	6,292	6,881
Total.....	10,557	11,390

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## ACCIDENTS.

The return of accidents for the year showed 95 persons killed and 2,538 injured. This was an increase of 27 in the number killed and 399 in the number injured as compared with 1909.

The accidents in 1909 and 1910 occurred to the following classes of persons:—

	1909.		1910.	
	Killed.	Injured.	Killed.	Injured.
Passengers.....	11	1,303	14	1,595
Employees.....	7	218	13	227
Others.....	50	618	68	716
Total.....	68	2,139	95	2,538

## SUMMARIES.

The following digest of statistical data since 1901 will readily enable comparisons to be made:—

	1901.	1902.	1903.	1904.	1905.
Total mileage.....	*674.58	557.59	759.36	766.50	793.12
Paid up Capital.....	\$39,076,018	\$41,593,063	\$47,096,45	\$50,399,188	\$61,033,321
Gross earnings.....	\$5,768,283	6,486,438	7,233,677	8,453,609	9,357,125
Net earnings.....	\$2,339,120	2,683,583	2,760,819	3,127,092	3,438,931
Earnings—passenger traffic.....	\$5,529,687	6,195,915	6,888,409	8,082,373	8,932,913
" freight.....	\$95,082	127,917	164,188	182,143	216,022
" mail and express.....	\$33,135	15,952	20,278	30,738	31,753
" other sources.....	\$110,377	146,652	160,803	158,353	176,435
Total operating expenses.....	\$3,435,162	3,802,855	4,472,858	5,326,516	5,918,194
Maintenance of way and buildings.....	\$310,892	445,837	481,236	606,146	629,656
Cost of motive power.....	\$502,101	541,087	777,201	1,377,199	1,240,001
Maintenance of cars.....	\$322,700	353,891	606,602	659,213	747,073
General and operating charges.....	\$2,299,468	2,462,038	2,607,817	2,683,957	3,301,462
Total car mileage.....	31,750,754	35,833,841	38,028,529	42,066,124	45,959,101
Passengers carried.....	120,934,656	135,681,402	155,662,812	181,689,998	203,467,317
Tons of freight carried.....	287,926	266,182	371,286	400,161	510,350

\* Improperly included, double track and siding.

	1906.	1907.	1908.	1909.	1910.
Total mileage.....	813.74	814.52	992.03	988.97	1,047.07
Paid up Capital.....	\$63,857,967	73,567,795	87,903,231	91,604,989	102,044,979
Gross earnings.....	\$10,966,871	12,630,430	14,007,049	14,611,484	17,100,789
Net earnings.....	\$4,291,834	4,971,624	5,311,170	4,962,501	5,383,276
Earnings—passenger traffic.....	\$10,438,000	12,013,421	13,233,724	14,080,755	16,125,995
" freight.....	\$288,105	344,367	346,021	386,092	575,537
" mail and express.....	\$35,041	41,951	54,883	110,452	68,604
" other sources.....	\$205,724	233,190	372,421	34,185	51,241
Total operating expenses.....	\$6,675,037	7,373,251	8,695,880	8,885,235	10,121,781
Maintenance of way and buildings.....	\$608,767	765,684	912,929	643,135	797,895
Cost of motive power.....	\$1,242,075	1,412,358	1,803,723	1,445,227	1,586,927
Maintenance of cars.....	\$894,460	1,060,783	1,118,925	1,184,287	4,814,762
General operating charges.....	\$3,929,733	4,498,424	4,860,303	5,612,041	1,406,943
Total car mileage.....	50,618,836	53,361,227	56,964,881	60,152,846	65,249,166
Passengers carried.....	237,655,074	273,999,404	299,099,309	314,026,671	360,964,876
Tons of freight carried.....	506,024	479,731	732,475	.....	852,294

Year.	KILLED.			INJURED.			PASSENGERS.			
	Passengers		Total.	Passengers		Total.	Number		Injured one in every	
	Employees.	Others.		Employees.	Others.		carried.	Killed, one in every		
1901.....	3	1	15	158	58	98	314	120,934,656	40,311,552	255,137
1902.....	9	1	32	410	33	120	563	137,681,402	15,297,933	335,808
1903.....	10	7	39	501	62	212	778	155,662,812	15,566,281	308,855
1904.....	10	3	53	508	61	272	844	181,689,998	18,168,999	357,657
1905.....	30	3	56	862	87	347	1,296	203,467,317	6,782,243	236,041
1906.....	11	2	47	1,085	127	441	1,653	237,655,074	21,605,006	219,327
1907.....	27	7	71	988	216	532	1,736	273,999,404	10,148,126	277,327
1908.....	18	6	67	1,156	188	539	1,883	299,099,309	16,616,628	288,736
1909.....	11	7	68	1,303	218	618	2,139	314,026,671	28,547,879	241,001
1910.....	14	13	95	1,595	227	716	2,538	360,964,876	25,783,205	226,310

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Detailed information with respect to the facts dealt with in these introductory observations will be found in tables forming the body of the subjoined report.

I have the honour to be, sir,

Your obedient servant,

J. L. PAYNE,

*Comptroller of Statistics.*





# RAILWAY STATISTICS



TABLE 1.—Location of Steam Railways of the Dominion of Canada, to June 30, 1910.

Name of Railway.	Description.	DISTANCE.	
		Miles.	Total.
Alberta Railway and Irrigation Co.....	From Lethbridge, Alberta, to Coutts, on International boundary, 4 ft. 8½ in. gauge.....	64·61	111·82
	Also third rail for 20 miles, making a gauge of 3 ft. Stirling to Cardston .....	47·21	
Albert Southern (abandoned)	Harvey Branch Junction to Alma, N.B.....	16·00	19·00
	Harvey Branch, Albert, to Harvey Bank, N.B.....	3·00	
Algoma Central and Hudson Bay.....	Sault Ste. Marie to Chippewa—Main line .....	69·35	89·64
	Branch—Michipicoten to Helen Mines.....	19·29	
	" Josephine Junction to Josephine Mine.....	10·00	
Atlantic, Quebec and Western.....	Paspebiac to Newport.....		35·00
Baie des Chaleurs in Atlantic and Lake Superior System.....	Matapedia Station on I. C. R. to Paspebiac, 100 miles .....		100·00
Bay of Quinté Railway.....	Deseronto to Bannockburn .....	76·00	89·37
	" west of Deseronto .....	2·00	
	Yarker to Sydenham.....	11·37	
Bedlington and Nelson.....	International boundary at Port Hill to Jct. Can. Pac. Ry. at Creston, and from Jct. with C.P.R. at Sirdar to Kuscomok .....		15·30
Beersville Coal and Railway Co. (now North Shore).....	From Adamsville to Mount Carlyle.....		8·63
Brandon, Saskatchewan and Hudson Bay.....	International boundary at Bannerman to Brandon, Man.....		69·45
Bessemer and Barry's Bay.....			5·00
British Yukon.....	White Pass to Whitehorse Spur, B.C., and Branch to Whitehorse.....		90·32
Buctouche and Moncton.....	Moncton, on Intercolonial Railway, to Buctouche, N. B. ....		32·00
Brockville, Westport and North Western.....	Brockville to Westport, Ont .....		45·00
Bruce Mines and Algoma.....	Town of Bruce Mines to Rock Lake Mine.....		17·28
Canada Atlantic, including Ottawa, Arnprior and Parry Sound Railway, now in Grand Trunk System.....	City of Ottawa to Junction with Grand Trunk at Lacolle and U.S. boundary. Crosses the St. Lawrence at Coteau by bridge. Connects with Grand Trunk Railway at Coteau and Lacolle, and Ottawa to Depot Harbour, Lake Huron, near Parry Sound.....		396·41
Central Counties.....	From Glen Robertson, on Canada Atlantic, to Hawkesbury, Ont.....	22·24	38·49
	Leased to Canada Atlantic.....	South Indian, on Canada Atlantic, to Rockland .....	
Canadian Northern.....	Port Arthur to Rainy River.....	286·90	388·49
	International boundary to Winnipeg.....	108·00	
	Beaver to Edmonton.....	751·36	
	Branches—Stanley Junction to Gunflint Lake.....	66·90	
	" Caruan Junction to Somerset.....	78·60	
	" Neepawa Junction to McCreary Junction.....	70·40	
	" Gilbert Plains Junction to Prince Albert.....	360·60	
	" Sifton Junction to Winnipegosis .....	21·20	
	" Emerson to South Junction.....	72·70	
	" Winnipeg Transfer Track .....	9·96	

TABLE I.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	DISTANCE.	
		Miles.	Total.
Canadian Northern— <i>Con.</i>	Branches—Rossburn Junction to Russell.....	104·20	
	" Greenway to Adelpa.....	52·10	
	" Arizona Junction to Brandon Junction.....	77·00	
	" Brandon Junction to Carberry.....	22·80	
	" Oak Point Junction to Oak Point.....	60·40	
	" Hartney to Virden.....	37·40	
	" Battleford to Battleford Junction.....	8·00	
	" Brandon to Regina.....	220·02	
	" Edmonton Junction to Mornville.....	22·90	
	" Edmonton to Stony Plains.....	21·40	
	" Oakland to Tobogan.....	17·80	
	" Thunderhill Junction to end of steel.....	40·77	
	" Dalmeny N. to end of steel.....	28·13	
	" Winnipeg to near Dundee.....	8·70	
Canada Coals and Railway Co., now Maritime Railway, Coal and Power Co.	" Saskatoon to west end of steel.....	127·38	
Canada Southern.....	Maccan Station, I.C.R., to Joggins Coal Mine.....		2,675·12
	Main Line—Windsor, Ont., to Suspension Bridge.....	226·18	15·00
	Amherstburg Branch—Essex Centre to Amherstburg.....	16·83	
	St. Clair Branch—St. Clair Junction to Courtwright.....	62·63	
	Fort Erie Branch—Fort Erie to Welland Junction.....	17·50	
	Erie and Niagara Branch—Old Fort Erie to Niagara.....	30·60	
	Oil Springs Branch—Oil Springs to Oil City.....	5·50	
Leased.....	Sarnia, Chatham and Erie—Oil City to Petrolia.....	7·00	
".....	Leamington and St. Clair—Comber to Leamington.....	15·95	
			382·19
Canada Eastern, now included in Intercolonial Railway.....	Late Northern and Western of New Brunswick.....		
	Fredericton to Loggieville.....	125·00	
Canadian Pacific—Owned.....	Main Line—Montreal to Vancouver.....		2,909·50
	Branches—Dunmore to Crowsnest.....	209·60	
	" Quebec to St. Martins Junction.....	159·80	
	" Piles Junction to Grand Piles.....	26·90	
	" Berthier Junction to Berthier.....	2·10	
	" Johette Junction to St. Felix.....	16·60	
	" Ste. Thérèse Junction to St. Jérôme.....	13·30	
	" Ste. Thérèse to St. Eustache.....	6·00	
Montreal and Western.....	" St. Jérôme to Labelle.....	66·90	
	" St. Lin Junction to St. Lin.....	15·10	
	" Buckingham Stn. to Buckingham Village.....	3·20	
Brockville and Ottawa Ry....	" Carleton Junction to Brockville.....	44·90	
	" Sudbury to Sault St. Marie.....	179·30	
	" Sudbury to Copper Mines.....	5·60	
	" Dymont to Ottamine.....	6·90	
	" Molson to Lac du Bonnet.....	21·50	
	" McGregor to Varcoe.....	55·50	
	" Whittier Junction to Emerson.....	63·80	
	" Rugby Junction to Manitou.....	100·40	
	" Rugby Junction to Gimli.....	56·10	
	" Rosenfeldt to Gretna.....	13·80	
	" Rugby Junction to Komarno.....	45·80	
	" Rudyard to Kaleida.....	6·50	
	Souris Branch.. { Kenmay to Estevan.....	156·20	
	{ Glenboro' to Souris.....	46·00	
	{ Deloraine to Napinka.....	18·60	
	Branches—Schwitzer Junction to Regina.....	210·20	
	" North Portal to Pasqua.....	160·30	
	" New Westminster Jct. to New Westminster.....	8·20	
Lake Témiscamingue Colonization.....	" Mattawa to Kippewa.....	47·20	
	" Mission Junction to Sumas.....	10·00	
	" Revelstoke to Arrow Head.....	27·40	

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TABLE I.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	DISTANCE.	
		Miles.	Total.
Canadian Pacific— <i>Con.</i> Lake Témiscamingue Col- onization.....	Branches—Vancouver to Coal Harbour.....	1 20	
	" Three Forks to Sandon.....	4 30	
	" Wood Bay to Windy Gates.....	32 40	
	" Cranbrook to Kimberly.....	19 10	
	" Deloraine to Lyleton.....	37 40	
	" Fernie to Fernie Mines.....	5 00	
	" Kirkella to Hardisty.....	556 70	
	" Marysville Junction to Marysville.....	0 90	
	" Crowsnest to Kootenay Landing.....	182 10	
	" Selkirk Junction to Selkirk.....	0 90	
	" Wolsley to Reston.....	122 40	
	" Launder to Tilston.....	28 90	
	" Bolton Junction to Romford.....	226 20	
	" Moosejaw to Outlook.....	118 50	
	" Stoughton to Forward.....	62 90	
" Ensign to Acme.....	39 00		
" Kipp to Carrianguay.....	28 00		
	Total mileage owned.....		3,269 60
			6,179 10
Lines leased .....	Atlantic and Northwest (in Canada)—		
	South end Lachine Bridge to Maine bound- ary, Que.....	181 90	
	Renfrew Jct. to Eganville, Ont.....	18 80	
			200 70
	St. Lawrence and Ottawa—		
	Ottawa to Prescott, Ont.....	51 70	
	Chaudiere Junction to Sussex St., Ottawa.....	6 60	
			58 30
	Ontario and Quebec—		
	Montreal (Windsor Sta.) to Toronto Jct.....	339 40	
	Mile End to Adirondack Jct.....	10 00	
	St. Luc Jct. to Western Jct.....	2 10	
	Toronto Jct. to Toronto (Union Station) ..	4 90	
	Leaside Jct. " ".....	5 30	
	London to Windsor.....	112 60	
			474 30
	Credit Valley—		
	Toronto Junction to St. Thomas.....	116 90	
	Streetsville Junction to Melville Jct.....	31 00	
	Cataract to Elora.....	27 30	
			175 80
	West Ontario Pacific—Woodstock to London .....		26 70
	Toronto, Grey and Bruce—		
Toronto Junction to Owen Sound.....	116 40		
Orangeville Junction to Teeswater.....	67 80		
Wingham Junction to Wingham.....	4 60		
Mount Forest Tank to Mount Forest.....	1 20		
		190 00	
Guelph Junction—			
Guelph Junction on Credit Valley Ry. to Guelph.....		14 90	
Montreal and Lake Maskinongé—			
St. Félix to St. Gabriel de Brandon.....		11 00	
Montreal and Ottawa—			
Vaudreuil to Jct. with Canada Atlantic.....	86 70		
Rigaud to Pt. Fortune.....	6 80		
		93 50	
Lindsay, Bobcaygeon and Pontypool—			
Burketon Junction to Bobcaygeon.....		38 70	
Toronto, Hamilton and Buffalo—			
Hamilton Junction to Hamilton.....		2 70	



TABLE 1.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Canadian Pacific— <i>Con.</i> Leased lines .....	Cap de la Madeleine— From Main Line C. P. R., at Junction with Piles Branch to Cap de la Madeleine.....	2'30	
	New Brunswick— Woodstock to Maine boundary.....	59'50	
	Newbury Junction to Gibson.....	59'10	
	Aroostook Junction to Edmundston.....	57'10	175'70
	St. John and Maine— Vanceboro to St. John .....	90'30	
	Fairville to West St. John.....	3'40	93'70
	Fredericton— Fredericton Junction to Fredericton.....		22'10
	New Brunswick and Canada— McAdam Junction to St. Stephen..	33'90	
	Watt Junction to St. Andrews.....	27'50	
	McAdam Junction to Woodstock.....	51'10	
	Debec Junction to Maine boundary.....	5'10	117'60
	St. Stephen and Milltown Ry.— St. Stephen to Milltown.....		4'60
	Tobique Valley— Perth Centre to Plaster Rock.....		27'50
	Manitoba and Northwestern— Portage la Prairie to Lanigan.....	348'90	
	Binscarth to Russell.....	11'30	
	Bredenburg South .....	1'00	
	Saskatchewan and Western—Minnedosa to Rapid City.....	18'20	379'40
	Manitoba Southwestern Colonization— Manitou to Deloraine .....	100'50	
	Rugby Junction to Glenboro.....	102'70	
	Elm Creek to Carman.....	12'20	215'40
	Great Northwest Central— Chater to Miniota.....	71'00	
	Forrest to Lenore.....	40'70	111'70
	British Columbia Southern— Nelson to Proctor.....	20'40	
	Curzon to Kingsgate.....	8'50	28'90
	Northern Colonization— Labelle to Duhamel.....		58'00
	Shuswap and Okanagan— From Jct. with C. P. R. at Sicamous to Lake Okanagan.....		50'80
	Nakusp and Slocan— Nakusp on Arrow Lake to Three Forks of Carpenter's Creek, B. C.....		36'40
Columbia and Western— Castlegar Junction to Midway .....	101'80		
Castlegar Junction to Rossland.....	29'30		
Trail to Snelter Junction .....	2'00		
Mining Spurs, including Rossland to Le Roi	24'80	157'90	
Kootenay and Arrowhead— Lardo to Gerrard.....		33'20	



TABLE 1.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Canadian Government Rys.	Prince Edward Island— <i>Con.</i>		
	" Montague Junction to Montague	6 20	
	" Emerald to Cape Traverse.....	12 90	269 33
			1,719 70
Canadian Northern Ontario.	Toronto to Parry Sound .....	145 40	
	Parry Sound Junction to Sudbury Junction	112 50	
	Sudbury Junction to Gowganda Junction...	53 30	
	Branches.....	21 45	
	Business Spurs.....	9 55	342 20
Canadian Northern Quebec.	Quebec to Montreal .....	176 35	
	Joliette to Hawkesbury .....	67 05	
	Garneau Junction to River à Pierre Jct'n...	40 00	
	St. Jerome Junction to Huberdean .....	45 70	
	St. Jacques Junction to St. Jacques.....	7 20	
	Shawinigan Junction to Falls.....	4 50	
	Spurs .....	7 87	348 67
Cape Breton Railway .....	Point Tupper to St. Peters.....	30 00	
	Terminal to St. Peters.....	1 00	31 00
Caraget.....	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, Que., connecting at both termini with Ottawa River Navigation Company's steamers (Gauge, 5 ft. 6 in.) .....		13 00
Central Ontario.....	Pictou to Trenton Junction .....	52 17	
	Trenton Junction to Coe Hill.....	72 60	
Central Railway of New Brunswick, now New Brunswick Coal and Railway Company.....	Ormsby Junction to Maynooth .....	35 36	140 13
	From North Station, on the Intercolonial Railway to Chipman.....	44 66	
	Extension, Chipman to Minto.....	13 34	58 00
Campbellford, Lake Ontario and Western.....	From Cobourg, Ont., to Junction with Central Ontario Railway, 49 miles under construction-		
Crowsnest Southern.....	International Boundary to Michel, B.C.....		74 18
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, 14 miles from Spring Hill Mines to Oxford Village on the Oxford and New Glasgow Branch, I.C.R., not in operation.		
Dominion Atlantic, comprising Windsor and Annapolis, Yarmouth and Annapolis and Cornwallis Valley and lease of Windsor Branch of Intercolonial and Midland of Nova Scotia.....	Windsor to Yarmouth .....	170 78	
	Branches—		
	Wilmot to Torbrook .....	5 26	
	From Kentville to Kingsport, on Basin of Minas (formerly Cornwallis Valley Railway).....	14 15	
	Windsor Branch of I.C.R.—Windsor to Windsor Junction, Intercolonial Railway, 14 miles from Halifax, leased .....	31 47	
	Windsor to Truro.....	57 21	278 87

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TABLE I.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Eastern British Columbia . . .	Corbin to McGillivray, B.C. . . . .	14'00	
	Brauches . . . . .	2'00	16'00
Edmonton, Yukon and Pacific . . . . .	Strathcona to Edmonton . . . . .		4'50
Elgin and Havelock . . . . .	From Elgin, County of Albert, N.B., to Petitcodiac Junction with Intercolonial Railway; thence to Havelock in County of Kings, N.B. . . . .	27'00	
	Havelock to Keith's Mills . . . . .	1'00	
			28'00
Esquimalt and Nanaimo . . . . .	Victoria to Wellington, Island of Vancouver . . . . .		78'00
Fredericton and St. Mary's Ry. Bridge, now in Intercolonial Ry. . . . .	Over the St. John River, connecting the Fredericton Railway, at Fredericton, with the New Brunswick Railway, and Canada Eastern Ry., at St. Mary's . . . . .		
Grand Trunk (owned)—Eastern Division . . . . .			736'36
Northern Division . . . . .			884'64
Middle Division . . . . .			1,326'14
			2,947'14
Leased and partly owned . . . . .	Buffalo and Lake Huron Ry. . . . .		
	Fort Erie to Goderich . . . . .	161'30	161'30
	Total mileage owned and leased . . . . .		3,168'44
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 . . . . . (Length of tunnel between portals 6,000 ft., cylindrical in section with clear inside diameter of 19 feet 10 inches.)		2'25
Grand Trunk Pacific . . . . .	Under construction . . . . .		
Gulf Shore . . . . .	Junction with Caraquet Railway at Pokemouche to Tracadie operated by Caraquet Ry. . . . .		16'78
Halifax and Southwestern, formerly Nova Scotia Southern, including Central Nova Scotia, Halifax and Yarmouth and Middleton and Victoria Beach . . . . .	Halifax to Yarmouth . . . . .	246'80	
	Mahone Junction to Lunenburg . . . . .	7'60	
	Bridgewater Junction to Middleton Junction . . . . .	53'20	
	New Germany Junction to Caledonia . . . . .	22'21	
	Middleton Junction to Victoria Beach . . . . .	40'00	
			369'81
Hampton and St. Martin, formerly St. Martin and Upham . . . . .	From Hampton on Intercolonial Ry. to St. Martin, County of St. John, N.B., on Bay of Fundy . . . . .		30'00
Hereford . . . . .	From International Boundary to Lime Ridge, Quebec, connects with Canadian Pacific Railway at Cookshire, Maine Central at International boundary, and with Quebec Central at Dudswell . . . . .		52'18
Interprovincial Railway, bridge and approaches, now included in Ottawa, Northern and Western . . . . .	Across the Ottawa River at City of Ottawa . . . . .	1'40	

TABLE 1.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Irondale, Bancroft and Ottawa .....	From Junction with Grand Trunk Railway near Kinmount Station, to Bancroft Station.....		48·00
Inverness and Richmond, now Inverness Ry. and Coal Co.....	Inverness to Point Tupper Junction.....		60·91
Kaslo and Slocan .....	From Kaslo to McGuigan, B.C.....	23·18	
	Branches.....	19	23·37
Kent Northern and leased line. ....	Richibucto, N.B., to Kent Jct., Intercolonial Railway .....		27·00
St. Louis and Richibucto....	Richibucto to St. Louis.....		7·00
Kettle River Valley.....	Grand Forks to Lynch Creek, B.C.....		18·50
Kingston and Pembroke....	Main Line Kingston to Renfrew.....	103·40	
	Glendower Branch—Bedford to Zanesville Mine .....	4·10	
	Robertsville Branch—To Robertsville Mines .....	·99	
	Branches—To Doran's Mills, Charcoal Works McLaren's Mills, Bethlehem Iron Mines, Lavant Mills, Clyde Forks Mills, Wilson's Mine, Carswell's Mills, William's Mine, Cameron Bay.....		
	(Connects with Grand Trunk at Kingston, Canadian Pacific at Sharbot Lake and at Renfrew.)	1·40	
			109·80
Klondike Mines Railway....	Dawson City to Sulphur Springs.....		31·81
Lenora Mount Sicker.....	Lenora Mines to Crofton, B.C.....		12·00
Lotbinière and Mégantic....	Lyster Station, Grand Trunk, to St. Jean des Chailons.....		30·00
Lake Erie and Detroit River.	Walkerville, Ont., to St. Thomas.....	126·78	
Erie and Huron.....	Rondeau to Sarnia.....	72·03	
			198·81
London and Port Stanley....	London to Port Stanley on Lake Erie.....		23·66
Liverpool and Milton.....	From Liverpool, N.S., to Milton.....		6·00
Manitoulin and North Shore.	Sudbury to Crean Hill.....		22·70
Maganetawan River.....	Burks Falls, on Grand Trunk Ry., to Maganetawan River.....		1·91
Middleton and Victoria Beach, now included in Halifax and Southwestern system .....	Middleton to Victoria Beach.....		
The Manitoba Ry., formerly—The Northern Pacific & Manitoba, the Winnipeg Transfer Ry., the Portage and Northwestern the Waskada and Northeastern leased to Govt. of Manitoba and operated by the Canadian Northern.....	International boundary to Winnipeg, and branches.....		350·68
Marmora Ry. and Mining Co., (formerly Ontario, Belmont and Northern)....	Central Ontario Junction to Wanston .....		9·60
Midland of Nova Scotia (formerly Stewiacke Valley)	From Windsor to Truro, N.S., see Dominion Atlantic Railway.....		
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.....	31·95	
	Branch—Stanstead Junction to Stanstead .....	3·51	
			35·46
Mid. of Man. now Gr. North.	International Boundary to Portage la Prairie.....	76·52	
	" " Morden.....	15·25	
			91·77



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TABLE 1.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Montreal and Vermont Jct.	From Junction with Stanstead, Shefford and Chamblay Railway, 2½ miles east of St. Johns, 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, Portland and Boston, now Montreal & Province Line . . . . .	Junction with Grand Trunk at St. Lambert to Farnham . . . . . Marieville to Césaire . . . . . Farnham to Freligsburgh . . . . .	32·00 8·60 18·00	
Montreal and Atlantic (formerly Southeastern) . . . . .	Main Line—Farnham to Richford on International Boundary . . . . . Sutton Junction to Drummondville . . . . .	43·70 59·20	58·60
	Leased—Lake Champlain and St. Lawrence Junction—Stanbridge to St. Guillaume . . . . .	102·90 60·50	163·40
	(Connects with Connecticut and Passumpsic, Grand Trunk and Stanstead, Shefford and Chamblay Rys.)		
Morrissey, Fernie and Michel . . . . .	From Swinton to Carbonado, B. C., and leased line . . . . .		10·85
Napierville Junction . . . . .	St. Constant Junction to Rouse's Point . . . . .		27·06
Nelson and Fort Sheppard . . . . .	From Five Mile Point to Fort Sheppard on International Boundary, B. C. . . . .		55·42
New Glasgow Iron, Coal and Railway Co., now Nova Scotia Steel and Coal Co . . . . .	From Ferrona Junction, I. C. R., to Sunny Brae . . . . .		12·50
New Brunswick and Prince Edward Island . . . . .	From Sackville Station, Intercolonial Railway to Cape Tormentine . . . . .		36·00
New Brunswick Southern (formerly Shore Line) . . . . .	St. John, N. B., to St. Stephen, N. B. . . . .		82·35
New Westminster Southern . . . . .	Douglas to South Westminster . . . . .		24·10
Nosbonsing and Nipissing . . . . .	From Lake Nosbonsing to Lake Nipissing . . . . .		5·50
Orford Mountain (now Can. Pac. Ry.) . . . . .			
Ottawa and New York . . . . .	From Ottawa to International Boundary near Cornwall . . . . .		56·90
Pembroke Southern leased to Canada Atlantic . . . . .	From Pembroke to Golden Lake . . . . .		21·36
Philipsburg Ry. and Quarry Co . . . . .	Stanbridge Station of Canadian Pacific and Central Vermont Railways, to Philipsburg, Missisquoi Co. . . . .		6·00
Pontiac and Renfrew . . . . .	From Wyman's Station, on Pontiac Pacific Junction Ry., to Bristol Iron Mines, County Pontiac, Que . . . . .		4·25
Princeton Branch of Washington Co., Ry., (U.S.) . . . . .	International Boundary near Waring to International Boundary near Woodland . . . . .		5·10
Qu'Appelle, Long Lake and Saskatchewan (in Can. Northern System) . . . . .	From Canadian Pacific Railway at Regina, Northwesterly to Long Lake and Prince Albert . . . . .		255·50
Quebec Bridge and approaches to connect adjacent railways . . . . .	(Across St. Lawrence River at Quebec, under construction 10 miles.)		
Quebec and Lake St. John . . . . .	Quebec to Chambord Junction . . . . . Chambord Junction to Chicoutimi . . . . . Valcartier to Gosford . . . . . Chambord Junction to Roberval . . . . . La Tuque Junction to La Tuque . . . . .	176·00 51·00 5·50 14·00 40·00	286·50



TABLE 1.—Showing Location of Railways, &amp;c.—Continued.

Name of Railway.	Description.	Distance.	
		Miles	Total.
Quebec Central	Main Line—Sherbrooke to Harlaka Junction, Inter-colonial Railway 5 miles from Levis, Que. . . . . Beauce Junction to St. George. . . . . Tring Megantic—Tring Junction to Megantic. . . . . (Connects with Grand Trunk, Canadian Pacific and Boston and Maine Rys. at Sherbrooke.)	138 00 24 00 60 00	222 00
Quebec and New Brunswick.	From Chaudiere Junction to Connors, N.B., 135 miles (3 miles under construction.)		
Quebec, Montmorency and Charlevoix	Hedleyville, Parish of St. Roch, Quebec, to Cap Tourmente. . . . .		27 00
Quebec, Montreal and Southern, comprising East Richelieu Valley Railway and United Counties	Noyan Junction to Bellevue Junction. . . . .	80 82	
And South Shore Railway	From Fortierville Junction with Grand Trunk at St. Lambert. . . . . St. Constant Junction to Napierville Junction. . . . .	109 69 1 40	191 91
Red Mountain	From International boundary Line, B.C., to Rossland. . . . .		9 59
Restigouche and Western, now International of New Brunswick	Campbellton, N.B., to St. Leonard's 110 miles (30 miles under construction). . . . .		80 00
Rutland and Noyan	International boundary to Noyan Jct. . . . .		3 39
Stanstead, Shefford and Chambly	From Junction with Montreal and Vermont Junction Railway, near St. John, Que., easterly to Waterloo. . . . .		45 00
St. John Bridge and Railway Extension, now leased by Canadian Pacific Ry.	From St. John to Fairville, crosses St. John River at the Falls by a cantilever steel bridge, and connects Intercolonial Railway with New Brunswick Railway, C.P.R., included in Canadian Pacific System, 2 00 miles.		
St. John Valley and Rivière du Loup	From Fredericton, N.B., to Woodstock, N.B., 66 miles, of which 6 miles are built. . . . .		
Salisbury and Albert (formerly Albert Railway)	Salisbury to Albert, N.B. . . . .		45 00
Schomberg and Aurora	Bond Lake, Ont., to Schomberg. . . . .		14 40
St. Lawrence and Adirondack	From Jct. with Canada Atlantic near Valleyfield to International boundary. . . . . Beauharnois to Junction with Canadian Pacific at Adirondack Junction. . . . . Leased—Valleyfield to Beauharnois. . . . .	19 92 12 40 13 30	46 12
Sydney and Louisburg (Dominion Coal Co.)	Sydney Harbour to Louisburg Harbour. . . . . Branches to coal mines. . . . . Spurs. . . . .	39 00 22 77 1 09	62 86
Spokane and British Columbia	Carson to Grand Forks. . . . .		3 70
St. Mary's River, now Alberta Railway and Irrigation Co.			

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TABLE 1.—Showing Location of Railways, &c.—*Concluded.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Temiscamingue and Northern Ontario.....	North Bay to Cochrane.....	252·80	266·14
	Englehart to Charlton.....	7·80	
	Cobalt to Kerr Lake.....	3·90	
	Haileybury to Moore's Cove.....	1·64	
Thousand Islands.....	Gananoque on St. Lawrence River to Thousand Island Junction.....		6·33
Témiscouata.....	Rivière du Loup, Que., to Edmundston, N.B., on the New Brunswick Railway.....	81·00	113·00
	Branch—Edmundston to Connors, on St. John River..	32·00	
Tilsouburg, Lake Erie and Pacific.....	Port Burwell to Ingersoll, now in Can. Pac. Ry.....		
Toronto, Hamilton and Buffalo, including Brantford, Waterloo and Lake Erie...	Waterford Jct. with Canada Southern to Welland Junction with Canada Southern—passing through the city of Hamilton.....	79·88	80·15
	Hamilton to Grand Trunk Junction.....	0·27	
Trans-Canada.....	From Roberval to Port Simpson across the continent, 60 miles from Roberval, westward under construction.		
Victoria and Sidney.....	Victoria to Sidney, B.C.....		16·26
Victoria Terminal Railway and Ferry.....	City of Victoria.....		1·14
Vancouver, Victoria and Eastern.....	Laurier to Grand Forks.....	16·47	219·40
	Grand Forks Junction to Phoenix.....	25·82	
	Grand Forks to Granby Smelter.....	4·74	
	Midway to International Boundary.....	28·89	
	Chopaka to Princeton.....	59·11	
	International Boundary to S. Westminster.....	21·05	
	International Boundary to Port Guichon.....	46·60	
New Westminster to Vancouver.....	14·79		
	Burrard Inlet to Vancouver.....	1·93	
Wellington Colliery.....	Union Bay to Cumberland.....		10·75
York and Carleton.....	Junction with Canada Eastern Ry. at Cross Creek Station to Ryan Brook, N.B.....		10·50
	Total mileage.....		24,730·86

1 GEORGE V., A. 1911

TABLE 2.—SUMMARY of Mileage operated for

Number.	Name of Railway.	SINGLE TRACK.						Total Mileage operated.
		Line represented by Capital Stock.		Line of Proprietary Companies.	Line operated under lease.	Line operated under contract, &c.	Line operated under track-age rights.	
		Main line.	Branches and spurs.					
1	Alberta Railway & Irrigation Co..	111·29	·53				1 60	113·42
2	Algoma Central & Hudson Bay....	89·64						89·64
3	Atlantic, Quebec & Western.....	35 00					1 75	36·75
4	Atlantic & Lake Superior.....	100·00						100·00
5	Bay of Quinté.....	78·00	11·37				19·00	108·37
6	Bedlington & Nelson.....	15·30					8·67	23·97
7	Bessemer & Barry's Bay.....	5·00						5·00
8	Brandon, Sask'n & Hudson Bay...	69·45						69·45
9	British Yukon.....	85·80	4·52					90·32
10	Brockville, Westport & N. Western	45·00						45·00
11	Bruce Mines & Algoma.....	17·28						17·28
12	Canada Southern.....	226·18	156·01					382·19
	Canadian Government Railways:—							
13	Intercolonial.....	1,415·33	35·04				40 30	1,490·67
14	Prince Edward Island.....	150·90	118·43					269·33
15	Canadian Northern.....	1,146·26	1,530·10		349·44	255·50		3,281·30
16	Canadian Northern Ontario.....	311·20	31·00				3·80	346·00
17	Canadian Northern Quebec.....	243·40	105·27				58·65	407·32
18	Canadian Pacific.....	2,909·50	3,020·60	2,576·10	1,309·80	184·00	37·30	10,037·30
19	Carillon & Grenville.....	13·00						13·00
20	Cape Breton.....	31·00						31·00
21	Caraquet.....	68·00			16·78			84·78
22	Central Ontario.....	140 13				9·60		149·73
23	Crowsnest Southern.....	74·18						74·18
24	Cumberland Railway & Coal Co....	32·00						32·00
25	Dominion Atlantic.....	242·14	5·26		31·47		14·42	293·29
26	Eastern British Columbia.....	14·00	2·00					16·00
27	Edmonton, Yukon & Pacific.....	4·50						4·50
28	Elgin & Havelock.....	27·00	1·00					28·00
29	Esquimalt & Nanaimo.....	78·00						78·00
30	Grand Trunk, in Canada.....	2,933·66				161·30	13·71	3,108·67
31	Grand Trunk (Canada Atlantic)...	396·41			59·85			456·26
32	Grand Trunk Pacific.....							
33	Halifax & Southwestern.....	246·80	123·01				2·30	372·11
34	Hampton & St. Martin's.....	30·00						30·00
35	Hereford.....	52·18						52·18
36	International of New Brunswick..	80·00						80·00
37	Irondale, Bancroft & Ottawa.....	48·00						48·00
38	Inverness Railway & Coal Co.....	60·91						60·91
39	Kaslo & Slocan.....	23·18	·19					23·37
40	Kent Northern.....	27·00			7·00			34·00
41	Kettle River Valley.....	18·50						18·50
42	Kingston & Pembroke.....	103·40	6·40					109·80
43	Klondike Mines.....	31·81						31·81
44	Lake Erie & Detroit, Pere Marquette	198·81					1·6·57	335·38
45	Liverpool & Milton.....	5·00	1·00					6·00
46	London & Port Stanley.....	23·66					·42	24·08
47	Lotbinière & Megantic.....	30·00						30·00
48	Maganetawan River.....	1·91						1·91
49	Manitoulin & North Shore.....	22·70					3·25	25·95
50	Maritime Railway & Coal Co.....	12·00	3·00					15·00
51	Massawippi Valley.....	35·46					2·95	38·41
52	Midland of Manitoba.....	91·77					·99	92·76
53	Montreal & Atlantic.....	102·90			60·50			163·40
54	Montreal & Province Line.....	50·00	8·60					58·60
55	Montreal & Vermont Junction.....	23·60						23·60
56	Moncton & Buctouche.....	32·00						32·00
57	Morrissette, Fernie & Michel.....	5·82			5·03			10·85
58	Napierville Junction.....	27·06						27·06
59	Nelson & Fort Sheppard.....	55·42					5·42	60·84

\* Under construction.



1 GEORGE V., A. 1911

TABLE 2.—SUMMARY of Mileage operated for

Number.	Name of Railway.	SINGLE TRACK.					Total Mileage operated.	
		Line represented by Capital Stock.		Line of Proprietary Companies.	Lines operated under lease.	Lines operated under contract.		Lines operated under track-age rights.
		Main line.	Bran'hs and spurs.					
60	New Brunswick Coal & Ry. Co. ....	58·00					58·00	
61	New Brunswick Southern.....	82·19	16				82·35	
62	New Brunswick & P. E. Island .....	36·00					36·00	
63	New Westminster Southern.....	24·10				1·48	25·58	
64	North Shore.....	6·13	2·50				8·63	
65	Nosbonsing & Nipissing.....	5·50					5·50	
66	Nova Scotia Steel & Coal Co.....	12·50					12·50	
67	Ottawa & New York.....	56·90				1·90	58·80	
68	Phillipsburg Ry. & Quarry Co.....	6·00					6·00	
69	Pontiac & Renfrew.....	4·25					4·25	
70	Princeton Branch of Wash'n Co. Ry .....	5·10					5·10	
71	Quebec Central.....	138·00	84·00				222·00	
72	Quebec Ry. Light & Power Co.....	24·00				3·00	27·00	
73	Quebec & Lake St. John.....	227·00	59·50				286·50	
74	Quebec, Montreal & Southern.....	191·91					191·91	
75	Red Mountain.....	9·59					9·59	
76	Rutland & Noyan.....	3·39					3·39	
77	Salisbury & Albert.....	45·00					45·00	
78	Schomberg & Anroca.....	14·40					14·40	
79	Stanstead, Shefford & Chambly.....	43·00					43·00	
80	St. Clair Tunnel.....	2·25					2·25	
81	St. Lawrence & Adirondack.....	32·82			13·30	8·92	55·04	
82	Spokane & British Columbia.....				3·70		3·70	
83	Sydney & Louisburg (Dom. Coal Co.).....	39·00	22·77	1·09		1·20	64·06	
84	Temiscouata.....	113·00					113·00	
85	Temiskaming & Northern Ontario.....	252·80	13·34				266·14	
86	Thousand Islands.....	6·08	25				6·33	
87	Toronto, Hamilton & Buffalo.....	79·88	27			4·36	84·51	
88	Vancouver Copper Co.....	12·00					12·00	
89	Vancouver, Victoria & Eastern.....	219·40				1·48	220·88	
90	Victoria & Sidney.....	16·26					16·26	
91	Victoria Terminal Ry. & Ferry Co.....	1·14					1·14	
92	Wellington Colliery Co.....	10·75					10·75	
93	York & Carleton.....	10·50					10·50	
	Final total.....	14,337·28	5,346·12	2,577·19	1,856·87	613·40	25,101·30	

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the Year ending June 30, 1910.—All Tracks:—*Continued.*

Rails.		SECOND TRACK.					Rails.		Number.
Iron.	Steel.	Line represented by Capital Stock.		Line operated under lease.	Line operated under trackage rights.	Total Mileage operated.	Iron.	Steel.	
		Main line.	Branches and spurs.						
	58'00								60
	82'35								61
	36'00								62
	24'10								63
	8'63								64
	5'50								65
	12'50								66
	56'90								67
	6'00								68
	4'25								69
	5'10								70
	222'00								71
	27'00	6'00				6'00		6'00	72
	286'50								73
	191'91								74
	9'59								75
	3'39								76
	45'00								77
	14'40								78
	43'00								79
	2'25								80
	46'12								81
	3'70								82
	62'86								83
	113'00								84
	266'14								85
	6'33								86
	80'15	2'04				2'04		2'04	87
	12'00								88
	219'40								89
	16'26								90
	1'14								91
	10'75								92
	10'50								93
6'40	21,724'46	1,368'61	18'90	155'90	37'60	1,581'01		1,543'41	



1 GEORGE V., A. 1911

TABLE 2.—Summary of Mileage Operated for the

Number.	Name of Railway.	YARD TRACK AND SIDINGS.						Rails.	
		Line represented by Capital Stock.		Line operated under lease.	Line operated under contract, &c.	Line operated under track-age rights.	Total mileage operated.	Iron.	Steel.
		Main line.	B'chs and spurs.						
1	Alberta Railway & Irrigation Co. ....	11 59					11 59	11 59	
2	Algoma Central & Hudson Bay ....	23 20	9 93				33 13	33 13	
3	Atlantic, Quebec & Western. ....								
4	Atlantic & Lake Superior. ....	2 00					2 00	2 00	
5	Bay of Quinté. ....	11 30	4 00				15 30	15 30	
6	Bedlington & Nelson. ....	1 28					1 28	1 28	
7	Bessemer & Barry's Bay. ....	1 00					1 00	1 00	
8	Brandon, Sask'n & Hudson Bay. ....	8 84					8 84	8 84	
9	British Yukon. ....								
10	Brockville, Westport & N'th Western	2 00					2 00	2 00	
11	Bruce Mines and Algoma. ....								
12	Canada Southern. ....	145 83	44 92				190 75	190 75	
	Canadian Gov't. R'lys.—								
13	Intercolonial. ....	383 71					383 71	383 71	
14	Prince Edward Island. ....	11 15	9 10				20 25	3 70	
15	Canadian Northern. ....	153 94	161 96	47 04			362 94	362 94	
16	Canadian Northern Ontario. ....	24 31	7 04				31 35	31 35	
17	Canadian Northern Quebec. ....	14 20	36 83				51 03	51 03	
18	Canadian Pacific. ....	2,215 20					2,215 20	2,215 20	
19	Carillon & Grenville. ....								
20	Cape Breton. ....								
21	Caraquet. ....	3 50					3 50	3 50	
22	Central Ontario. ....	15 50			50		16 00	16 00	
23	Crowsnest Southern. ....	13 80					13 80	13 80	
24	Cumberland R'ly. & Coal Co. ....	16 00					16 00	16 00	
25	Dominion Atlantic. ....	17 78	9 14	6 18			33 10	8 78	
26	Eastern British Columbia. ....								
27	Edmonton, Yukon & Pacific. ....								
28	Elgin & Havelock. ....								
29	Esquimalt & Nanaimo. ....								
30	Grand Trunk, in Canada. ....	1,099 56					1,099 56	1,099 56	
31	" (Canada Atlantic). ....	103 00		5 29			108 29	108 29	
32	*Grand Trunk Pacific. ....								
33	Halifax & Southwestern. ....	11 73	7 32				19 05	19 05	
34	Hampton & St. Martins. ....								
35	Hereford. ....	8 96					8 96	8 96	
36	*International of New B'k. ....								
37	Irondale, Bancroft & Ottawa. ....	1 00					1 00	1 00	
38	Inverness R'ly. & Coal Co. ....	4 60					4 60	4 60	
39	Kaslo & Slocan. ....		1 43				1 43	1 43	
40	Kent Northern. ....								
41	Kettle River Valley. ....	1 29					1 29	1 29	
42	Kingston & Pembroke. ....	23 00	1 00				24 00	24 00	
43	Klondike Mines. ....	2 00					2 00	2 00	
44	Lake Erie & Detroit (Pere Mar-	66 94					66 94	66 94	
	quette). ....								
45	Liverpool & Milton. ....								
46	London & Port Stanley. ....	10 03					10 03	10 03	
47	Lotbinière & Megantic. ....	3 00					3 00	3 00	
48	Maganetawan River. ....								
49	Manitoulin & North Shore. ....	4 80	2 92				7 72	7 72	
50	Maritime R'ly. & Coal Co. ....	3 00					3 00	3 00	
51	Massawippi Valley. ....	8 84					8 84	8 84	
52	Midland of Manitoba. ....	8 88					8 88	8 88	
53	Montreal & Atlantic. ....	36 60					36 60	36 60	
54	Montreal & Province Line. ....	2 50					2 50	2 50	
55	Montreal & Vermont Jet. ....	2 00					2 00	2 00	
56	Moncton & Buctouche. ....	2 00					2 00	2 00	
57	Morrissey, Fernie & Michel. ....								
58	Napierville Junction. ....	3 22					3 22	3 22	
59	Nelson & Fort Sheppard. ....	3 09					3 09	3 09	

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Year ending June 30, 1910—All Tracks.

## TOTAL MILEAGE OPERATED—ALL TRACKS.

Line represented by Capital Stock.		Line of proprietary Companies.	Line operated under lease.	Line operated under contract &c.	Lines operated under trackage rights.	Total Mileage operated.	Rails.		Number.
Main line.	Branches and spurs.						Iron.	Steel.	
122.88	5.53				1.60	125.01		123.41	1
112.84	9.93					122.77		122.77	2
35.00					1.75	36.75		35.00	3
102.00						102.00		102.00	4
89.30	15.37				19.00	123.67		104.67	5
16.58					8.67	25.25		16.58	6
6.00						6.00		6.00	7
78.29						78.29		78.29	8
85.80	4.52					90.32		90.32	9
47.00						47.00		47.00	10
17.28						17.28		17.28	11
598.19	217.73					815.92		815.92	12
1,822.17	37.14				77.90	1,937.21		1,859.31	13
162.05	127.53					289.58	3.70	285.88	14
1,300.20	1,692.06		396.48	255.50		3,644.24		3,644.24	15
335.51	38.04				3.80	377.35		373.55	16
257.60	142.10				58.65	458.35		399.70	17
5,522.20	3,020.60	2,576.10	1,465.70	184.00	37.30	12,805.90		12,768.60	18
13.00						13.00		13.00	19
31.00						31.00		31.00	20
71.50			16.78			88.28		88.28	21
155.63				10.10		165.73		165.73	22
87.98						87.98		87.98	23
48.00						48.00		48.00	24
259.92	14.40		37.65		14.42	326.39	8.78	303.19	25
14.00	2.00					16.00		16.00	26
4.50						4.50		4.50	27
27.00	1.00					28.00		28.00	28
78.00						78.00		78.00	29
4,739.70				161.30	13.71	4,914.71		4,901.00	30
500.29			65.14			565.43		565.43	31
258.53	130.33				2.30	391.16		388.86	32
30.00						30.00		30.00	34
61.14						61.14		61.14	35
80.00						80.00		80.00	36
49.00						49.00		49.00	37
65.51						65.51		65.51	38
23.18	1.62					24.80		24.80	39
27.00			7.00			34.00		34.00	40
19.79						19.79		19.79	41
126.40	7.40					133.80	30.40	103.40	42
33.81						33.81		33.81	43
265.75					136.57	402.32		265.75	44
5.00	1.00					6.00		6.00	45
33.69					.42	34.11		33.69	46
33.00						33.00		33.00	47
1.91						1.91		1.91	48
27.50	2.92				3.25	33.67		30.42	49
15.00	3.00					18.00		18.00	50
44.30					2.95	47.25		44.30	51
100.65					.99	101.64		100.65	52
145.90			60.50			206.40		206.40	53
52.50	8.60					61.10		61.10	54
25.60						25.60		25.60	55
34.00						34.00		34.00	56
5.82			5.03			10.85		10.85	57
30.28						30.28		30.28	58
58.51					5.42	63.93		58.51	59

1 GEORGE V., A. 1911

TABLE 2.—Summary of Mileage Operated for the

Number.	Name of Railway.	YARD TRACK AND SIDINGS.						Rails.	
		Line represent- ed by Capital Stock.		Line operated under lease.	Line operated under con- tract, &c.	Line operated under track- age rights.	Total mileage operated.	Iron.	Steel.
		Main line.	B'chs and spurs.						
60	New Brunswick Coal & Ry. Co.	7 00					7 00	7 00	
61	New Brunswick Southern	2 76					2 76	2 76	
62	New Brunswick & P.E. Island	1 60					1 60	1 60	
63	New Westminster Southern	1 16					1 16	1 16	
64	North Shore	1 37					1 37	1 37	
65	Nosbousing & Nipissing	1 25					1 25	1 25	
66	Nova Scotia Steel & Coal Co.	1 00					1 00	1 00	
67	Ottawa & New York	6 71					6 71	6 71	
68	Phillipsburg Ry. & Quarry Co.	2 00					2 00	2 00	
69	Pontiac & Renfrew								
70	Princeton Branch of Wash'n Co. Ry.	14					14	14	
71	Quebec Central								
72	Quebec Ry., Light & Power Co.	6 00					6 00	6 00	
73	Quebec & Lake St. John	35 41	3 64				39 05	35 05	
74	Quebec, Montreal & Southern	23 05	3 12				26 17	26 17	
75	Red Mountain	3 68					3 68	3 68	
76	Rutland & Novan	.77					.77	.77	
77	Salisbury & Albert	5 00					5 00	5 00	
78	Schomberg & Aurora								
79	Stanstead, Shefford & Chambly	3 23					3 23	3 23	
80	St. Clair Tunnel								
81	St. Lawrence & Adirondack	4 24		3 12			7 36	7 36	
82	Spokane & British Columbia			20			20	20	
83	Sydney & Louisburg (Dom. Coal Co.)		42 42				42 42	42 42	
84	Temiscouata	5 86	2 74			25	8 85	8 60	
85	Temiskaming & Northern Ontario	74 52	3 42				77 94	77 94	
86	Thousand Islands	1 00					1 00	1 00	
87	Toronto, Hamilton & Buffalo	30 35					30 35	30 35	
88	Vancouver Copper Co.								
89	Vancouver, Victoria & Eastern	36 24					36 24	36 24	
90	Victoria & Sydney	1 20					1 20	1 20	
91	Victoria Terminal Ry. & Ferry Co.								
92	Wellington Colliery Co								
93	York & Carleton								
	Final totals	4,741 71	350 93	61 83	50	25	5,155 22	36 48	5,118 49

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Year ending June 30, 1910—All Tracks—Concluded.

TOTAL MILEAGE OPERATED—ALL TRACKS.									
Line represented by Capital Stock.		Line of proprietary Companies.	Line operated under lease.	Line operated under contract, &c.	Line operated under trackage rights.	Total mileage operated.	Rails.		Number.
Main line.	Branches and spurs.						Iron.	Steel.	
65.00						65.00		65.00	60
84.95	16					85.11		85.11	61
37.60						37.60		37.60	62
25.26					1.48	26.74		25.26	63
7.50	2.50					10.00		10.00	64
6.75						6.75		6.75	65
13.50						13.50		13.50	66
63.61					1.90	65.51		63.61	67
8.00						8.00		8.00	68
4.25						4.25		4.25	69
5.24						5.24		5.24	70
138.00	84.00					222.00		222.00	71
36.90				3.00		39.00		39.00	72
262.41	63.14					325.55		325.55	73
214.96	3.12					218.08		218.08	74
13.27						13.27		13.27	75
4.16						4.16		4.16	76
50.00						50.00		50.00	77
14.40						14.40		14.40	78
46.23						46.23		46.23	79
2.25						2.25		2.25	80
37.06			16.42		8.92	62.40		53.48	81
			3.90			3.90		3.90	82
39.00	65.19	1.09			1.20	106.48		105.28	83
118.86	2.74				.25	121.85		121.60	84
327.32	16.76					344.08		344.08	85
7.08	.25					7.33		7.33	86
112.27	.27					112.90		112.54	87
12.00						12.00		12.00	88
255.64					1.48	257.12		255.64	89
17.46						17.46		17.46	90
1.14						1.14		1.14	91
10.75						10.75		10.75	92
10.50						10.50		10.50	93
20,447.60	5,715.95	2,577.19	2,074.60	613.90	408.29	31,837.53	42.88	31,386.36	

1 GEORGE V., A. 1911

TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1910.—Canada.

## NOVA SCOTIA.

Number.	Name of Railway.	Mileage owned in <b>Nova Scotia</b> on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Canadian Government Railway—Intercolonial.....	481·61	481·61		
2	Cape Breton .....	31·00	31·00		
3	Cumberland Railway & Coal Co.....	32·00	32·00		
4	Dominion, Atlantic and .....	247·40	247·40		
5	Windsor Branch of I.C. Ry.....	31·47	31·47		
6	Halifax & Southwestern.....	369·81	369·81		
7	Inverness Railway & Coal Co .....	60·91	61·00		·09
8	Liverpool & Milton.. ..	6·00	5·75	·25	
9	Maritime Coal, Railway & Power Co.....	15·00	15·00		
10	Nova Scotia Steel & Coal Co.'s Railway .....	12·50	12·50		
11	Sydney & Louisburg (Dominion Coal Co.).....	62·86	62·99		·13
	Total.....	1,350·56	1,350·53	·25	·22

## PRINCE EDWARD ISLAND.

Number.	Name of Railway.	Mileage owned in <b>Prince Edward Isl'd</b> on June 30.		Increase.	Decrease.
		1910.	1909.		
	Canadian Government Ry.—Prince Edward Island.	269·33	269·33		
	Total.....	269·33	269·33		

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TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1910.—Canada—*Continued.*

## NEW BRUNSWICK.

Number.	Name of Railway.	Mileage owned in New Brunswick on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Albert Southern (abandoned).....		19 00		19 00
2	Canadian Government Railway—Intercolonial.....	504 69	504 69		
3	Canadian Pacific.....	438 60	440 20		1 60
4	Caraget and.....	68 00	68 00		
5	Gulf Shore.....	16 78	16 78		
6	Elgin & Havelock.....	28 00	28 00		
7	Hampton & St. Martin's.....	30 00	36 00		
8	International of New Brunswick.....	80 00	89 00		
9	Kent Northern and.....	27 00	27 00		
10	St. Louis & Richibucto.....	7 00	7 00		
11	Moncton & Buctouche.....	32 00	32 00		
12	New Brunswick Coal & Railway Co.....	58 00	58 00		
13	New Brunswick & Prince Edward Island.....	36 00	36 00		
14	New Brunswick Southern..	82 35	82 35		
15	North Shore.....	8 63	8 63		
16	Princeton Branch of Washington Co. Ry. (U.S.)....	5 10	5 10		
17	Salisbury & Albert.....	45 00	50 00		*5 00
18	Temiscouata.....	44 00	44 00		
19	York & Carleton.....	10 50	10 50		
	Total.....	1,521 65	1,547 25	.....	25 60

\* Yard tracks.



1 GEORGE V., A. 1911

TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1910.—Canada—Continued.

## QUEBEC.

Number.	Name of Railway.	Mileage owned in Quebec on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Atlantic and Lake Superior.....	100'00	100'00		
2	Atlantic, Quebec and Western.....	35'00	20'50	14'50	
3	Canadian Government Railway—Intercolonial.....	464'07	464'07		
4	Canadian Pacific.....	1,031'20	939'80	91'40	
5	Canadian Northern Quebec.....	348'67	266'80	81'87	
6	Carillon and Grenville.....	13'00	13'00		
7	Grand Trunk.....	451'40	451'40		
8	Grand Trunk (Canada Atlantic).....	66'38	66'38		
9	Hereford.....	52'18	52'85		'67
10	Lotbinière and Megantic.....	30'00	30'00		
11	Massawippi Valley.....	35'46	35'46		
12	Montreal and Atlantic.....	163'40	163'40		
13	Montreal and Province Line.....	58'60	58'60		
14	Montreal and Vermont Junction.....	23'60	23'60		
15	Napierville Junction.....	27'06	27'06		
16	Orford Mountain, now included in Can. Pac. Ry.....		55'10		55'10
17	Phillipsburg Railway and Quarry Co.....	6'00	6'00		
18	Quebec Central.....	222'00	222'00		
19	Quebec and Lake St. John.....	286'50	286'50		
20	Quebec Railway, Light and Power Co.....	27'00	27'00		
21	Quebec, Montreal and Southern.....	191'91	191'91		
22	Rutland and Noyan.....	3'39	3'39		
23	Stanstead, Shefford and Chambly.....	43'00	43'00		
24	St. Lawrence and Adirondack.....	46'12	46'12		
25	Temiscouata.....	69'00	69'00		
	Total.....	3,794'94	3,662'94	187'77	55'77

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TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1910.—Canada—Continued.

## ONTARIO.

Number.	Name of Railway.	Mileage owned in Ontario on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Algoma Central and Hudson Bay.....	89 64	89 64		
2	Bay of Quinté.....	89 37	89 37		
3	Bessemer and Barry's Bay.....	5 00	5 00		
4	Brockville, Westport and Northwestern.....	45 00	45 00		
5	Bruce Mines and Algoma.....	17 28	17 28		
6	Canada Southern.....	382 19	382 19		
7	Canadian Northern.....	353 70	353 70		
8	Canadian Northern Ontario.....	342 20	332 73	9 47	
9	Canadian Pacific.....	2,881 90	2,881 50	40	
10	Central Ontario, and.....	140 13	140 13		
11	Marmora Railway and Mining Co.....	9 60	9 60		
12	Grand Trunk.....	2,643 56	2,657 04		13 48
13	Grand Trunk (Canada Atlantic).....	389 88	389 88		
14	Irondale, Bancroft and Ottawa.....	48 00	48 00		
15	Kingston and Pembroke.....	109 80	109 80		
16	Lake Erie and Detroit River, and.....	198 81	198 81		
17	London and Port Stanley.....	23 66	23 66		
18	Maganetawan River.....	1 91	1 91		
19	Manitoulin and North Shore.....	22 70	15 83	6 87	
20	Nosbonsing and Nipissing.....	5 50	5 50		
21	Ottawa and New York.....	56 90	56 90		
22	Pontiac and Renfrew.....	4 25	4 25		
23	Schomberg and Aurora.....	14 40	14 40		
24	St. Clair Tunnel and approaches.....	2 25	2 25		
25	Temiskaming and Northern Ontario.....	266 14	264 74	1 40	
26	Thousand Islands.....	6 33	6 33		
27	Toronto, Hamilton and Buffalo.....	80 15	83 67		3 52
	Total.....	8,230 25	8,229 11	4 66	3 52

1 GEORGE V., A. 1911

TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1910.—Canada—Continued.

## MANITOBA.

Number.	Name of Railway.	Mileage owned in <b>Manitoba</b> on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Brandon, Saskatchewan and Hudson Bay.....	69·45	69·45		
2	Canadian Northern.....	1,530·90	1,522·08	8·82	
3	Canadian Pacific.....	1,528·50	1,522·00	6·50	
4	Midland of Manitoba, now Manitoba Great North- ern.....	91·77	91·77		
	Total.....	3,220·62	3,205·30	15·32	

## SASKATCHEWAN.

Number.	Name of Railway.	Mileage owned in <b>Saskatchewan</b> on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Canadian Northern.....	1,182·50	1,006·44	176·06	
2	Canadian Pacific.....	1,749·40	1,624·90	124·50	
	Total.....	2,931·90	2,631·34	300·56	

## ALBERTA.

Number.	Name of Railway.	Mileage owned in <b>Alberta</b> on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Alberta Railway and Irrigation Co.....	111·82	111·82		
2	Canadian Northern.....	214·20	214·20		
3	Canadian Pacific.....	1,157·90	991·00	166·90	
4	Edmonton, Yukon and Pacific.....	4·50	4·50		
	Total.....	1,488·42	1,321·52	166·90	

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TABLE 3.—SUMMARY of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1910.—Canada—*Concluded.*

## BRITISH COLUMBIA.

Number.	Name of Railway.	Mileage owned in <b>British Columbia</b> on June 30.		Increase.	Decrease.
		1910.	1909.		
1	Bedlington and Nelson .....	15·30	23·97		8·67
2	British Yukon .....	31·22	31·22		
3	Canadian Pacific .....	1,212·50	1,208·90	3·60	
4	Crowsnest Southern .....	74·18	74·18		
5	Eastern British Columbia .....	16·00	14·00	2·00	
6	Esquimalt and Nanaimo .....	78·00	78·00		
7	Kaslo and Slocan .....	23·37	23·37		
8	Kettle River Valley .....	18·50	20·00		1·50
9	Morrissey, Fernie and Michel .....	10·85	10·85		
10	Nelson and Fort Sheppard .....	55·42	55·42		
11	New Westminster Southern .....	24·10	24·10		
12	Red Mountain .....	9·59	9·59		
13	Spokane and British Columbia .....	3·70	3·70		
15	Vancouver Copper Co.'s Ry. .....	12·00	12·00		
14	Vancouver, Victoria and Eastern .....	219·40	178·49	40·91	
16	Victoria and Sydney .....	16·26	16·26		
17	Victoria Terminal Ry. and Ferry Co. ....	1·14	1·14		
18	Wellington Colliery Co. ....	10·75	10·75		
	Total .....	1,832·28	1,795·94	46·51	10·17

## YUKON TERRITORY.

Number.	Name of Railway.	Mileage owned in <b>Yukon Territory</b> on June 30.		Increase.	Decrease.
		1910.	1909.		
1	British Yukon .....	59·10	59·10		
2	Klondike Mines .....	31·81	31·81		
	Total .....	90·91	90·91		

1 GEORGE V., A. 1911

TABLE 4.—Amount of Railway Capital at the

Number.	1	2	3	4	5	6
	Name of Railway.	STOCKS.			FUNDED	
		Amount Out- standing.	Amount per Mile of Line.	Propor- tion to Total Railway Capital. 100 × Col. 2 Col. 12.	Amount Out- standing. Cols. 8 + 9 + 10 + 11	Amount per Mile of Line.
1	Alberta Ry. and Irrigation Co. ....	1,223,500	10,924	100.00		
2	Algoma Central and Hudson Bay..	10,000,000	81,920	56.49	7,703,763	63,109
3	Atlantic, Quebec and Western .....	940,000	26,857	28.70	2,231,970	66,656
4	Atlantic and Lake Superior .....				1,941,313	19,413
5	Bay of Quinté .....	1,395,000	14,940	61.34	880,000	9,424
6	Bedlington and Nelson .....	1,000,000	65,359	100.00		
7	Bessemer and Barry's Bay.....	125,000	20,833	100.00		
8	Brandon, Saskatchewan & Hudson Bay.....	2,120,000	30,526	100.00		
9	*Brandon Transfer .....	12,600		100.00		
10	British Yukon.....	2,934,119	30,149	60.00	1,957,460	20,114
11	Brockville, Westport and North- western .....	900,000	20,000	66.66	450,000	10,000
12	Bruce Mines and Algoma.....	99,000	5,729	33.79	194,000	11,226
	Canada Atlantic, including—					
13	Ottawa, Arnprior and Parry Sound (G. T. Ry.).....	7,200,000	18,163	31.94	15,337,188	38,690
14	Central Counties.....	500,000	12,990	56.81	380,000	9,873
15	Pembroke Southern.....	178,000	8,334	54.27	150,000	7,022
16	Canada Southern.....	15,000,000	39,247	42.69	20,130,000	52,670
	Canadian Government Ry's—					
17	Intercolonial .....					
18	Prince Edward Island .....					
19	Canadian Northern .....	55,000,000	20,229	36.56	95,412,203	35,093
20	Canadian Northern Ontario.....	250,000	786	3.08	7,860,000	24,717
21	Canadian Northern Quebec.....	9,550,000	28,006	52.26	8,725,511	25,588
22	Canadian Pacific.....	205,616,666	20,561	53.64	177,693,583	17,769
	Owned—					
23	Canada Central.....				973,333	3,625
24	Montreal and Western .....	5,000	75	1.40	353,708	5,287
	Leased—					
25	Atlantic and Northwest.....	3,416,000	9,877	33.52	6,775,066	19,586
26	British Columbia Southern.....	172,200	821	12.78	1,175,000	5,600
27	Calgary and Edmonton .....	1,000,000	2,270	10.90	8,158,894	18,548
28	Cap de la Madeleine .....	20,000	8,571	100.00		
29	Columbia and Kootenay.....	250,000	4,166	16.30	1,277,500	21,291
30	Columbia and Western .....	1,000,000	6,365	14.94	5,691,000	36,225
31	Fredericton .....	319,280	14,447	76.17	100,000	4,525
32	Great Northwest Central.....	500,000	4,475	26.66	1,375,000	12,809
33	Guelph and Goderich .....	125,000	1,564	4.92	2,415,000	30,225
34	Guelph Junction.....	21,000	1,354	16.82	173,000	11,161
35	Kootenay and Arrowhead.....	1,000,000	30,120	56.18	780,000	23,494
36	Lindsay, Bobcaygeon and Pontypool.....	200,000	5,168	28.56	500,000	12,919
37	Manitoba and Northwestern... ..	6,872,814	20,108	55.60	5,489,153	16,059
38	Manitoba Southwest Coloniza- tion.....	700,000	3,256	21.04	2,616,000	12,167
39	Montreal and Lake Maskinonge .....	23,000	2,272	20.00	100,000	9,090
40	Montreal and Ottawa .....	227,200	2,430	12.20	1,636,250	17,500
41	Nakusp and Slocan.....	300,000	8,219	31.67	647,074	17,728
42	New Brunswick .....	4,780,800	10,858	37.93	7,821,127	17,763
43	New Brunswick and Canada... ..	2,179,867	18,318	92.77	170,000	1,429
44	Nicola, Kamloops and Simil- kameen .....	250,000	5,319	17.54	1,175,000	25,000
45	Northern Colonization .....	300,000	12,766	21.14	1,118,000	47,574

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Close of the Year ending June 30, 1910.

7	8	9	10	11	12	13		
DEBT.					DESIGNATION OF FUNDED DEBT.		SUMMARY.	
Proportion to Total Railway Capital. 100 x Col. 5 Col. 12.	Bonds.	Mis- cellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.	Total Railway Capital. Cols. 2 + 5.	Amount per Mile of Line. Cols. 3 + 6.	Number.	
p. c.	\$	\$	\$	\$	\$	\$		
					1,223,500	10,924	1	
43·51	6,750,000	953,763			17,703,763	145,029	2	
71·30	2,231,970				3,171,970	93,513	3	
100·00	1,941,313				1,941,313	19,413	4	
38·66	880,000				2,275,000	24,364	5	
					1,000,000	65,359	6	
					125,000	20,833	7	
					2,120,000	30,526	8	
					12,600		9	
40·00	1,957,460				4,891,579	50,263	10	
33·34	450,000				1,350,000	30,000	11	
66·21	194,000				293,000	16,955	12	
68·06	15,337,188				22,537,188	56,853	13	
43·19	380,000				880,000	22,862	14	
45·73	150,000				328,000	15,356	15	
57·31	20,130,000				35,130,000	91,917	16	
							17	
							18	
63·44	77,548,260	6,742,080		11,121,863	150,412,203	55,322	19	
96·92	7,860,000				8,110,000	25,503	20	
47·74	8,725,511				18,275,511	53,594	21	
46·36	176,333,583			1,360,000	383,310,249	38,330	22	
100·00	973,333				973,333	3,625	23	
98·60	353,708				358,708	5,362	24	
66·48	6,775,066				10,191,066	29,463	25	
87·22	1,175,000				1,347,200	6,421	26	
89·10	8,158,894				9,158,894	20,818	27	
					20,000	8,571	28	
83·70	1,277,500				1,527,500	25,457	29	
85·06	5,691,000				6,691,000	42,590	30	
23·83	100,000				419,280	18,972	31	
73·34	1,375,000				1,875,000	16,784	32	
95·08	2,415,000				2,540,000	31,789	33	
89·18	173,000				194,000	12,515	34	
43·82	780,000				1,780,000	53,614	35	
71·44	500,000				700,000	18,087	36	
44·40	5,489,153				12,361,967	36,167	37	
78·96	2,616,000				3,316,000	15,423	38	
80·00	100,000				125,000	11,362	39	
87·80	1,636,250				1,863,450	19,930	40	
68·33	647,074				947,074	25,947	41	
62·07	7,821,127				12,601,927	28,621	42	
7·23	170,000				2,349,867	19,747	43	
82·46	1,175,000				1,425,000	30,319	44	
78·86	1,118,000				1,418,000	60,340	45	



1 GEORGE V., A. 1911

TABLE 4.—Amount of Railway Capital at the

Number.	1	2	3	4	5	6
	Name of Railway.	STOCK.			FUNDED	
		Amount Out- standing.	Amount per Mile of Line.	Propor- tion to Total Railway Capital. 100 × Col. 2 Col. 12.	Amount Out- standing. Cols. 8+9+10+11	Amount per Mile of Line.
	Canadian Pacific— <i>Con.</i>	\$	\$	p. c.	\$	\$
	Leased— <i>Con.</i>					
46	Ontario and Quebec .....	2,000,000	2,946	9·26	19,502,591	28,871
47	Ottawa, Northern and Western	1,300,000	8,207	30·00	3,075,000	19,413
48	Shuswap and Okanagan .....	750,000	14,763	40·00	1,139,253	22,426
49	St. John Bridge and Ry. Extension .....	200,000	100,000	61·54	125,000	62,500
50	St. John and Maine .....	2,654,153	28,296	92·43	216,664	2,310
51	St. Lawrence and Ottawa .....	789,909	13,549	44·79	973,334	16,695
52	St. Mary's and Western Ont- ario .....	250,000	16,393	55·70	198,250	13,000
53	St. Stephen and Milltown .....	50,000	10,870	100·00		
54	Tilsonburg, Lake Erie and Pa- cific .....	400,000	11,976	31·50	1,000,000	26,041
55	Tobique Valley .....	29,900	1,068	9·65	280,000	10,000
56	Toronto, Grey and Bruce .....	785,490	4,127	18·32	3,500,000	18,392
57	Vancouver and Lulu Island .....	25,000	1,480	8·20	280,000	16,568
58	Walkerton and Lucknow .....	19,000	504	2·50	740,000	19,628
59	West Ontario Pacific .....	21,000	789	100·00		
60	Berlin, Waterloo, Wellesley and Lake Huron .....	500,000	38,461	54·00	426,000	32,769
61	Georgian Bay and Seaboard .....	250,000	19,230	38·52	390,000	30,692
62	Orford Mountain .....	501,000	9,109	41·64	702,000	12,764
63	*Central of Canada .....	526,000		100·00		
64	Cape Breton .....	1,000,000	32,258	100·00		
65	Caraquet .....	950,000	13,286	62·30	546,900	8,042
66	Carillon and Grenville .....	200,000	15,385	100·00		
67	Central Ontario and .....	3,340,000	23,857	76·96	1,000,000	7,143
68	Marmora Ry. and Mining Co .....	115,421	11,542	53·11	100,000	10,000
69	Crowsnest Southern .....	4,180,000	56,349	100·00		
70	Cumberland Ry. and Coal Co .....	500,000	15,625	52·00	489,500	15,328
71	Dominion Atlantic .....	2,433,333	9,892	31·10	5,364,040	21,630
72	Elgin and Havelock .....	44,900	1,603	47·30	50,000	1,786
73	Eastern British Columbia .....	420,000	30,000	50·00	420,000	30,000
74	Esquimalt and Nanaimo .....	2,500,000	32,501	100·00		
75	*Erie, London and Tilsonburg .....	12,500		100·00		
76	*Fort William Terminal .....	12,500		100·00		
77	Grand Trunk .....	222,151,134	75,379	61·40	139,889,145	47,466
78	Buffalo and Lake Huron .....	2,555,657	15,844	40·74	3,716,955	23,043
79	Great Western .....					
80	Midland, Ontario .....					
81	Northern .....					
82	Owen Sound Branch .....				100,000	8,064
83	Toronto Belt Line .....	50,000	3,909	9·76	462,500	36,161
84	Wellington, Grey and Bruce .....					
85	*Grand Trunk Pacific .....	24,942,000		23·95	79,167,857	
86	Gulf Shore .....	6,250	390	100·00		
87	*Ha-Ha Bay .....	600,000		100·00		
88	Halifax and Southwestern .....	1,000,000	2,704	18·72	4,341,954	11,741
89	Hereford .....	800,000	15,137	50·00	800,000	15,137
90	*Huron and Ontario .....	3,000,000		95·24	150,000	
91	*Indian River .....	15,000		100·00		
92	*International of New Brunswick .....	1,320,000		59·56	896,000	
93	Inverness Ry. and Coal Co .....	7,500,000	114,504	78·00	2,115,000	32,290
94	Irondale, Bancroft and Ottawa .....	53,500	1,114	10·62	450,000	9,375
95	Kaslo and Slocan .....	1,000,000	42,735	57·15	750,000	32,051

\* Under construction.

SESSIONAL PAPER No. 20b

Close of the Year ending June 30, 1910—Continued.

7	8	9	10	11	12	13	
DEBT.	DESIGNATION OF FUNDED DEBT.				SUMMARY.		
Proportion to Total Railway Capital. 100 × Col. 5 Col. 12.	Bonds.	Miscellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. 3 + 6	Number.
p. c.	\$	\$	\$	\$	\$	\$	
90·74	19,502,591				21,502,591	31,817	46
70·00	3,075,000				4,375,000	27,620	47
60·00	1,139,253				1,889,253	37,189	48
38·46	125,000				325,000	162,500	49
7·57	216,664				2,870,817	30,606	50
55·21	973,334				1,763,243	30,244	51
44·30	198,250				448,250	29,393	52
					50,000	10,870	53
68·50	1,000,000				1,400,000	38,017	54
90·35	280,000				309,900	11,068	55
81·68	3,500,000				4,285,490	22,519	56
91·80	280,000				305,000	18,048	57
97·50	740,000				759,000	20,132	58
					21,000	789	59
46·00	426,000				926,000	71,230	60
61·48	399,000				649,000	49,922	61
58·36	702,000				1,203,000	21,873	62
					526,000		63
					1,000,000	32,258	64
37·70	500,000	46,900			1,496,900	21,328	65
					200,000	15,385	66
23·04	1,000,000				4,340,000	31,000	67
46·89	100,000				215,421	21,542	68
					4,180,000	56,349	69
48·00	489,500				989,500	30,953	70
68·90	4,901,706	462,334			7,797,373	31,522	71
52·70	50,000				94,900	3,389	72
50·00	420,000				840,000	60,000	73
					2,500,000	32,501	74
					12,500		75
					12,500		76
38·60	139,889,145				362,640,279	122,845	77
59·26	3,716,955				6,272,612	38,887	78
							79
							80
							81
100·00	100,000				100,000	8,064	82
90·24	462,500				512,500	40,070	83
							84
76·05	79,167,857				104,109,857		85
					6,250	390	86
					600,000		87
81·28	4,341,954				5,341,954	14,445	88
50·00	800,000				1,600,000	30,274	89
4·76		150,000			3,150,000		90
					15,000		91
40·44	896,000				2,216,000		92
22·00	2,115,000				9,615,000	146,794	93
89·38	450,000				503,500	10,489	94
42·85	750,000				1,750,000	74,786	95

1 GEORGE V., A. 1911

TABLE 4.—Amount of Railway Capital at the

Number.	1 Name of Railway.	2 3 4 STOCKS.			5 6 FUNDED						
		Amount Out- standing.	Amount per Mile of Line.	Proportion to Total Railway Capital. 100 × Col. 2 Col. 12.	Amount Out- standing. Cols. 8+9+10+11	Amount per Mile of Line.					
							§	§	p. c.	§	§
96	Kent Northern and . . . . .	75,000	2,777	66.40	38,000	1,407					
97	St. Louis and Richibucto . . . . .	20,000	2,857	100.00							
98	Kettle River Valley . . . . .	375,000	18,750	46.01	440,000	22,000					
99	Kingston and Pembroke . . . . .	3,393,550	30,907	85.57	572,000	5,209					
100	Klondike Mines . . . . .	1,375,000	44,355	55.76	1,091,250	35,202					
101	Lake Erie and Detroit River, and . . . . .	1,400,000	7,042		3,016,000	15,170					
102	London and Port Stanley . . . . .	1,332,854	56,409	100.00							
103	Liverpool and Milton . . . . .	30,300	5,050	85.84	5,000	833					
104	Lotbinière and Mégantic . . . . .	50,000	1,666	100.00							
105	Maganetawan River . . . . .	30,000	15,706	100.00							
106	Manitoba (Canadian Northern) . . . . .	1,432,200	4,086	20.43	5,576,800	15,911					
107	Manitoulin and North Shore . . . . .	200,000	8,819	33.06	405,000	17,841					
108	Maritime Coal and Railway Co. . . . .	2,000,000	133,333	72.00	774,500	51,633					
109	Massawippi Valley . . . . .	800,000	22,560	100.00							
110	Midland of Manitoba . . . . .	204,000	22,229	100.00							
111	Moncton and Buctouche . . . . .	250,000	7,812	80.65	60,000	1,875					
112	Montreal and Atlantic, and . . . . .	3,206,000	31,098	71.34	1,065,000	10,350					
113	Lake Champlain and St. Lawrence Junction . . . . .	600,000	9,917	61.35	378,000	6,248					
114	Montreal and Province Line . . . . .	1,000,000	17,064	83.33	200,000	4,926					
115	Montreal and Vermont Junction . . . . .	1,000,000	42,373	66.66	500,000	21,186					
116	Morrissey, Fernie and Michel . . . . .	1,263,000	217,010	95.92	42,500	7,302					
117	Napierville Junction . . . . .	600,000	22,173	100.00							
118	Nelson and Fort Sheppard . . . . .	1,500,000	27,066	54.71	1,293,000	23,331					
119	New Brunswick and P.E. Island . . . . .	214,850	5,968	75.16	71,000	1,972					
120	New Brunswick Southern . . . . .	49,000	581	9.00	500,000	5,931					
121	New Brunswick Coal and R'ly. Co. . . . .	†									
122	New Westminster Southern . . . . .	600,000	24,896	100.00							
123	North Shore . . . . .	98,000	11,355	73.68	35,000	4,056					
124	No-bonring and Nipissing . . . . .	250,000	45,455	100.00							
125	Nova Scotia Steel and Coal Co.'s Railway . . . . .	†			†						
126	Ottawa and New York . . . . .	1,000,000	17,575	38.46	1,600,000	28,119					
127	* Pacific, Northern and Omenica . . . . .	60,000		100.00							
128	Père Marquette (in Canada) . . . . .				5,870,000	29,500					
129	Phillipsburg Ry. and Quarry Co. . . . .	124,500	20,750	100.00							
130	Pontiac and Renfrew . . . . .	20,000	4,706	100.00							
131	Princeton Branch of the Wash- ington Co. Railway (U.S.) . . . . .	86,950	17,049	50.00	86,950	17,049					
132	* Quinze and Blanche River . . . . .	125,000		100.00							
133	Qu'Appelle, Long Lake and Saskat- chewan (C.N.R.) . . . . .	201,100	787	3.80	5,083,582	19,896					
134	Quebec Central . . . . .	3,381,603	15,233	35.17	6,233,406	28,079					
135	Quebec and Lake St. John . . . . .	4,524,000	15,790	37.00	7,702,960	26,886					
136	Quebec Ry., Light and Power Co. . . . .	3,250,000	120,000	56.28	2,517,299	93,259					
137	* Quebec and New Brunswick . . . . .	387,900		100.00							
138	Quebec, Montreal and Southern . . . . .	1,000,000	5,211	100.00							
139	Red Mountain . . . . .	190,600	19,874	46.76	217,000	22,628					
140	Rutland and Noyan . . . . .	100,000	29,499	50.00	100,000	29,499					
141	Salisbury and Albert . . . . .	150,000	3,333	100.00							
142	Schomberg and Aurora . . . . .	250,000	17,611	45.90	300,000	20,833					
143	Stanstead, Shefford and Chambly . . . . .	608,750	14,157	46.60	697,461	16,220					
144	St. Clair Tunnel . . . . .	350,000	155,555	12.28	2,500,000	1,111,111					

† Owned and operated by New Brunswick Government. \* Under construction.

SESSIONAL PAPER No. 20b

Close of the Year ending June 30, 1910—Continued.

7	8	9	10	11	12	13	No.
DEBT.	DESIGNATION OF FUNDED DEBT.				SUMMARY.		
Proportion to Total Railway Capital. 100 x Col. 5 Col. 12.	Bonds.	Miscellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.	Total Railway Capital. Col. 2 + 5.	Amount per Mile of Line. Cols. 3 + 6.	
p. c.	\$	\$	\$	\$	\$	\$	
33.60	38,000				113,000	4,184	96
					20,000	2,857	97
53.99	440,000				815,000	40,750	98
14.43	572,000				3,965,550	36,116	99
44.24	935,040			156,210	2,466,250	79,557	100
	3,000,000			16,000	4,416,000	22,212	101
					1,332,854	56,409	102
14.16	5,000				35,300	5,883	103
					50,000	1,666	104
					30,000	15,706	105
79.57	5,576,800				7,009,000	19,997	106
66.94	405,000				605,000	26,660	107
23.00	774,500				2,774,500	184,966	108
					800,000	22,560	109
					204,000	22,229	110
19.35	60,000				310,000	9,687	111
28.66	1,065,000				4,265,000	41,448	112
38.65	378,000				978,000	16,165	113
16.67	200,000				1,200,000	21,990	114
33.34	500,000				1,500,000	63,559	115
4.08	42,500				1,305,500	224,312	116
					600,000	22,173	117
46.29	1,293,000				2,793,000	50,397	118
24.84	71,000				285,850	7,940	119
91.00	500,000				549,000	6,512	120
					+		121
					600,000	24,896	122
26.32	35,000				133,000	15,411	123
					250,000	45,455	124
61.54	1,325,000		275,000		2,600,000	45,694	125
					60,000		127
100.00	5,870,000				5,870,000	29,500	128
					124,500	20,750	129
					20,000	4,706	130
50.00	86,950				173,900	34,098	131
					125,000		132
96.20	5,083,582				5,284,682	20,683	133
64.83	4,588,473		1,644,933		9,615,009	43,312	134
63.00	4,586,347		3,116,613		12,226,960	42,676	135
43.72	2,500,000	10,000		7,299	5,767,299	213,259	136
					387,900		137
					1,000,000	5,211	138
53.24	217,000				407,600	42,502	139
50.00	100,000				200,000	58,998	140
					150,000	3,333	141
54.10	300,000				550,000	38,444	142
53.40	697,461				1,306,211	30,377	143
87.72	2,500,000				2,850,000	1,266,666	144

† General capital of the Nova Scotia Steel and Coal Co.

1 GEORGE V., A. 1911

TABLE 4.—Amount of Railway Capital at the

No.	1 Name of Railway.	2 Amount Out- standing.	3		4 Proportion to Total Railway Capital. 100 x Col. 2 Col. 12.	5 Amount Out- standing. Cols. 8+9+10+11	6 Amount per Mile of Line.	
			STOCKS.					FUNDED
			Amount per Mile of Line.					
		\$	\$	p. c.	\$	\$		
145	St. Martins .....	99,000	3,300	52.38	90,000	3,000		
146	*St. John Valley and River du Loup .....	34,932		100.00				
147	St. Lawrence and Adirondack. ....	1,230,655	37,497	57.37	914,418	27,862		
148	Sydney and Louisburg (Dominion Coal Co.) .....	†						
149	Temiscaming and Northern Ontario .....	†						
150	Temiscouata .....	1,000,000	8,849	24.41	3,099,669	27,401		
151	Thousand Islands .....	60,000	8,185	51.85	58,000	7,913		
152	Toronto, Hamilton and Buffalo .....	2,500,000	29,532	36.80	4,280,000	50,645		
153	*Trans-Canada .....	37,700		100.00				
154	Vancouver Copper Co.'s Ry. ....				92,466	7,705		
155	Vancouver, Victoria and Eastern .....	10,000,000	45,579	100.00				
156	and Vancouver Westminster and Yukon .....	3,522,000	234,800	100.00				
157	Victoria Terminal Railway and Ferry Co. ....	250	218	100.00				
158	Victoria and Sidney, B.C. ....	103,000	6,334	27.00	300,000	18,450		
159	Wellington Colliery Co.'s Ry. ....	250,000	23,250	100.00				
160	York and Carleton .....	105,000	10,500	100.00				
	Final total .....	687,557,387			722,740,300			

\* Under construction. † Owned and operated by the Ontario Government. ‡ General capital of



SESSIONAL PAPER No. 20b

Close of the Year ending June 30, 1910—*Concluded.*

7	8	9	10	11	12	13	
DEBT.	DESIGNATION OF FUNDED DEBT.				SUMMARY.		
Proportion to Total Railway Capital. 100 × Col. 5 Col. 12.	Bonds.	Miscellaneous obligations.	Income Bonds.	Equipment trust obligations.	Total Railway Capital. Cols. 2 + 5.	Amount per Mile of Line. Cols. 3 + 6.	No.
p. c.	\$	\$	\$	\$	\$	\$	
47.62	90,000				189,000	6,300	145
					34,932		146
42.63	914,418				2,145,073	65,359	147
					+		148
					+		149
75.59	3,099,669				4,099,669	36,250	150
48.15	58,000				118,000	16,098	151
63.20	4,280,000				6,780,000	80,227	152
					37,700		153
100.00	92,466				92,466	7,705	154
					10,000,000	45,579	155
					3,522,000	234,800	156
					250	218	157
73.00	300,000				403,000	24,784	158
					250,000	23,259	159
					105,000	10,500	160
	696,677,305	8,365,077	5,036,546	12,661,372	1,410,297,687		

the Dominion Coal Company.



1 GEORGE V., A. 1911

TABLE 5.—STATEMENT of Aid granted and paid to Railways by

Number.	Name of Railway.	BY DOMINION GOVERNMENT.			Name of Province.	Bonus Granted.
		Bonus Granted.	Bonus Paid up.	Loan.		
		\$ cts.	\$ cts.	\$ cts.		
1	Albert Southern .....	50,460 00	50,460 00		New Brunswick.	48,680 00
2	Harvey Branch.....	5,553 57	5,553 57		"	9,000 00
3	Alberta Ry. & Irrig'n. Co.	148,094 00	148,094 00			
4	Algoma Central & Hudson Bay.....	1,440,000 00	924,976 00			
5	Atlantic & Lake Superior..	828,435 84	828,435 84		Quebec.....	1,596,390 00
6	Atlantic, Quebec & Western	365,568 00	365,568 00			
7	Bay of Quinté.....	350,455 25	350,455 25		Ontario.....	84,000 00
8	Bedlington & Nelson...(nil)					
9	Brandon, Sask'n. & Hudson Bay.....(nil)					
10	*Brandon Transfer.....(nil)					
11	British Yukon.....(nil)					
12	Brockville, Westport & Northwestern.....	140,800 00	140,800 00		Ontario.....	
13	Bruce Mines & Algoma....	53,920 00	53,920 00		"	50,918 00
14	*Burks Falls & French River.....(nil)					
15	Canada Atlantic (G. T. R.) including—	282,355 20	282,355 20		{ Ontario.....	270,000 00
					{ Quebec.....	200,000 00
16	Ottawa, Amprior & Parry Sound .....	932,512 00	932,512 00		Ontario.....	577,326 06
17	Central Counties .....				"	
18	Pembroke Southern.....	64,000 00	64,000 00		"	55,500 00
19	Canada Southern, including Sarnia, Chatham & Erie.				"	
20	Leamington & St. Clair..	51,200 00	51,200 00		"	147,859 00
21	Canadian Gov't Rys.:—					
22	Intercolonial, including—					
23	Canada Eastern .....	374,839 84	374,839 84			
24	Drummond County.....	423,936 00	423,936 00		Quebec.....	
25	Fredericton & St. Mary's Bridge.....	30,000 00	30,000 00			
26	Prince Edward Island.....					
27	Canadian Northern, including—	374,606 00	374,606 00			
28	Winnipeg Great North'n					
29	Port Arthur, Duluth & Western.....	271,200 00	271,200 00		Ontario.....	255,571 00
30	Ontario & Rainy River..	1,534,526 00	1,534,526 00		"	1,072,800 00
31	Manitoba.....				Manitoba.....	641,575 25
32	Canadian Northern Ont. ...	2,255,360 00	2,123,942 40		Ontario.....	**
33	Canadian Northern Que. ...	1,789,540 35	1,789,540 35		Quebec.....	1,194,129 46
34	Canadian Pacific	29,750,506 00	29,750,506 00		Manitoba.....	375,377 50
		10,189,521 00	10,189,521 00		British Columbia	37,500 00
35	Owned—Canada Central.	1,525,250 00	1,525,250 00		Ontario.....	1,479,000 00
36	Lake Temiskaming Colonization.....	310,335 95	310,335 95		Quebec.....	350,076 82
37	North Shore .....	1,500,000 00	1,500,000 00			
38	Montreal & Western.	361,270 00	361,270 00		Quebec.....	472,500 00
39	Que., M'tl., Ottawa & Occidental.....				"	727,000 00
40	Leased—Atlantic & North West .....	3,888,800 00	3,888,800 00		"	711,122 02
41	Cap de la Madeleine... ..	7,421 00	7,421 00			
42	Columbia & Kootenay..	88,800 00	88,800 00			
43	Credit Valley.....				Ontario.....	531,000 00
44	Fredericton.....				New Brunswick.	230,000 00
45	Guelph & Goderich.....				Ontario.....	
46	Guelph Junction.....	51,200 00	46,000 00		"	
47	Lindsay, Bobcaygeon & Pontypool.....	185,173 06	185,173 06		"	52,500 00

\*\* Ontario Government guarantees Bonds, 268 miles at \$20,000 per mile.

## SESSIONAL PAPER No. 20b

## Governments and Municipalities to June 30, 1917.

BY PROVINCIAL GOVERNMENTS.			BY MUNICIPALITIES.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
48,680 00						
9,000 00						
947,199 25			50,500 00	9,000 00		
84,000 00			197,990 43	197,990 43		
50,918 00			116,000 00	116,000 00		
			560 00	500 00		
270,000 00						
200,000 00			154,392 00	152,900 00		32,000 00 †
577,326 06			24,000 00	24,000 00		
55,500 00			20,000 00	20,000 00		
147,859 00			322,500 00	322,500 00		
			15,000 00	15,000 00		
255,571 00			40,000 00	40,000 00		
1,072,800 00			50,000 00	50,000 00		
641,575 25						
** 1,194,129 46			20,000 00	20,000 00		
372,157 50			72,000 00	72,000 00		200,000 00
37,500 00			572,500 00	464,761 29		
1,479,000 00						42,500 00
350,076 82						
472,500 00						
727,000 00	1,176,556 00		25,000 00	25,000 00	771,644 62	
699,192 08						325,000 00
531,000 00			1,085,000 00	1,085,000 00		
230,000 00			80,000 00	86,000 00		
			31,000 00	31,000 00		
						193,000 00
52,500 00			73,000 00	73,000 00		

† This amount was paid for 6,793,014 acres of land relinquished by Company.

1 GEORGE V., A. 1911

TABLE 5.—STATEMENT of Aid Granted and Paid to Railways

Number.	Name of Railway.	BY DOMINION GOVERNMENT.			Name of Province.	Bonus Granted.
		Bonus Granted.	Bonus Paid up.	Loan.		
		\$ cts.	\$ cts.	\$ cts.		\$ cts.
	Can. Pacific—Leased Lines —Continued.					
48	Manitoba & North-western.....				Manitoba.....	
49	Manitoba & South-western Colonization.....				".....	
50	Montreal & Lake Maskinoué.....	41,280 00	41,280 00		Quebec.....	87,750 00
51	Montreal & Ottawa....	192,000 00	192,000 00		{ Ontario.....	100,000 00
52	Nakusp & Slocan.....	121,600 00	117,760 00		{ Quebec.....	182,210 00
53	New Brunswick.....				British Columbia	
54	New Brunswick & Canada.....				New Brunswick.	76,000 00
55	Nicola, Kamloops & Similkameen.....	300,800 00	300,800 00		".....	575,000 00
56	Northern Colonization.....	355,200 00	355,200 00		Quebec.....	96,000 00
57	Ontario & Quebec.....	196,000 00	196,000 00		Ontario.....	
58	Ottawa, Northern & Western.....	950,000 00	821,000 20		{ Ontario.....	50,000 00
59	Saskatchewan & Western.....				{ Quebec.....	1,316,389 15
60	Shuswap & Okanagan..	163,200 00	163,200 00		Manitoba.....	
61	St. John Bridge and Ry. extension.....			433,900 00	New Brunswick.	5,181 81
62	St. John & Maine.....				".....	830,000 00
63	St. Lawrence & Ottawa.....				Ontario.....	
64	St. Mary's & Western Ontario.....	67,344 00	67,344 00		".....	
65	St. Stephen & Milltown.....	14,848 00	*14,848 00		New Brunswick.	13,920 00
66	Tilsonburg, Lake Erie & Pacific.....	158,871 48	117,431 48		Ontario.....	38,564 00
67	Tobique Valley.....	134,016 00	134,016 00		New Brunswick.	70,000 00
68	Toronto, Grey & Bruce.....	14,656 00	14,656 00		Ontario.....	375,282 00
69	West Ontario Pacific.....	60,000 00	60,000 00		".....	
70	Orford Mountain.....	192,942 50	192,942 50		Quebec.....	138,884 92
71	Cape Breton.....	196,800 00	196,800 00		Nova Scotia.....	99,200 00
72	Caraquet.....	224,000 00	224,000 00		New Brunswick.	180,000 00
73	Carillon & Grenville. (nil)					
74	Central Ontario, and.....	179,466 00	179,466 00		Ontario.....	263,000 00
75	Marmora Ry. & Mining Co.....	30,720 00	30,720 00		".....	19,149 39
76	Colechester Coal & Ry. Co..	12,800 00	12,800 00			
77	Crowsnest Southern. (nil)					
78	Cumberland Ry. & Coal Co.	44,800 00	39,850 00		Nova Scotia.....	184,450 00
79	Dominion Atlantic, including—					
80	Windsor & Annapolis....	1,193,369 00	1,193,369 00		Nova Scotia.....	
81	Cornwallis Valley.....	44,800 00	44,800 00		".....	44,800 00
82	Western Counties.....	500,000 00	500,000 00		".....	679,197 45
83	Midland of Nova Scotia..	399,060 40	399,060 40		".....	185,600 00
84	Eastern British Columbia (nil)					
85	Edmonton, Yukon & Pacific (C. N. R.).....	160,000 00	91,200 00			
86	Elgin & Havelock.....	*82,652 82	*82,652 82		New Brunswick.	107,500 00
87	Esquimalt & Nanaimo....	750,000 00	750,000 00			
88	Grand Trunk (in Canada) including—			15,142,633 33		
89	Beauharnois Junction....	62,400 00	62,400 00		Quebec.....	179,073 00
90	Brantford, Norfolk & Port Burwell.....				Ontario.....	68,000 00
91	Buffalo & Lake Huron....				".....	
92	Cobourg, Blairton & Marmora.....				".....	18,740 00

\* Includes used iron rails.

SESSIONAL PAPER No. 20b

by Governments and Municipalities to June 30, 1910—Continued.

BY PROVINCIAL GOVERNMENTS.			BY MUNICIPALITIES.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
			215,600 00	215,600 00		
	900,000 00					
87,750 00						
100,000 00						
182,210 00			5,300 00	5,300 00		
76,000 00	647,074 00		23,000 00	23,000 00		
375,000 00			47,500 00	47,500 00		
96,000 00						
			52,500 00	52,500 00		
50,000 00			150,000 00	150,000 00		
1,192,672 58			101,000 00	100,000 00		
			10,000 00	10,000 00		
5,181 81						
880,000 00		300,000 00				60,000 00
					300,000 00	90,000 00
			80,000 00	77,996 39		
13,920 00						
38,564 60			75,000 00	75,000 00		
70,000 00						
375,282 00			988,000 00	969,561 44		
			25,000 00	25,000 00		
138,884 92			3,000 00	3,000 00		
99,200 00			10,000 00	10,000 00		
180,000 00						
263,000 00			93,500 00	93,500 00		
19,149 39						
173,650 00						
44,800 00			27,685 00	27,685 00		
679,197 45			250,000 00	250,000 00		
183,510 40			36,000 00	36,000 00		
107,500 00			13,000 00	13,000 00		
179,073 00						
68,000 00			966,000 00	966,000 00		
18,740 00	26,000 00		113,500 00	113,500 00		

1 GEORGE V., A. 1911

TABLE 5.—STATEMENT of Aid granted and paid to Railways

Number.	Name of Railway.	BY DOMINION GOVERNMENT.			Name of Province.	Bonus Granted.
		Bonus Granted.	Bonus Paid up.	Loan.		
		\$ cts.	\$ cts.	\$ cts.		\$ cts.
93	Grand Trunk, Victoria Jubilee Bridge.....	500,000 00	500,000 00		"	
94	Grand Trunk, Georgian Bay & Lake Erie.....				"	336,000 00
95	Grand Junction, Belleville & North Hastings.....	21,888 00	21,888 00		"	224,660 00
96	Owen Sound Branch.....	39,744 00	39,744 00		"	
97	Great Western.....					
98	Hamilton & Northwestern.....				Ontario	565,020 00
99	London, Huron & Bruce.....				"	178,630 00
100	Midland Ontario.....				"	168,350 00
101	Montreal & Champlain Junction.....	103,600 00	103,600 00		Quebec	150,000 00
102	Northern.....				Ontario	196,188 00
103	North Simcoe.....				"	83,300 00
104	Northern Pacific Junction.....	1,320,000 00	1,320,000 00			
105	South Norfolk.....	54,400 00	54,400 00		Ontario	
106	Toronto Belt Line.....					
107	Toronto & Nipissing.....				Ontario	105,212 00
108	Lake Simcoe Junction.....				"	53,000 00
109	Victoria.....				"	312,000 00
110	Waterloo Junction.....	32,800 00	32,800 00		"	
111	Wellington, Grey & Bruce.....				"	241,276 00
112	Whitby, Port Perry & Lindsay.....				"	94,957 59
113	*Grand Trunk Pacific.....	966,620 16	966,620 16	10,000,000 00	Ontario	376,320 00
114	Gulf Shore.....	53,699 20	53,699 20		New Brunswick.	41,950 00
115	Halifax & Southwestern, including—	819,874 93	819,874 93		Nova Scotia.....	3,883,405 00
116	Central of N. S. & Nova Scotia Southern.....	653,776 00	653,776 00		"	
117	Halifax & Yarmouth.....	160,000 00	160,000 00		"	156,499 33
118	Middleton & Victoria Beach.....	125,760 00	125,760 00		"	96,000 00
119	Hampton and St. Martins.....	†83,612 54	†83,612 54		New Brunswick.	145,600 00
120	Hereford.....	170,560 00	170,560 00		Quebec.....	103,000 00
121	Inverness Ry. & Coal Co., (C.N.R.).....	627,000 00	368,545 97		Nova Scotia.....	272,000 00
122	*International of New Brunswick.....	556,544 00	555,752 07		New Brunswick.	218,700 00
123	Irondale, Bancroft & Ottawa.....	144,000 00	144,000 00		Ontario.....	315,000 00
124	Kaslo & Slocan..... (nil)					
125	Kent Northern.....	†58,334 27	†58,334 27		New Brunswick.	135,000 00
126	St. Louis & Richibucto.....	22,400 00	22,400 00		"	21,000 00
127	Kettle River Valley.....	97,771 52	97,771 52			
128	Kingston & Pembroke.....	48,000 00	48,000 00		Ontario.....	456,493 00
129	Klonike Mines.....	197,184 00	197,184 00			
130	L'Assomption (road abandoned).....	11,200 00	11,200 00			
131	Lake Erie & Detroit River.....	571,851 00	571,851 00		Ontario.....	83,000 00
132	London & Port Stanley.....				Ontario.....	
133	Lenora Mt. Sicker (Vancouver Copper Co.) (nil)					
134	Liverpool & Milton..... (nil)					
135	Lotbinière & Megantic.....	96,000 00	96,000 00		Quebec.....	126,994 00
136	Manitoba Great Northern..... (nil)					
137	Magametawan River.....	3,552 00	3,552 00		Ontario.....	10,000 00
138	Manitoulin & North Shore.....	32,000 00	32,000 00			
139	Maritime Coal & Ry. Co.....	40,700 00	40,700 00		Nova Scotia.....	39,788 00

† Used iron rails.

\* Under construction.



SESSIONAL PAPER No. 20b

by Government and Municipalities to June 30, 1910—Continued.

By PROVINCIAL GOVERNMENTS.			By MUNICIPALITIES.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
336,000 00			929,000 00	929,000 00		
224,660 00			213,000 00	213,000 00		50,000 00
			85,500 00	85,500 00		
565,020 00			599,865 00	599,805 00		
178,630 00			311,500 00	311,500 00		
168,350 00			144,870 85	144,870 85		
150,000 00			21,774 00	21,774 00		
196,188 00			241,980 00	241,980 00		390,000 00
83,300 00						
			65,000 00	65,000 00		
105,212 00			376,702 59	376,702 59		
53,000 00			100,000 00	100,000 00		
312,000 00			186,000 00	186,000 00		
			47,000 00	47,000 00		
241,276 00			682,000 00	682,000 00		
94,957 59			222,094 93	222,094 93		
376,320 00			309,000 00	300,000 00		
41,950 00						
3,879,450 00						
			88,874 17	88,874 17		
156,499 33			15,338 93	15,338 93		
145,600 00						
84,226 36						
233,000 00			100,000 00	50,000 00		
218,700 00			5,000 00	5,000 00		
135,000 00						
135,000 00						
21,000 00						
456,493 00			509,320 00	509,320 00		
83,000 00			356,500 00	356,500 00		
126,994 00					1,332,854 00	414,000 00
10,000 00						
39,788 00						



1 GEORGE V., A. 1911

TABLE 5. STATEMENT of Aid granted and paid to Railways

Number	Name of Railway.	BY DOMINION GOVERNMENT.			Name of Province.	Bonns Granted.
		Bonns Granted.	Bonus Paid up.	Loan.		
		\$ cts.	\$ cts.	\$ cts.		
140	Massawippi Valley.....	5,376 00	5,376 00		Quebec.....	
141	Minudie Coal & Ry. Co....	18,544 00	18,544 00		Quebec.....	441,000 00
142	Montreal & Atlantic.....					
143	Lake Champlain & St. Lawrence Junction.....				".....	250,280 00
144	Montreal & Province Line.....	58,560 00	58,560 00		".....	231,122 00
145	Montreal & Vermont Junction.....(nil)					
146	Moncton & Buctouche.....	102,400 00	101,600 00		New Brunswick.....	95,000 00
147	Morrissey, Fermie & Michel.....(nil)					
148	Napierville Junction.....	173,440 00	173,440 00		Quebec.....	
149	Nelson & Fort Sheppard.....(nil)					
150	New Brunswick & P.E.I.....	113,440 00	113,440 00		New Brunswick.....	99,708 90
151	New Brunswick Coal & Ry. Co.....	190,400 00	190,400 00		".....	224,000 00
152	New Brunswick Southern.....				".....	413,000 00
153	New Westminster Southern.....(nil)					
154	North Shore.....	27,616 00	27,616 00		New Brunswick.....	16,200 00
155	Nosbonsing & Nipissing.....(nil)					
156	Nova Scotia Steel & Coal Co.....	40,000 00	39,840 00		Nova Scotia.....	40,000 00
157	Ottawa & New York.....	262,384 00	262,384 00		Ontario.....	35,000 00
158	Phillipsburg Ry. & Quarry Co.....	23,712 00	23,712 00		Quebec.....	25,667 50
159	Pontiac & Renfrew.....	13,600 00	13,600 00		".....	17,433 60
160	Princeton Branch of Wash- ington Co. Ry. (U.S.).....(nil)					
161	*Quebec Bridge & Ry. Co.....	374,353 33	374,353 33		Quebec.....	250,000 00
162	Quebec Central.....	403,980 69	403,980 69		".....	1,076,123 14
163	Quebec & Lake St. John.....	1,454,695 00	1,233,943 50		".....	2,533,000 00
164	Quebec Ry. Light and Power Co.....	96,000 00	96,000 00		Quebec.....	306,945 50
165	*Quebec & New Brunswick.....					
166	Quebec, Montreal & Southern, including.....	416,550 55	416,550 55		Quebec.....	210,000 00
167	United Counties, East Richelieu Valley.....	69,952 00	69,952 00		".....	115,215 00
168	South Shore.....	296,993 38	296,998 38		".....	276,645 00
169	Red Mountain.....(nil)					
170	Rutland & Noyan.....(nil)					
171	Salisbury & Albert.....	29,665 45	429,391 01		New Brunswick.....	455,000 00
172	Schomberg & Aurora.....	48,000 00	46,144 00			
173	Stanstead, Shefford and Chambly.....(nil)					
174	St. Clair Tunnel.....	375,000 00	375,000 00			
175	*St. John Valley & River du Loup.....					
176	St. Lawrence & Adirondack.....	149,481 60	149,481 60		Quebec.....	70,400 00
177	St. Maurice Valley.....	112,640 00	112,640 00			
178	Sydney & Louisburg (Dom. Coal Co.).....	89,600 00	87,808 00		Nova Scotia.....	87,808 00
179	Temiskaming & Northern Ontario.....					
180	Temiscouata.....	645,9 0 00	645,950 00		Quebec.....	362,250 00
181	Thousand Islands.....	61,200 00	29,840 00		(New Brunswick) Ontario.....	66,000 00
182	Toronto, Hamilton and Buffalo.....	57,600 00	57,600 00		".....	

\* Under construction.

† Includes \$14,663.45 used rails.

SESSIONAL PAPER No. 20b

by Governments and Municipalities to June 30, 1910—Continued.

BY PROVINCIAL GOVERNMENTS.			BY MUNICIPALITIES.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
						65,000 00
315,891 89						528,000 00
250,280 00			51,000 00	36,000 00		
231,122 00			25,000 00	25,000 00		
94,500 00						
			10,000 00	10,000 00		
99,708 9						
224,000 00						
413,000 00			3,000 00	3,000 00		
16,200 00						
40,000 00			4,000 00	4,000 00		
35,000 00			85,000 00	85,000 00		
25,667 00						
17,433 60						
250,00 00			300,000 00	290,817 46		
1,076,123 14			103,000 00	103,000 00		
2,368,816 88			12,000 00	12,000 00		450,000 00
306,945 50						
207,565 00						
115,215 00						
276,645 00			25,000 00	25,000 00		
455,000 00			70,000 00	70,000 00		
70,400 00						
82,000 00						
362,250 00			25,000 00	25,000 00		
66,000 00			10,000 00	10,000 00		
			268,000 00	265,500 00		

† Includes \$14,663.45 used iron rails.

1 GEORGE V., A. 1911

TABLE 5.—STATEMENT of Aid granted and paid to Railways

Number.	Name of Railway.	BY DOMINION GOVERNMENT.			Name of Province.	Bonus Granted.
		Bonus Granted.	Bonus Paid up.	Loan.		
		\$ cts.	\$ cts.	\$ cts.		
183	Vancouver, Victoria and Eastern.....(nil)					
184	Victoria & Sidney, B.C.....				British Columbia	107,635 00
185	Victoria Terminal Ry. & Ferry Co.....(nil)					
186	Wellington Colliery Co's. Ry.....(nil)					
187	York & Carleton .....	32,896 00	32,896 00		New Brunswick.	25,247 00
	Final total.....	79,926,174 88	78,410,272 58	25,576,533 33		34,227,739 89

SESSIONAL PAPER No. 20b

by Governments and Municipalities to June 30, 1910—*Concluded.*

By PROVINCIAL GOVERNMENTS.			By MUNICIPALITIES.			
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
107,635 00			161,452 50	161,452 50		
25,247 00						
32,787,030 16	2,750,030 00	300,000 00	12,988,680 40	12,739,824 98	2,404,498 62	2,839,500 00



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27	Grand Trunk.....	10,772,106 84	20,241,172 34	326,221 28	34,342,500 46	22,585,436 06	8,807,004 40
28	Grand Trunk (Canada Atlantic).....	460,425 32	1,532,650 63	4,729 99	2,035,805 91	1,067,453 34	368,372 48
29	Haltfax and South-western.....	209,403 89	2,001,491 19	2,118 77	3,445,317 38	665,696 47	66,696 47
30	Halifax.....	18,205 62	47,055 66	1,540 79	66,802 07	96,904 28	-30,102 28
31	Inverness Railway and Coal Co.....	22,487 50	168,808 73	1,306 56	192,602 88	104,630 20	87,972 68
32	Ironclads, Bancroft and Ottawa.....	7,310 08	20,449 15	231 30	27,900 53	30,402 40	-2,411 87
33	Kaslo and Slocan.....	3,026 44	14,964 66	.....	17,991 10	34,958 18	-16,967 08
34	Kent Northern.....	8,303 06	9,043 32	.....	11,290 00	6,056 38	6,056 38
35	Kettle River Valley.....	415 75	1,839 15	.....	2,254 90	5,907 65	-3,652 75
36	Kingston and Pembroke.....	59,325 03	130,940 17	Cr. 4,342 61	185,922 59	159,968 40	25,954 19
37	Klondike Mines.....	11,553 50	41,805 18	672 61	54,032 29	53,006 71	965 58
38	Liverpool and Milton.....	462 00	10,179 64	.....	10,641 61	7,245 72	3,395 89
39	Liverpool and Milton.....	6,139 25	28,935 39	373 15	36,457 99	32,493 00	2,964 99
40	Lothmere and Megantic.....	39,524 76	83,995 21	708 95	124,228 93	125,924 24	-1,695 31
41	London and Port Stanley.....	3,063 90	76,432 10	1,516 59	84,772 86	48,239 73	32,239 73
42	Maritime Coal, Railway and Power Co.....	7,834 46	58,017 46	17 75	65,869 67	43,822 29	22,047 38
43	Massawippi Valley.....	68,443 50	128,667 77	852 35	197,963 62	148,481 57	49,482 05
44	Midland Railway Co. of Manitoba (now Manitoba Great Northern).....	8,439 87	61,778 28	54 22	70,272 47	85,105 08	-14,832 61
45	Montreal and Atlantic.....	202,626 18	712,832 21	17,653 73	938,112 12	820,207 11	112,905 01
46	Montreal and Province Line.....	54,740 75	45,697 78	1,632 68	105,041 21	64,314 26	40,726 95
47	Montreal and Vermont Junction.....	64,349 06	39,835 96	91 75	104,276 77	60,618 81	43,627 96
48	Morrissey, Fernie and Michel.....	10,681 65	99,841 15	.....	110,522 80	78,845 30	31,677 50
49	Moncton and Buctouche.....	9,772 09	18,430 43	.....	28,302 52	22,818 70	5,483 82
50	Naperville Junction.....	3,062 65	57,234 88	84 38	62,381 91	34,821 38	27,560 53
51	Nelson and Fort Sheppard.....	29,540 31	42,035 48	2,887 61	74,483 40	120,203 21	-45,719 81
52	New Brunswick Coal and Railway Co.....	15,452 52	41,573 99	8,543 59	65,543 10	77,841 00	-12,297 90
53	New Brunswick Coal and Railway Co.....	9,738 58	21,046 63	103 39	30,888 60	26,129 58	4,768 02
54	New Brunswick and Prince Edward Island.....	23,187 72	20,939 80	229 16	44,356 68	76,738 60	-32,381 92
55	New Westminister Southern.....	14,547 96	24,922 00	135 96	39,605 92	26,332 45	13,273 47
56	North Shore Railway Co.....	139 55	3,269 21	.....	3,468 75	3,355 48	113 28
57	North Scotia Steel and Coal Co.....	1,893 30	3,058 58	.....	10,496 49	10,496 49	-5,514 61
58	Orford Mountain.....	5,739 93	16,780 37	89 00	22,609 30	33,808 66	-11,259 36
59	Ottawa and New York.....	72,873 21	76,462 25	2,815 23	152,159 69	150,655 58	1,495 11
60	Pere Marquette.....	155,437 25	2,295,157 55	7,025 21	2,457,620 01	1,500,584 17	957,035 81
61	Phillipsburg Railway and Quarry Co.....	7,429 29	5,492 97	.....	5,492 97	2,382 97	2,382 97
62	Princeton Branch of Washington Co.....	7,429 29	13,638 00	.....	22,407 29	10,707 19	13,700 10
63	Quebec Central.....	367,967 19	729,873 54	6,842 11	1,104,682 84	759,355 73	345,127 09
64	Quebec and Lake St. John.....	237,473 69	335,350 17	8,237 39	581,001 25	546,917 09	34,114 16
65	Quebec Railway, Light and Power Co.....	14,041 87	44,028 02	4,471 96	62,787 85	48,209 43	14,488 42
66	Quebec, Montreal and Southern.....	120,012 63	158,123 33	335 52	278,471 48	255,304 31	23,167 17
67	Red Mountain.....	3,867 60	11,014 76	564 42	15,446 78	42,730 11	-27,283 33
68	Rutland and Noyan.....	4,421 38	4,166 61	.....	13,587 99	9,418 58	4,169 41
69	Salisbury and Albert.....	11,790 22	22,471 24	1,214 85	36,476 31	34,544 09	1,932 22
70	Scheunberg and Aurora.....	4,659 51	5,627 06	.....	10,186 57	12,964 33	-2,777 76
71	Stansfeld, Shefford and Chambly.....	36,739 07	41,098 26	298 31	78,135 64	71,965 48	6,169 16
72	St. Clair Tunnel.....	194,697 64	287,004 50	.....	515,101 47	113,199 79	173,804 71
73	St. Lawrence and Adirondack.....	6,139 16	32,002 56	381 27	293,986 66	293,986 66	221,114 81
74	St. Martins.....	19,531 91	12,469 05	230 21	18,888 42	15,673 06	3,165 36
75	Sydney and Louisburg.....	19,531 91	293,133 28	2,136 07	315,101 29	293,806 36	21,291 93



TABLE 6.—INCOME Account of Railways for the Year ending June 30, 1910, including Comparative Statement of Net Earnings—*Concluded*.

Number.	1 Name of Railway.	EARNINGS.			5 Total Gross including other Earnings from Operation. Cols. 3+4+A.	6 Operating Expenses.	7 NET EARNINGS.
		3 Passenger.	4 Freight.	A Other Earnings from Operation.			
		\$	cts.	\$	cts.	\$	cts.
76	Spokane and British Columbia.....	99	10	3,157	52	5,162	39
77	Temiscouata.....	76,646	39	151,270	70	168,877	02
78	Temiskaming and Northern Ontario.....	693,657	58	966,797	07	1,142,210	16
79	Thousand Islands.....	11,913	83	23,060	74	30,910	76
80	Toronto, Hamilton and Buffalo.....	290,014	80	719,850	10	588,572	49
81	Vancouver, Victoria and Eastern.....	196,433	96	436,237	47	665,085	92
82	Victoria Terminal Railway and Ferry Co.....	2,034	32	2,163	53	2,226	42
83	Victoria and Sidney, B.C.....	20,793	21	25,465	01	27,297	22
84	Wabash in Canada.....	667,447	54	1,726,648	01	1,792,579	29
85	Wellington Colliery Co.....	3,245	65	70,252	61	63,498	26
86	York and Carleton.....	2,419	70	3,448	30	3,865	00
	Final total.....	52,456,218	51	117,494,484	29	120,405,440	42
				3,505,514	33	173,956,217	13
						2,003	00
						53,550,776	71

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TABLE 7.—EARNINGS and Income for the Year ending June 30, 1910.

Operating Revenues.

1	2	3	4	5	A	6	7	8
Name of Railway.	\$ cts.	Cents.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$	p. c.
1 Alberta Railway and Irrigation Co.	99,050 12	2-720	1,043 86	10,005 28	1,103 52	111,202 78	1-24068	29-46
2 Algoma Central and Hudson Bay	20,597 03	3-775			8 15	20,605 18	5-4658	5-21
3 Atlantic and Lake Superior	28,868 30	2-117	3,605 76	1,141 34	11 38	33,626 78	35-811	39 13
4 Atlantic, Quebec and Western	5,621 88	3-004			41 40	5,663 28	33-227	33-57
5 Bay of Quinte	31,246 98	2-107	6,597 16	2,244 17		40,088 31	25-303	23-90
6 Bedlington and Nelson	106 88	3-524		52 65	1 28	160 81	1-1317	13-28
7 Bessemer and Barry's Bay	29,558 04	2-626	2,367 14	1,066 05	346 95	33,338 18	7-3820	44-17
8 Brandon, Saskatchewan and Hudson Bay	71,619 56	7-249	4,499 00	1,420 35	744 58	78,283 49	1-36916	23 79
9 British Yukon	27,169 78	1-467	3,380 40	1,130 52	529 10	32,199 80	5-6620	53 78
10 Brockville, Westport and Northwestern	2,114,844 54	2-219	107,834 38	391,337 84	29,292 33	2,634,309 09	1-45781	29-82
11 Canada Southern	2,653,156 87	1-691	229,229 23	290,448 76	151,321 97	3,234,156 83	1-08673	33-98
12 Canadian Government Railways—Intercolonial.	139,905 17	2-184	21,968 90	2,130 23	4,351 17	168,175 49	5-2802	52 88
13 " " P. E. Island	2,320,529 52	2-784	77,999 06	145,904 36	87,969 63	2,631,963 57	1-07830	19-02
14 Canadian Northern	138,160 86	2-200	495 63	7,735 37	5,553 63	131,944 29	4-5888	29-73
15 " " Ontario	257,499 68	1-856	4,529 72	14,637 68	6,315 54	283,062 62	6-9219	30-08
16 " " Quebec	24,428,281 82	1-821	782,908 12	1,972,743 45	373,697 90	27,587,231 29	1-54881	31-20
17 Canadian Pacific	4,741 55	2-845		192 31	66 50	5,000 36	2-5715	68-55
18 Cape Breton	15,417 24	2-675	2,892 60			18,309 84	4-2344	34-37
19 Caraque	1,287 98	2-912				1,287 98	5-8266	60-08
20 Carillon and Grenville	75,905 72	2-262	6,637 43	6,839 72		89,382 87	5-9783	29-13
21 Central Ontario	21,080 00	3-773	1,293 93	1,146 93	253 23	23,774 09	5-1366	15-00
22 Crownest, Southern	12,629 71	2-763	1,046 88	1,916 68	613 85	16,297 12	4-4855	33-11
23 Cumberland Railway and Coal Co.	347,340 63	2-199	13,346 32	24,256 80	12,565 83	397,509 58	8-190	47-47
24 Dominion Atlantic	3,135 69	2-212	676 08	36 27		3,908 04	2-0876	36-88
25 Elgin and Havelock								

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1910—Continued.

Operating Revenues.

Number	Name of Railway.	REVENUE FROM TRANSPORTATION.								Proportion to Total Earnings 100 × Col. 6, Col. 16.
		2	3	4	5	A	6	7	8	
		Passenger Revenue.	Revenue per Passenger per mile.	Mail.	Express.	Excess Baggage, Parlour and Chair Car Revenue and other items.	Total Passenger Service Train Revenue.	Passenger Earnings per Train Mile.		
		\$ cts.	Cents.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$	p.c.	
26	Eastern British Columbia	3,842 10	5.402	225 00	.....	5 50	4,072 60	53699	13.73	
27	Grand Trunk	9,034,100 92	1.767	366,605 75	1,116,404 09	254,996 08	10,772,106 84	1,31353	34.36	
28	Grand Trunk (Canada Atlantic)	399,293 41	2.231	23,205 06	22,711 56	15,215 29	460,423 32	62290	22.61	
29	Halifax and Southwestern	180,081 09	2.492	6,334 44	17,941 14	5,047 22	209,403 89	67255	50.82	
30	Hereford	14,676 69	2.940	2,659 23	660 00	206 70	18,205 62	33137	27.25	
31	Inverness Railway and Coal Co.	21,096 42	2.582	.....	526 87	864 30	22,487 59	52713	11.67	
32	Irondale, Bancroft and Ottawa	5,977 57	2.856	711 90	536 23	64 38	7,310 08	22977	26.15	
33	Kaslo and Slocan	2,630 18	6.494	308 42	84 85	2 99	3,026 44	43032	16.82	
34	Kent Northern	7,136 02	2.782	676 08	490 96	.....	8,303 06	49124	18.43	
35	Kettle River Valley	415 75	3.979	.....	.....	.....	415 75	19464	18.43	
36	Kingston and Pembroke	48,364 08	2.538	7,208 98	3,235 37	516 60	59,325 03	46252	31.90	
37	Klondike Mines	10,637 00	14.800	856 50	.....	.....	11,553 50	1,0867	21.38	
38	Liverpool and Milton	462 00	1.250	.....	.....	.....	462 00	04888	4.34	
39	Lothbriere and Megantic	4,656 85	2.656	1,502 40	.....	.....	6,159 25	32737	17.35	
40	London and Port Stanley	33,528 16	1.119	1,552 74	3,636 00	747 86	39,524 76	49190	31.81	
41	Manitoulin and North Shore	3,063 70	3.976	.....	.....	20	3,063 90	22094	8.78	
42	Maritime Coal, Ry. and Power Co.	6,919 10	3.321	300 48	446 20	168 68	7,834 46	36989	11.89	
43	Massawippi Valley	64,028 06	2.223	2,864 57	999 96	550 91	68,443 50	78895	34.57	
44	Midland Ry. Co. of Manitoba now Manitoba Great Northern	7,355 66	2.311	496 08	512 21	75 92	8,439 87	25561	12.01	
45	Montreal and Atlantic	176,465 72	2.373	10,316 22	12,489 08	3,355 15	202,626 18	67547	21.71	
46	Montreal and Province Line	48,312 53	2.627	2,302 31	3,369 52	756 39	54,740 75	76903	52.11	
47	Montreal and Vermont Junction	55,805 03	2.062	2,525 95	5,445 72	572 36	64,349 06	1,01873	61.71	
48	Morrissey, Fernie and Michel	10,681 65	1.663	.....	.....	.....	10,681 65	30153	9.66	
49	Monton and Bucquetouche	8,819 36	2.065	801 23	56 26	35 19	9,772 09	46686	34.65	

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50	Napierville Junction.....	4,277 03	2 716	376 92	381 81	26 89	5,062 65	29,953	8 11
51	Nelson and Fort Sheppard.....	24,356 86	3 570	1,497 60	2,973 54	707 31	19,540 31	71,950	39 66
52	New Brunswick Coal and Railway Co.....	13,681 98	2 649	1,281 22	462 32	.....	15,425 52	21,934	23 53
53	New Brunswick and Prince Edward Island.....	8,580 09	2 352	933 81	224 68	.....	9,738 58	37,673	31 52
54	New Brunswick Southern.....	17,665 61	2 307	2,088 36	3,166 55	26 20	23,187 72	44,501	32 50
55	New Westminster Southern.....	11,631 01	3 594	2,625 27	143 54	148 11	14,347 96	1 35810	36 73
56	North Shore Railway Co.....	199 35	3 123	.....	.....	.....	199 55	04074	5 75
57	Nova Scotia Steel and Coal Co.....	1,581 30	3 075	312 00	.....	.....	1,893 30	10801	38 23
58	Orford Mountain.....	5,037 50	2 602	246 48	2,229 49	226 46	5,739 93	16868	25 38
59	Ottawa and New York.....	64,745 11	2 207	4,245 17	2,928 67	954 26	72,873 21	95198	47 89
60	Pere Marquette.....	125,269 30	2 033	8,311 86	19,174 41	2,681 68	153,437 25	55248	6 32
61	Phillipsburg Railway and Quarry Co.....	.....	.....	.....	.....	.....	.....	.....	.....
62	Prince George Branch of Washington Co.....	6,767 65	1 831	194 56	381 57	85 57	7,429 29	73923	33 06
63	Quebec Central.....	331,172 83	2 083	19,099 40	12,400 00	5,294 96	367,967 19	81429	33 31
64	Quebec and Lake St. John.....	205,589 49	1 861	13,319 62	12,915 00	5,639 58	237,473 69	1 03162	40 87
65	Quebec Railway, Light and Power Co.....	14,041 87	1 120	.....	.....	.....	14,041 87	1 23902	22 36
66	Quebec, Montreal and Southern.....	107,150 42	2 407	4,874 51	5,897 11	2,090 59	120,012 63	56917	43 09
67	Red Mountain.....	2,970 84	3 498	292 00	454 91	149 85	3,867 60	58639	23 03
68	Rutland and Noyan.....	3,184 02	2 234	87 36	150 00	.....	9,421 38	1 39049	69 34
69	Salisbury and Albert.....	8,970 45	2 664	2,353 92	327 90	137 95	11,790 22	30803	33 26
70	Schomberg and Aurora.....	4,659 51	3 063	.....	.....	.....	4,659 51	21321	45 74
71	Stanstead, Shefford and Chambly.....	28,521 84	2 345	1,735 09	5,697 49	784 65	36,739 07	58888	47 02
72	St. Clair Tunnel.....	.....	.....	.....	.....	.....	.....	.....	.....
73	St. Lawrence and Adirondack.....	182,652 84	1 657	2,585 62	8,093 29	1,365 89	194,697 64	1 06397	37 80
74	St. Martins.....	5,121 91	2 509	367 23	50 02	.....	6,139 16	34008	32 58
75	Sydney and Louisbourg.....	16,651 80	2 521	1,078 40	1,008 29	743 45	19,531 94	53228	6 19
76	Spekane and British Columbia.....	97 62	3 528	.....	1 48	.....	99 10	08602	3 02
77	Temiscouata.....	67,954 02	2 466	5,684 04	1,623 23	1,385 12	76,646 39	52527	33 09
78	Temiskaming and Northern Ontario.....	636,613 61	2 485	13,178 81	37,309 06	6,536 50	693,657 98	1 95151	39 43
79	Thousand Islands.....	8,388 46	4 562	563 00	2,962 37	.....	11,913 83	35764	31 88
80	Toronto, Hamilton and Buffalo.....	271,645 55	1 944	3,248 74	12,800 00	2,220 51	290,014 80	1 02613	28 47
81	Vancouver, Victoria and Eastern.....	173,869 37	2 985	4,014 83	5,916 00	6,633 76	196,433 96	96274	30 79
82	Victoria Terminal Ry. and Ferry Co.....	2,062 74	3 103	31 58	.....	.....	2,034 32	1 36623	48 20
83	Victoria and Sydney, B. C.....	20,370 06	2 313	423 15	.....	.....	20,793 21	91777	44 65
84	Wabash in Canada.....	636,216 04	1 724	1,343 92	29,716 31	6,171 27	667,447 54	93534	27 81
85	Wellington Colliery Co.....	2,975 65	5 340	269 00	.....	.....	3,245 65	72061	4 47
86	York and Carleton.....	2,159 00	5 651	20 00	240 70	.....	2,419 70	28400	41 23
Final total .....									
									52,356,218 51
993,613 63									
4,143,837 52									
1,799,887 80									

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1910—Continued.

Operating Revenues.

Number.	Name of Railway.	REVENUE FROM TRANSPORTATION.						REVENUE FROM OPERATION OTHER THAN TRANSPORTATION.			SUMMARY OF REVENUES.		
		9	10	B	11	12	13	14	15	16	17		
		Freight Revenue.	Revenue per Ton per Mile.	Switching Revenue, Special Service Train Revenue and Miscellaneous.	Total Revenue from Transportation.	Freight Earnings per Train Mile.	Proportion to Total Earnings.	Station and Train Privileges, Storage and Car Service.	Telegraph, Rents and other Sources.	Total Operating Revenues.	Total Earnings per Train Mile.		
		\$ cts.	Cents.	\$ cts.	\$ cts.	\$	p. c.	\$ cts.	\$ cts.	\$ cts.	\$		
1	Alberta Railway and Irrigation Co.	244,531 64	2 802	425 00	356,159 42	2 90349	64 81	8,042 48	13,250 38	377,452 28	2 92235		
2	Algonia Central and Hudson Bay	114,720 54	1 809	119,826 04	255,151 76	4 51302	59 21	61,176 50	79,751 49	396,979 75	7 43107		
3	Atlantic and Lake Superior	47,806 07	4 488	.....	81,432 85	5 09311	55 61	.....	4,488 15	85,921 00	9 1502		
4	Atlantic, Quebec and Western	10,887 12	3 927	.....	16,550 40	6 32889	65 69	20 97	.....	16,571 37	9 7297		
5	Bay of Quinte	121,792 89	2 097	.....	161,881 20	7 4190	72 61	2,449 86	3,404 26	167,735 32	1 02176		
6	Bedlington and Nelson	1,050 07	5 319	.....	1,210 88	7 2319	86 72	.....	.....	1,210 88	8 33894		
7	Bessemer and Barry's Bay	3,710 59	2 971	.....	3,710 59	.....	100 00	.....	.....	3,710 59	1 23686		
8	Brandon, Saskatchewan and Hudson Bay	41,730 74	1 448	260 01	75,328 93	1 6 922	55 64	136 25	.....	75,465 18	1 09408		
9	British, Ynkon	246,597 73	12 181	.....	324,791 22	4 34513	74 93	127 55	4,075 83	328,994 60	5 64429		
10	Brookville, Westport and Northwestern	27,653 85	4 104	.....	59,853 65	9 7889	46 20	.....	10 00	59,863 65	1 04419		
11	Canada Southern	6,117,596 94	5 63	49,956 55	8,801,862 58	3 05135	69 81	26,975 52	5,405 92	8,833,944 02	2 38864		
	Canadian Government Railways—												
12	Intercolonial	6,120,691 51	5 53	60,790 61	9,415,648 95	1 47707	61 96	33,139 78	66,857 20	9,515,545 93	1 40313		
13	Prince Edward Island	146,631 41	4 185	2,294 90	317,101 80	8 0019	46 82	674 55	255 23	318,631 58	2 96955		
14	Canadian Northern	9,955,289 33	7 34	149,917 00	12,737,200 50	2 59161	73 05	27,084 61	1,068,776 52	13,833,061 63	2 37908		
15	" Ontario	337,749 33	8 82	3,463 58	493,157 13	1 37600	66 77	801 77	17,030 82	510,989 72	1 14479		
16	" Quebec	642,343 81	1 303	5,105 08	930,451 51	1 90502	68 83	4,674 83	5,530 29	940,646 63	1 53211		
17	Canadian Pacific	58,904,060 20	7 78	339,821 39	86,801,112 88	2 66294	67 08	308,443 22	1,297,566 23	88,317,122 33	2 30007		
18	Cape Breton	2 271 66	3 910	.....	7 272 02	1 16688	31 14	21 81	.....	7 293 83	3 7465		
19	Carquet	34,961 40	2 963	.....	53,271 24	8 0832	65 63	.....	.....	53,271 24	1 22196		
20	Carillon and Grenville	64 12	10 960	.....	1,352 10	2 6317	2 99	.....	791 50	2,143 60	8 8651		
21	Central Ontario	209,761 16	2 110	.....	299,144 03	2 0650	68 37	.....	7,632 77	306,796 80	1 54880		
22	Crowanest Southern	133,269 36	1 222	70 71	157,114 16	2 10734	84 13	425 58	.....	158,483 97	1 44595		



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TABLE 7.—EARNINGS and Income for the Year ending June 30, 1910—Continued.

Operating Revenues.

Number.	Name of Railway.	REVENUE FROM TRANSPORTATION.				Proportion to Total Earnings. 100x Col. 9 B Col. 16.	REVENUE FROM OPERATIONS OTHER THAN TRANSPORTATION.				SUMMARY OF REVENUES.	
		Freight Revenue.	Revenue per Ton per Mile.	Switching Revenue, Special Service Train Revenue and Miscellaneous.	Total Revenue from Transportation.		Freight Earnings per Train Mile.	Station and Train Privileges, Storage and Car Service.	Telegraph, Rents and other Sources.	Total Operating Revenues. Cols. 14 + 15.	Total Earnings per Train Mile.	
9	10	11	12	13	14	15	16	17				
23	Cumberland Railway and Coal Co.	\$ cts.	2 424	\$ cts.	48,437 08	p. c.	66 89	\$ cts.	48,937 08	\$	1 35439	
24	Dominion Atlantic	437,021 66	2 554	167 50	834,698 74	1 75078	52 20	1,510 25	837,377 08	1 50513		
25	Elgin and Havelock	9,805 92	5 176	Cr. 3,119 74	10,594 22	52382	63 12		10,594 22	56593		
26	Eastern British Columbia	23,821 21	1 823	1,705 00	29,598 81	3 36579	56 06	37 25	29,659 98	3 91086		
27	Grand Trunk	19,968,630 34	672	275,542 00	31,016,279 18	2 11614	64 58	194,810 11	31,342,500 46	1 81698		
28	Grand Trunk (Canada Atlantic)	1,430,373 69	660	102,577 54	1,993,075 95	1 89148	75 28	26,397 43	2,035,805 94	1 44082		
29	Halifax and Southwestern	199,066 39	1 860	1,424 80	409,895 08	78332	48 06	1,225 64	412,013 85	1 29498		
30	Hereford	47,054 16	1 044	1 50	65,261 28	1 03335	70 44	1,380 55	66,802 87	1 84489		
31	Inverness Railway and Coal Co.	168,592 10	1 040	216 63	191,296 32	1 59695	87 66	1,150 93	192,602 88	1 82204		
32	Irondale, Bancroft and Ottawa	20,449 15	2 246		27,759 23	64277	73 06	219 30	27,990 53	87981		
33	Kaslo and Slocan	14,964 65	5 379		17,991 10	2 12635	83 18		17,991 10	2 55809		
34	Kent Northern	9,043 32	4 811		17,346 38	53505	52 14		17,346 38	1 01977		
35	Kettle River Valley	1,839 15	6 015		2,254 90	86102	81 57		2,254 90	1 05566		
36	Kingston and Pembroke	112,135 84	2 139	18,804 33	190,295 20	2 29665	70 42	Cr. 4,342 61	185,922 39	1 41010		
37	Klondike Mines	41,806 18	27 738		53,359 68	4 22882	77 37	672 61	54,032 29	5 46554		
38	Liverpool and Milton	10,179 64	5 039		10,641 64	1 07721	95 66		10,641 64	1 12607		
39	Lothbère Mégantic	28,955 59	3 775		35,114 84	1 54182	81 59	87 75	35,487 99	1 80728		
40	London and Port Stanley	75,471 99	9 016	8,523 22	123,519 97	1 48184	67 61	385 31	124,298 49	1 02189		
41	Manitoulin and North Shore	72,270 50	2 185	4,161 60	79,496 00	3 00185	94 34	68 59	81,012 59	3 14991		
42	Maritime Coal, Ry. and Power Co.	58,017 46	3 232		63,851 92	2 01764	88 08	17 75	63,869 67	2 23072		
43	Massawippi Valley	127,296 13	883	1,371 64	197,111 27	1 33147	64 49	358 26	197,963 62	1 11453		
44	Midland Ry. Co. of Manitoba, now Manitoba Great Northern	61,703 38	1 020	74 90	70,218 15	1 87360	87 91	54 32	70,272 47	1 82578		
45	Montreal and Atlantic	707,255 48	1 186	5,576 73	913,468 39	1 75117	76 39	5,766 72	933,112 12	1 71527		
46	Montreal and Province Line	48,510 67	2 542	137 11	103,408 53	1 14698	46 18	1,521 24	105,041 21	1 08413		



TABLE 7.—EARNINGS and Income for the Year ending June 30, 1910—Concluded.

Operating Revenues.

Number.	Name of Railway.	REVENUE FROM TRANSPORTATION.							REVENUE FROM OPERATIONS OTHER THAN TRANSPORTATION.				SUMMARY OF REVENUES.	
		9	10	B	11	12	13	14	15	16	17	Total Operating Revenues. Cols. 11 + 14 + 15.	Total Earnings per Train Mile.	
		Freight Revenue.	Revenue per Ton per Mile.	Switching Revenue, Special Service Train Revenue and miscellaneous.	Total Revenue from Transportation.	Freight Earnings per Train Mile.	Proportion to Total Earnings. 100xCol. 9xB Col. 16.	Station and Train Privileges, Storage and Car Service.	Telegraph, Repts and other Sources.					
		\$ cts.	Cents.	\$ cts.	\$ cts.	\$	p.c.	\$ cts.	\$ cts.	\$ cts.	\$	\$	\$	
47	Montreal and Vermont Junction.	39,750 51	2-157	85 45	104,185 02	1 10080	38-20	25 95	65 80	104,276 77	1-04955			
48	Morrissey, Fernie and Michel.	93,714 35	2-726	6,096 80	110,522 80	2-81846	90-34			110,522 80	3-12000			
49	Moncton and Buctouche.	18,430 43	2-981		98,202 52	86163	65-35			28,202 52	1-31849			
50	Napierville Junction.	57,284 88	2-883	388 35	62,297 53	2-76509	91-79	97 20	Cr. 12 82	62,381 91	3-01507			
51	Nelson and Fort Sheppard.	41,697 13	2-770		71,595 79	2-28017	56-40	188 55	2,699 06	74,483 40	1-33672			
52	New Brunswick Coal and Ry. Co.	41,573 99	1-354		56,999 51	59116	63-43		8,543 59	65,543 10	93199			
53	New Brunswick and P. E. Island.	21,046 63	3-906		30,785 21	33869	68-14		103 39	30,888 60	57865			
54	New Brunswick Southern.	20,937 80	1-666	2 00	44,127 52	35683	47-21	5 17	223 99	44,356 68	75688			
55	New Westminster Southern.	24,668 70	5-806	253 30	39,469 96	2-32655	62-92	118 96	17 00	39,668 75	3-68631			
56	North Shore Railway Co.	3,269 21	5-002		3,468 76	68108	94-25			3,468 76	7-2256			
57	Nova Scotia Steel and Coal Co.	3,058 58	3-183		4,951 88	17451	61-77			4,951 88	28259			
58	Orford Mountain.	16,765 17	3-878	25 20	22,520 30	49315	74-22	63 00	26 00	22,609 30	66414			
59	Ottawa and New York.	76,345 58	1-386	116 67	149,335 46	2-05113	50-25	1,237 59	1,577 61	152,150 69	1-32731			
60	Père Marquette.	2,269,438 13	5-23	25,719 42	2,450,504 80	2-26394	93-38	1,240 11	5,785 10	2,457,620 01	1-90456			
61	Phillipsburg Ry. and Quarry Co.	5,492 97	6-893		5,492 97	91733	100-00			5,492 97	9-11733			
62	Princeton Branch of Washington Co.	15,038 00	1-887		22,467 29	2-18639	66-94			22,467 29	2-11371			
63	Quebec Central.	729,873 54	1-593		1,097,840 73	2-42475	66-06	2,379 07	4,463 04	1,104,682 84	1-78861			
64	Quebec and Lake St. John.	333,942 55	1-477	1,407 62	572,823 80	1-68382	57-71	3,631 76	4,605 63	581,001 25	1-48369			
65	Quebec Ry. Light and Power Co.	43,058 22	3-753	969 80	58,069 89	2-14198	70-12	367 63	4,350 93	62,787 85	1-99766			
66	Quebec, Montreal and Southern.	156,460 99	1-279	1,662 34	278,135 96	1-04674	56-78	473 52	Cr. 138 00	278,471 48	1-27776			
67	Red Mountain.	8,304 76	5-419	2,710 00	14,882 36	84462	71-31	248 33	316 09	15,446 78	1-18104			
68	Rutland and Noyan.	4,166 61	7-719		13,587 99	90303	30-66			13,587 99	2-01990			
69	Salisbury and Albert.	22,471 24	1-372		34,261 46	58709	63-34		1,214 85	35,476 31	9-02468			
70	Schomberg and Aurora.	5,527 06	4-821		10,186 57	20725	54-26			10,186 57	4-66635			
71	Stanstead, Shefford and Chambly.	40,855 76	2-962	242 50	77,837 33	89404	52-59	160 82	137 49	78,135 64	8-62594			

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72 St. Clair Tunnel	287,004 50	100-00	345 34	35 93	287,004 50
73 St. Lawrence and Adirondack	114 50	62-13	44 75	185 46	515,101 47
74 St. Martins	3 779	66-19	652 32	1,783 75	18,838 42
75 Sydney and Louisburg	689	93-02	18 00	1,783 75	315,101 29
76 Spokane and British Columbia	4 752	96-42	1,925 22	52,750 33	3,274 62
77 Temiscouata	2 555	65-54	23,950 02	2,386 37	2,862 43
78 Temiskaming & Northern Ontario	1 543	55-65	4,374 57	4,178 43	231,625 62
79 Thousand Islands	11 136	61-72	3,754 40	1,506 69	1,435 85
80 Toronto, Hamilton and Buffalo	1 062	70-58	20 03	2 85	1,737,065 40
81 Vancouver, Victoria and Eastern	1 323	68-38	269 32	38 15	37,361 54
82 Victoria Terminal Ry. & Ferry Co.	5 540	51-22	5,376 23	213 49	1,018,417 90
83 Victoria and Sydney, B. C.	5 063	71-95	.....	.....	637,932 52
84 Wabash in Canada	580	95-53	.....	.....	4,220 73
85 Wellington Colliery Co.	1,717,099 59	58-77	.....	.....	46,565 69
86 York and Carleton	7 375	.....	.....	.....	2,399,685 27
Final total	115,942,399 70	.....	079,061 12	2,826,453 21	5,808 00
					69,019
					173,456,217 13

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

Number.	1 Name of Railway.	6 MAINTENANCE OF WAY				
		2 Superintendence.	3 Ballast.	4 Ties.	5 Rails.	Other Track Material.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Alberta Ry. and Irrigation Co. ....	3,000 00		25,781 93	280 24	
2	Algoma Central and Hudson Bay.	4,151 70	854 71	24,316 63	270 09	992 43
3	Atlantic and Lake Superior. ....	480 45		3,053 73		412 10
4	Atlantic, Quebec and Western. ....			11 20	2 00	24 19
5	Bay of Quinte. ....	1,871 25	60 00	3,607 07	12 95	394 06
6	Bedlington and Nelson. ....	1,349 11		1,222 68	Cr. 15 55	Cr. 5 23
7	Bessemer and Barry's Bay. ....					
8	Brandon, Saskatchewan and Hudson Bay. ....	4,564 60		Cr. 14 82	Cr. 107 56	1,076 03
9	British Yukon. ....	53 41		2,302 34	10 99	1,056 48
10	Brockville, Westport and North-western. ....	475 97		3,195 88		
11	Canada Southern. ....	38,873 71	46,597 13	132,305 39	144,547 38	106,198 56
12	Canadian Gov. Rys. (Intercolonial)	50,697 72	41,154 85	239,472 91	259,989 75	135,030 27
13	" " (P. E. Island)	2,806 30	1,600 47	11,656 82	10,993 15	5,714 18
14	Canadian Northern. ....	45,571 29	Cr. 22 50	637,208 11	12,652 50	55,856 84
15	" " Ontario. ....	5,606 31	24 00	3,498 05	632 39	3,363 17
16	" " Quebec. ....	9,169 19	777 22	34,547 75		6,132 96
17	Canadian Pacific. ....	438,159 30	190,500 38	1,164,955 68	376,628 02	522,547 05
18	Cape Breton. ....	440 60		1,153 65		
19	Cararquet. ....	720 00	600 00	3,792 95		1,445 00
20	Carillon and Grenville. ....			664 00		50 00
21	Central Ontario. ....	1,435 00	3,571 68	6,900 00	615 88	2,748 04
22	Crowsnest Southern. ....	5,433 86		6,115 49	157 48	4,665 18
23	Cumberland Ry. and Coal Co. ....	1,200 00		2,881 25		345 07
24	Dominion Atlantic. ....	2,232 05		18,027 49	10,500 00	2,988 82
25	Elgin and Havelock. ....			1,667 16		104 32
26	Eastern British Columbia. ....	447 85				127 68
27	Grand Trunk. ....	107,474 91	71,602 85	727,698 62	823,127 38	194,357 48
28	Grand Trunk (Canada Atlantic). ..	12,748 70	7,777 98	101,561 32	14,201 71	14,270 35
29	Halifax and Southwestern. ....	4,309 75		11,161 45	Cr. 5 60	906 69
30	Hereford. ....	1,448 70	375 55	4,917 57	778 24	1,919 45
31	Inverness Ry. and Coal Co. ....	1,297 07		4,267 17	731 22	1,142 43
32	Irondale, Bancroft and Ottawa. ....	360 00	265 40	3,106 50		79 56
33	Kaslo and Slocan. ....			2,653 37	36 50	64 78
34	Kent Northern. ....	625 00		750 00		500 00
35	Kettle River Valley. ....	97 49				
36	Kingston and Pembroke. ....	3,030 59		11,430 40	161 00	1,415 18
37	Klondike Mines. ....				52 95	
38	Liverpool and Milton. ....					
39	Lotbinière and Megantic. ....		78 75	1,164 71	38 12	190 42
40	London and Port Stanley. ....	993 70	212 50	4,088 33	102 34	1,619 49
41	Manitoulin and North Shcre. ....	1,266 50		2,802 22	0 93	231 04
42	Maritime Coal, Ry. and Power Co. ..			750 00		
43	Massawippi Valley. ....	1,186 97		6,799 26	128 07	939 44
44	Midland Ry. Co. of Manitoba, now Manitoba Great Northern. ....	4,782 56	127 48	1,969 40	0 58	497 28
45	Montreal and Atlantic. ....	8,253 13	2,993 33	20,618 32	18,174 91	14,111 24
46	Montreal and Province Line. ....	843 20	266 03	5,675 47	252 48	858 45
47	Montreal and Vermont Junction. ..	854 27		2,281 89	237 60	501 79
48	Morrissey, Fernie and Michel. ....			2,624 69	2,565 45	
49	Moncton and Buctouche. ....			1,414 56		188 28
50	Napierville Junction. ....	837 92			19 65	36 60
51	Nelson and Fort Sheppard. ....	4,216 08		9,549 49	Cr. 30 47	619 08

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for the Year ending June 30, 1910.

7		8		9		10		11		12		13		Number.	
AND STRUCTURES.															
Roadway and Track.		Removal of Snow, Sand and Ice.		Tunnels.		Bridges, Trestles and Culverts.		Over and under Grade Crossings.		Grade Crossings, Fences, Cattle Guards and Signs.		Snow and Sand Fences, and Snow Sheds.		Number.	
\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.		
30,593	31	757	33			1,616	65			2,638	39			1	
18,911	45	3,188	86			17,135	04			175	79			2	
18,091	28	58	11			2,289	38			686	59			3	
5,458	21	19	55							82	98	121	45	4	
12,937	30	1,287	55			588	43			760	44		8	5	
1,549	49					83	53	38	97				27	6	
1,975	55	50	46			62	25							7	
19,827	54	3,615	56			1,187	16			121	61		286	8	
20,197	20	10,429	87			1,438	74			9	01		317	9	
2,936	35	468	90			1,088	48			1,709	00			10	
369,185	39	13,515	28			82,907	61	2,098	11	19,158	54		13	11	
569,733	14	89,363	62			62,844	10		761	08	37,491	35	9,937	18	12
59,125	19	11,592	96			1,523	27			5,568	27		410	13	
856,717	35	78,251	98			163,849	93			13,804	62		12	14	
67,192	00	7,585	54			5,292	36			815	29		25	15	
77,513	12	21,044	30			59,795	65	55	00	3,733	63		1,493	16	
6,744,621	19	490,984	95	17,177	05	1,032,666	27	7,510	41	290,320	27		55,967	95	17
3,447	82	184	45			53	95			80	78			18	
9,860	87					1,225	00			950	58		175	00	19
345	00					150	00			180	00			20	
22,524	35	3,119	31			2,713	69			3,972	64			21	
55,501	92	3,391	36			10,161	22			440	15			22	
8,033	51					180	00							23	
46,477	72	3,052	39			11,280	76	769	83	8,689	34		614	60	24
2,796	73	85	17			961	50			94	60		1	25	
7,817	76	1,053	43			507	23			5	78			26	
1,351,434	43	109,689	81	39	00	388,729	96	18,861	21	151,126	29		7,657	88	27
147,913	00	17,901	37			4,017	45	Cr. 1,472	53	9,956	69		1,062	99	28
57,799	99	807	59			1,623	54			1,423	72		261	40	29
17,358	32	1,779	74			3,485	03			583	13			30	
14,552	84	1,539	44			1,272	75			1,159	52		239	28	31
6,598	72	940	95			482	76	4	68	6	72			32	
6,957	42	3,603	41			2,108	56							33	
1,650	00									25	00			34	
2,132	98	5	25											35	
28,139	17	1,774	14			4,562	96			1,122	84		457	80	36
8,113	39	2,283	95			5,925	70							37	
														38	
5,668	48	36	23			152	48			156	09			39	
8,239	18	1,717	05			1,423	00	25	29	611	82			40	
5,445	25	463	03			33	85							41	
6,598	91	194	62			163	11			11	35			42	
17,875	50	336	92			76	87			676	22			43	
25,549	93	1,841	19			357	05			124	37		103	86	44
93,157	65	9,596	63			51,892	32	61	72	22,168	56		121	30	45
11,904	09	1,338	18			1,741	97			1,791	48		57	37	46
5,288	51	1,064	02			569	24			788	91		36	75	47
3,582	47	1,497	10											48	
4,976	96					1,735	38							49	
3,229	88	505	72			45	16			412	85		10	10	50
27,804	61	2,092	28			21,150	80			9	38			51	

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

Number.	1 Name of Railway.	2 3 4 5 6 MAINTENANCE OF WAY				
		Superinten- dence.	Ballast.	Ties.	Rails.	Other Track Material.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
52	New Brunswick Coal and Ry. Co.			3,600 95		125 86
53	New Brunswick and P. E. Island.	100 00		1,975 00		159 71
54	New Brunswick Southern	2,476 89	429 00	195 55	742 00	3,743 42
55	New Westminster Southern	2,056 06	163 05	2,362 12	Cr. 32 31	189 08
56	North Shore					
57	Nova Scotia Steel and Coal Co.			1,140 90		25 00
58	Orford Mountain		1,517 01	408 98		116 35
59	Ottawa and New York	1,356 19	8,016 76	3,629 11	764 94	749 07
60	Père Marquette	8,521 68	3,905 44	17,539 61	176 39	2,725 82
61	Phillipsburg Railway and Quarry Co.					
62	Princeton Br'ch of Washington Co.	74 82		716 23	299 88	273 87
63	Quebec Central	4,206 62	3,500 00	16,500 00	42,000 00	4,079 74
64	Quebec and Lake St. John	4,721 47		16,609 58	60 92	4,236 25
65	Quebec Ry., Light and Power Co.	241 36		442 62	21 32	59 99
66	Quebec, Montreal and Southern	5,058 49		14,208 19	239 22	3,300 61
67	Red Mountain	901 90		2,612 90	Cr. 5 50	200 72
68	Rutland and Noyan	112 12	32 65	184 71	35 16	42 23
69	Salisbury and Albert	752 60	236 25	2,407 35	822 53	9 77
70	Schomberg and Aurora					
71	Stanstead, Shefford and Chambly	682 75		6,260 12	265 59	878 72
72	St. Clair Tunnel					
73	St. Lawrence and Adirondack	1,787 85	133 55	8,566 43	1,711 58	3,430 60
74	St. Martins			1,717 37		568 42
75	Sydney and Louisburg	1,353 00		11,313 79	1,877 22	5,364 34
76	Spokane and British Columbia	83 78		237 30		
77	Temiscouata	1,928 40		9,588 97	309 04	1,088 75
78	Temiskaming and Northern Ontario	7,506 33	10,271 36	24,014 39	13,217 10	8,413 68
79	Thousand Islands	46 35	68 80	664 58	6 45	428 62
80	Toronto, Hamilton and Buffalo	6,192 82	17,256 13	14,357 57	4,552 59	7,273 98
81	Vancouver, Victoria and Eastern	14,993 43	118 41	16,706 84	8,278 53	7,779 08
82	Victoria Terminal Ry. and Ferry Co.	26 84		104 35		3 70
83	Victoria and Sydney, B.C.	359 60		1,417 68		49 30
84	Wabash in Canada	718 50	12 22	687 06	655 04	201 38
85	Wellington Colliery Co.			949 13		
86	York and Carleton					
	Final total	839,925 47	415,078 44	3,436,727 46	1,753,740 37	1,141,231 29



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for the Year ending June 30, 1910—Continued.

7	8	9	10	11	12	13	
AND STRUCTURES—Continued.							
Roadway and Track.	Removal of Snow, Sand and Ice.	Tunnels.	Bridges, Trestles and Culverts.	Over and Under Grade Crossings.	Grade Crossings, Fences, Cattle Guards and Signs.	Snow and Sand Fences and Snow Sheds.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
14,042 21			783 24				52
4,615 11	213 96		1,271 78		799 56		53
20,188 93	759 83		385 56		686 34	37 61	54
5,026 20	6 34		657 74		51 43		55
888 80	60 85						56
2,163 95					363 00		57
7,510 91	1,417 72		606 52		497 02	71 35	58
18,131 51	1,046 75		1,024 05		1,246 15	89 81	59
49,262 18	6,185 02		9,303 39	349 50	4,679 54	10 95	60
							61
1,377 29					64 85		62
76,292 60	739 75		2,533 50		809 88	845 02	63
49,508 97	19,741 10		8,118 03	281 44	1,590 69	120 34	64
2,455 90	1,098 55		385 00	6 14	466 50	28 29	65
24,852 92	5,802 47		8,931 30		2,341 53	0 48	66
4,921 16	631 79		6,444 64		28 56		67
756 48	105 17		5 00		40 38		68
7,125 85			1,539 43		116 62		69
2,959 66							70
7,972 38	1,531 72		1,931 98	2 95	690 52	33 50	71
							72
16,067 05	1,653 36		3,984 50	134 86	2,365 28	21 64	73
			634 75				74
30,807 88	1,008 66		1,504 94		1,862 09		75
2,018 71							76
26,646 10	470 44		5,991 91		2,254 24	79 89	77
166,417 67	15,449 40		13,739 09	Cr. 314 60	2,265 47	38 24	78
2,523 11	11 90		768 15		46 35		79
49,880 34	5,538 53	11 75	6,535 26		5,977 07	341 25	80
178,779 44	1,333 64	361 19	18,237 60	1,982 99	761 28	85 67	81
306 05			5 84		52 63		82
4,065 97			79 00		700 20		83
640 27			7 38				84
8,943 83							85
1,435 00							86
11,683,918 50	963,916 50	17,528 99	2,048,471 72	31,097 05	614,400 97	81,225 86	



1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

Number.	Name of Railway.	14	15	16	17	18
		MAINTENANCE OF WAY				
		Signals and interlocking plants.	Telegraph and telephone lines.	Electric power transmission.	Buildings, fixtures and grounds.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1	Alberta Railway & Irrigation Co.		1,324 14		7,306 12	
2	Algoma Central & Hudson Bay.		1,850 10		2,317 61	
3	Atlantic & Lake Superior.		201 43		1,264 64	
4	Atlantic, Quebec & Western		43 94		36 33	
5	Bay of Quinte	808 70	105 08		1,327 04	
6	Bellington and Nelson	32 61	11 91		36 79	
7	Bessemer & Barry's Bay.		4 62			
8	Brandon, Saskatchewan & Hudson Bay.	235 57	183 92		1,727 27	
9	British Yukon		578 35		3,064 32	
10	Brockville, Westport & Northwestern.				583 97	
11	Canada Southern.	50,323 10	3,302 86		29,375 91	
12	Canadian Government Rys. (Intercolonial).	4,997 94	1,053 62		161,045 11	
13	" " (P. E. Island).	13 20	7 10		6,561 23	
14	Canadian Northern.	8,003 09	35,761 35	115,178 74	3,289 81	
15	Canadian Northern, Ontario.	355 98	2,743 75		3,071 96	
16	Canadian Northern, Quebec.	1,643 80	178 30		12,760 99	
17	Canadian Pacific.	46,214 85	327,902 77		1,536,208 16	
18	Cape Breton.		98 43		31 07	
19	Caraquet.					
20	Carillon & Grenville				40 00	
21	Central Ontario.		117 11		6,279 78	
22	Crowsnest Southern.	141 44	183 33		1,693 04	
23	Cumberland Railway & Coal Co.					
24	Dominion Atlantic.	42 68	328 13		5,378 72	
25	Elgin & Havelock.				36 84	
26	Eastern British Columbia.		32 35		280 55	
27	Grand Trunk.	29,035 94	26,589 82	37 56	494,227 37	
28	Grand Trunk (Canada Atlantic).	1,066 19	6,508 02		31,951 91	
29	Halifax & Southwestern.	25 59	792 53		4,654 47	
30	Hereford.	42 63			954 31	
31	Inverness Ry. & Coal Co.		203 02		2,740 16	
32	Irondale, Bancroft & Ottawa.		235 08		189 24	
33	Kaslo & Slocan.		9 35		214 36	
34	Kent, Northern.				50 00	
35	Kettle River Valley.				21 39	
36	Kingston & Pembroke.		1 05		1,280 22	
37	Klondike Mines		39 65		670 75	
38	Liverpool & Milton					
39	Lotbinière & Megantic.		2 70		199 82	
40	London & Port Stanley.	37 68	15 47		2,458 71	
41	Manitoulin & North Shore.		527 24		129 40	
42	Maritime Coal, Ry. & Power Co.		29 61		182 78	
43	Massawippi Valley.		3 90		2,612 11	
44	Midland Ry. Co. of Manitoba, now Manitoba Great Northern.	296 80	131 29		643 99	
45	Montreal and Atlantic.	1,322 01	2,965 82		12,882 70	
46	Montreal and Province Line.		87 59		2,376 24	
47	Montreal and Vermont Junction.		103 52		394 61	
48	Morrissey, Fernie and Michel.				507 36	
49	Moncton and Buctouche.				498 33	
50	Napierville Junction.	39 62	0 60		135 73	
51	Nelson and Fort Sheppard.	79 16	231 79		881 81	
52	New Brunswick Coal and Railway Co.	32 63	561 93		459 61	
53	New Brunswick and P. E. Island.				95 33	
54	New Brunswick Southern.				1,041 89	
55	New Westminster Southern.	32 57	410 65		196 24	

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for the Year ending June 30, 1910—*Continued.*

19	20	21	22	23	24	25	
AND STRUCTURES— <i>Continued.</i>							
Docks and Wharfs.	Roadway, tools and supplies.	Work equipment—repairs.	Work equipment—renewals.	Work equipment—depreciation.	Injuries to persons.	Stationery and printing.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
						121 50	1
1,361 85	1,449 78					444 94	2
	451 31						3
	28 67					1 94	4
34 73	113 06						5
	72 28				9 73	48 07	6
							7
	308 04				26 72	144 14	8
195 21	876 15				1 92	12 09	9
							10
2,861 69	25,355 61				543 76	2,052 31	11
30,455 53	19,940 33				398 91	3,773 66	12
2,410 09	1,557 42					263 25	13
14,970 99					3,193 28	2,181 67	14
120 24	1,356 80				5 00	192 79	15
	2,699 11				1,953 47	256 05	16
110,148 79	150,918 27				37,847 99	28,179 82	17
	3 97						18
	225 00					90 00	19
133 00	45 00						20
	442 48					11 47	21
	1,014 55				134 13	160 16	22
							23
118 73	2,500 37					8 95	24
	10 41						25
	45 66					1 42	26
1,016 81	22,290 20				13,317 97	5,227 26	27
609 27	5,955 50				428 50	431 27	28
29 14	988 01					62 13	29
	423 47				25 45	7 27	30
	182 75				25 00	92 42	31
	44 36					5 45	32
157 31	438 33						33
							34
	242 11						35
15 84	629 74					25 65	36
20 70	81 58					17 55	37
							38
32 68	60 33						39
1,453 48	87 28				8 80	20 90	40
	237 02					77 60	41
							42
	496 81					37 98	43
							44
	447 87				33 96	178 54	45
	1,994 91				715 90	435 14	46
	209 31				1,201 01	9 53	47
	63 80					26 37	48
							49
	87 66						50
	52 73					13 68	51
	833 69				46 35	112 11	52
	560 14						53
144 70	143 65					30 00	54
169 44	2,777 04					44 21	55
	189 03				46 05	48 07	

Transferred to maintenance of equipment.

Transferred to maintenance of equipment.

Transferred to maintenance of equipment.

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TABLE 8.—Summary of Operating Expenses

Number.	14.	15	16	17	18
	Name of Railway.	MAINTENANCE OF WAY			
		Signals and interlocking plants.	Telegraph and telephone lines.	Electric power transmission	Buildings, fixtures and grounds.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
56	North Shore Railway Co. ....				
57	Nova Scotia Steel and Coal Co. ....				
58	Orford Mountain. ....		35 26		251 34
59	Ottawa and New York. ....	711 92	28 54		7,458 55
60	Père Marquette. ....	705 25	133 30		7,631 06
61	Phillipsburg Railway and Quarry Co. ....				
62	Princeton Branch of Washington Co. ....				
63	Quebec Central. ....				8,466 03
64	Quebec and Lake St. John. ....	599 36	333 29		10,227 91
65	Quebec Railway Light and Power Co. ....	70 22	66 35		398 37
66	Quebec, Montreal and Southern. ....	1,068 48	20 22		5,206 30
67	Red Mountain. ....	18 21	120 25		542 27
68	Rutland and Noyan. ....	4 86			
69	Salisbury and Albert. ....				5 70
70	Schomberg and Aurora. ....				7 93
71	Stanstead, Shefford and Chambly. ....	23 52	67 62		1,745 39
72	St. Clair Tunnel. ....				
73	St. Lawrence and Adirondack. ....	192 38	0 69		4,854 90
74	St. Martin. ....		52 15		
75	Sydney and Louisburg. ....				2,270 41
76	Spokane and British Columbia. ....		23 00		94 67
77	Tenniscouata. ....				3,220 50
78	Teniskaming and Northern Ontario. ....	0 84	20,786 32	1,109 18	47,279 69
79	Thousand Islands. ....				556 17
80	Toronto, Hamilton and Buffalo. ....	3,091 77	5 30		9,059 45
81	Vancouver, Victoria and Eastern. ....	4,357 54	1,042 96		5,741 25
82	Victoria Terminal Railway and Ferry Co. ....		0 14		8 53
83	Victoria and Sydney, B.C. ....		1 86		139 88
84	Wabash in Canada. ....				277 32
85	Wellington Colliery Co. ....				
86	York and Carleton. ....				
	Final total. ....	155,668 13	438,160 47	116,325 48	2,461,761 72

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for the Year ending June 30, 1910—Continued.

19	20	21	22	23	24	25	
AND STRUCTURES—Continued.							
Docks and wharfs.	Roadway, tools and supplies.	Work equipment—repairs.	Work equipment—renewals.	Work equipment—depreciation.	Injuries to persons.	Stationery and printing.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
.....	.....	.....	.....	.....	.....	.....	56
.....	233 65	.....	.....	.....	49 25	.....	57
.....	732 52	.....	.....	.....	5 60	6 88	58
Cr. 472 50	552 22	.....	.....	.....	4,289 73	221 73	59
.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	1 10	61
587 11	2,152 02	.....	.....	.....	.....	216 54	62
19 38	2,537 12	.....	.....	.....	4 00	123 03	63
.....	82 95	.....	.....	.....	.....	17 12	64
.....	852 73	.....	.....	.....	.....	185 42	65
.....	161 79	.....	.....	.....	5 63	26 92	66
.....	36 64	.....	.....	.....	.....	3 38	67
.....	494 11	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	69
.....	182 78	.....	.....	.....	34 37	10 54	70
.....	.....	.....	.....	.....	.....	.....	71
.....	288 63	.....	.....	.....	132 02	7 68	72
.....	.....	.....	.....	.....	.....	.....	73
.....	50 80	.....	.....	.....	.....	.....	74
.....	347 86	.....	.....	.....	.....	10 31	75
.....	5,498 11	.....	.....	.....	376 40	798 30	76
10 05	90 38	.....	.....	.....	.....	.....	77
.....	1,014 94	.....	.....	.....	230 40	127 88	78
549 60	3,091 27	.....	.....	.....	1,139 85	382 24	79
25 70	5 75	.....	.....	.....	.....	.....	80
340 05	83 05	.....	.....	.....	.....	.....	81
.....	21 15	.....	.....	.....	2 66	31 52	82
.....	.....	.....	.....	.....	.....	.....	83
.....	20 00	.....	.....	.....	.....	.....	84
.....	.....	.....	.....	.....	.....	.....	85
167,519 61	267,462 06	.....	.....	.....	66,233 81	47,017 92	86

TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1910—Continued.

Number.	Name of Railway.	MAINTENANCE OF WAY AND STRUCTURES—Continued.							MAINTENANCE OF EQUIPMENT.				
		28	29	30	31	33	34	35	36	37	38	39	
		Other Expenses.	Total of Foregoing Accounts.	Maintaining Joint Tracks, Yards and other Facilities. DR.	Maintaining Joint Tracks, Yards and other Facilities. Cr.	Total—Maintenance of Way and Structures	Superintendence.	Steam Locomotives—Repairs.	Steam Locomotives—Renovals.	Electric Locomotives—Repairs.			
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$	cts.	
1	Alberta Ry. & Irrigation Co.	982 94	74,352 55	604 64		74,957 19	1,011 06	10,202 03					
2	Algoma Central & Hudson Bay		77,420 98			77,420 98	3,404 84	11,907 62					
3	Atlantic & Lake Superior	811 99	27,922 46			27,922 46	730 70	6,048 18					
4	Atlantic, Quebec & Western	197 33	5,906 34			5,906 34		739 98					
5	Bay of Quinte	222 62	24,138 69			24,138 69		12,195 29					
6	Bedlington & Nelson	2 35	4,464 46			4,464 46	17 09	93 08					
7	Bessmer & Barry's Bay		2,092 88			2,092 88	432 07						
8	Brandon, Sask. & Hudson Bay	7 04	33,189 79			33,189 79	542 31	3,422 17					
9	British Yukon		40,543 40			40,543 40	1,659 11	4,973 02					
10	Brookville, Westport & Northwestern	75 00	10,533 55			10,533 55		1,216 12					
11	Canada Southern		1,069,216 04	66,769 25	90,334 53	1,045,650 76	31,940 72	429,325 77	33,000 00				
12	Canadian Govt. Rys.—Intercolonial	1,704 61	1,719,825 68	42,373 22	7,092 84	1,755,106 06	54,392 80	609,685 15	133,333 32				
13	Canadian Govt. Rys.—P. E. Island	8 00	121,811 38			121,811 38	6,910 46	27,457 22					
14	Canadian Northern	106 70	2,046,588 38	2,429 87	1,187 28	2,047,830 97	27,721 73	946,765 16					
15	Canadian Northern Ontario		101,880 82			101,880 82	3,787 76	26,329 79					
16	Canadian Northern Quebec	84 37	234,138 07	125 32	855 11	233,408 28	3,742 72	51,686 77					
17	Canadian Pacific	1,522 50	13,370,921 67	139,132 51	56,116 14	13,653,938 04	265,371 10	4,768,604 49	361,328 31				
18	Cape Breton	27 90	5,522 02			5,522 02		418 98					
19	Caracquet	52 50	19,136 90			19,136 90	600 00	5,799 78					
20	Carillon & Grenville	250 00	1,837 00			1,837 00	480 00	100 00					
21	Central Ontario	18 25	54,469 68	420 00		54,889 68	1,050 00	7,004 24					
22	Crowsnest Southern	7 84	89,201 15	107 25		89,308 40	808 58	8,326 35					
23	Cumberland Ry. & Coal Co.	153 91	12,793 74			12,793 74	1,200 00	243 22					
24	Dominion Atlantic	56 75	113,007 33			113,007 33	3,077 61	16,731 68	12,000 00				
25	Elgin & Havelock	7 89	5,765 87			5,765 87		256 92					
26	Eastern British Columbia		10,319 71			10,319 71	217 64	1,974 20					
27	Grand Trunk	29 00	4,543,671 75	53,007 55	303,894 19	4,292,685 11	72,107 58	2,979,958 93					
28	Grand Trunk (Canada Atlantic)	48 95	376,938 64	6,374 40	754 28	382,558 76	8,307 27	145,302 98					



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29	Halifax & Southwestern.....	4 95	84,845 35	2,255 04	.....	87,100 39	2,467 69	22,661 58	.....
30	Hereford.....	.....	34,098 86	19 30	.....	14,102 22	529 89	7,279 57	5 90
31	Inverness Ry. & Coal Co.....	833 73	30,278 80	.....	15 94	30,278 80	1,702 11	10,536 14	.....
32	Irontdale, Bancroft & Ottawa.....	.....	12,269 42	.....	.....	12,269 42	.....	2,379 17	.....
33	Kaslo & Sicam.....	5 00	16,248 39	.....	.....	16,248 39	.....	2,960 76	.....
34	Kent Northern.....	25 00	3,625 00	.....	.....	3,625 00	.....	250 00	.....
35	Kettle River Valley.....	.....	2,499 22	.....	.....	2,499 22	45 50	596 57	.....
36	Kingston & Pembroke.....	413 14	54,450 69	634 20	.....	55,084 89	69 50	12,801 11	.....
37	Klondike Mines.....	11 50	17,217 72	.....	.....	17,217 72	.....	4,044 31	.....
38	Liverpool & Milton.....	.....	1,360 60	.....	.....	1,360 60	.....	438 00	.....
39	Lotbiniere & Megantic.....	12 29	7,793 10	.....	.....	7,793 10	.....	3,196 72	145 45
40	London & Port Stanley.....	36 79	23,148 81	57 97	4,379 19	18,827 59	434 55	10,417 46	7 80
41	Manitoulin & North Shore.....	.....	11,214 08	.....	.....	11,214 08	1,406 98	1,628 68	.....
42	Maritime Coal, Ry. & Power Co.....	.....	7,930 38	.....	.....	7,830 38	.....	5,721 51	.....
43	Massawippi Valley.....	.....	31,170 05	700 00	360 00	31,510 05	585 47	6,549 96	.....
44	Midland Ry. Co. of Manitoba, now Manitoba Great Northern.....	8 62	37,094 77	121 29	.....	37,216 06	276 03	3,388 82	.....
45	Montreal & Atlantic.....	.....	261,375 39	77 53	.....	261,453 12	3,318 93	48,227 88	31,000 00
46	Montreal & Province Line.....	.....	28,612 40	.....	.....	28,612 40	691 57	33 67	.....
47	Montreal & Vermont Junction.....	.....	12,211 28	.....	.....	12,211 28	531 11	.....	.....
48	Morrissey, Ferme & Michel.....	.....	10,777 07	48 45	.....	10,825 52	.....	4,594 14	.....
49	Moncton & Buctouche.....	1,302 08	10,203 25	.....	.....	10,203 25	.....	607 35	.....
50	Napierville Junction.....	.....	5,340 24	.....	.....	5,340 24	369 90	1,773 75	.....
51	Nelson & Fort Sheppard.....	5 48	67,601 64	2,115 00	.....	69,716 64	522 67	4,134 82	.....
52	New Brunswick Coal & Railway Co.....	.....	20,166 57	.....	.....	20,166 57	100 00	11,084 27	.....
53	New Brunswick & P. E. Island.....	.....	9,548 80	.....	.....	9,548 80	.....	1,820 52	.....
54	New Brunswick Southern.....	Cr. 723 97	32,953 74	1,022 15	.....	33,975 80	.....	1,630 09	.....
55	New Westminster Southern.....	2 35	11,404 67	1,034 25	.....	12,438 92	88 38	2,364 14	.....
56	North Shore Railway Co.....	.....	949 65	.....	.....	949 65	.....	90 57	.....
57	Nova Scotia Steel & Coal Co.....	.....	3,692 85	.....	.....	3,692 85	.....	586 65	.....
58	Orford Mountain.....	700 30	13,415 66	.....	.....	13,415 66	.....	919 46	.....
59	Ottawa & New York.....	.....	44,998 35	919 63	50 00	45,867 98	2,295 89	8,777 54	.....
60	Pere Maquette.....	40 29	115,760 60	158,207 04	377 96	273,589 68	4,604 26	109,094 02	81 71
61	Phillipsburg Railway & Quarry Co.....	.....	.....	.....	.....	.....	.....	.....	.....
62	Prince-ton Branch of Washington Co.....	.....	2,808 04	.....	.....	2,808 04	64 47	488 62	.....
63	Quebec Central.....	42 65	162,970 06	.....	.....	162,970 06	7,508 59	32,285 48	15,000 00
64	Quebec & Lake St. John.....	2 30	118,835 18	.....	419 14	118,416 04	3,027 93	62,095 67	.....
65	Quebec Railway, Light & Power Co.....	27 34	5,868 02	224 42	.....	6,092 44	528 00	2,125 16	.....
66	Quebec, Montreal & Southern.....	48 40	72,116 75	295 00	7,193 81	65,217 95	4,840 55	15,478 24	.....
67	Red Mountain.....	0 91	16,612 15	.....	.....	16,612 15	176 68	1,292 58	.....
68	Ratland and Noyau.....	.....	1,358 78	.....	.....	1,358 78	91 19	519 66	75 84
69	Salisbury & Albert.....	.....	13,510 21	.....	.....	13,510 21	338 75	1,747 91	.....
70	Schenberg & Aurora.....	5,409 68	8,377 27	.....	.....	8,377 27	.....	245 48	.....
71	Stanstead, Shefford & Chambly.....	.....	22,314 45	53 59	.....	22,368 04	567 47	39 49	.....
72	St. Clair Tunnel.....	.....	42,051 04	.....	.....	42,051 04	.....	.....	.....
73	St. Lawrence & Adirondack.....	.....	46,333 60	23,182 88	.....	68,516 48	7,731 84	11,000 02	.....
74	St. Martins.....	3,177 63	6,150 32	.....	.....	6,150 32	.....	766 57	.....
75	Sydney & Louisbourg.....	1,523 41	58,885 74	.....	.....	58,885 74	1,200 00	39,137 32	.....
76	Spokane & British Columbia.....	.....	2,808 26	.....	.....	2,808 26	36 84	512 94	.....
77	Temisconate.....	.....	51,936 41	.....	.....	51,936 41	2,441 05	8,216 25	.....



TABLE 8.—SUMMARY of Operating Expenses for the year ending June 30, 1910—Continued.

Number	Name of Railway.	MAINTENANCE OF WAY AND STRUCTURES.—Continued.						MAINTENANCE OF EQUIPMENT.									
		27	28	29	30	31	33	34	35	36	37						
	Other Expenses.	Total of Foregoing Accounts.	Maintaining Joint Tracks, Yards and other Facilities. Dr.	Maintaining Joint Tracks, Yards and other Facilities. Cr.	Total Maintenance of Way and Structures.	Super-intendence.	Steam Locomotives—Repairs.	Steam Locomotives—Renewals.	Electric Locomotives—Repairs.								
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.							
78	Temiskaming & Northern Ontario.....	134	77	337,001	74	16,608	04	59,749	11								
79	Thousand Islands.....	50	00	5,270	91	14	45	2,261	11								
80	Toronto, Hamilton & Buffalo.....			131,447	03	4,748	41	46,052	35								
81	Vancouver, Victoria & Eastern.....			265,739	38	2,937	17	37,515	86								
82	Victoria Terminal Rly. & Ferry Co.....	16	57	539	53	12	85	89	48								
83	Victoria & Sydney B. C.....			7,236	59	170	60	1,220	92								
84	Wabash in Canada.....			3,254	50	8,814	33	186,702	91								
85	Wellington Colliery Co.....			9,893	01			8,263	34								
86	York & Carleton.....			1,455	00			16	00								
	Final total.....	19,439	05	26,915,261	91	713,520	37	493,179	42	27,035,603	46	565,442	79	10,876,301	12	585,978	33

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TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1910—Continued.

No.	Name of Railway.	MAINTENANCE OF EQUIPMENT—Continued.							
		42	43	45	46	48	49	51	
		Passenger Train Cars— Repairs.	Passenger Train Cars— Renovals.	Freight Train Cars— Repairs.	Freight Train Cars— Renovals.	Work Equipment— Repairs.	Work Equipment— Renovals.	Floating Equipment— Repairs.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
1	Alberta Railway and Irrigation Co.	5,829	79	3,301	25	150	23		
2	Algoma Central and Hudson Bay.	1,613	74	17,680	76	3,754	22		
3	Atlantic and Lake Superior.	4,133	86	328	07				
4	Ottawa, Quebec and Western.	1,558	91			332	95		
5	Bay of Quinté	2,947	88	5,121	81				
6	Bedfordton and Nelson.								
7	Bessemer and Barry's Bay.					203	20		2 20
8	Brandon, Saskatchewan and Hudson Bay.	1,770	07	1,917	63	528	94		
9	British Yukon.	2,562	05	2,016	40	1,948	03		
10	Brookville, Westport and Northwestern.	961	46	672	49				
11	Canada Southern.	75,184	71	376,622	19			1,176	00
12	Canadian Government Railways (Intercolonial).	266,105	36	496,127	91			25,929	66
13	Canadian Government Railways (P. E. Island).	13,147	36	10,013	61			100,000	08
14	Canadian Northern.	214,236	65	471,729	94			3,737	26
15	Canadian Northern, Ontario.	18,320	15	15,767	01			22,869	48
16	Canadian Northern, Quebec.	23,401	41	26,872	18			3,139	27
17	Canadian Pacific.	1,905,714	07	3,174,744	90			1,350	51
18	Cape Breton.	634	00					541,791	33
19	Caraqueet.	225	00	11	27				
20	Carillon and Grenville.	150	00	500	00				
21	Central Ontario.	1,916	06	6,546	06				
22	Crowsnest Southern.	1,136	14	11,659	44			646	83
23	Camberland Railway and Coal Co.			1,922	08				
24	Dominion Atlantic.			14,847	11				
25	Elgin and Havelock.	13,238	77	48	08			67	74
26	Eastern British Columbia.	63	34						
27	Grand Trunk.	40	73	1,605	64			1,559	39
28	Grand Trunk (Canada Atlantic).	740,263	12	1,919,633	04			55,798	04
		16,438	03	65,586	60			5,947	92



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56	North Shore Railway Co.	120 90	30 05						
57	Nova Scotia Steel and Coal Co.	1,730 17	330 31						
58	Orford Mountain.	2,469 20	106 72						
59	Ottawa and New York	10,419 06	2,423 74	311 94					
60	Pine Marquette	63 85	184,063 27	5,335 38				73 26	2,403 31
61	Phillipsburg Railway and Quarry Co.	270 54	687 08	5 10					
62	Princeton Branch of Washington Co.	9,442 76	35,148 79						
63	Quebec Central.	21,662 61	24,304 98						
64	Quebec and Lake St. John.	364 05	1,400 00						
65	Quebec Railway, Light and Power Co.	9,395 61	17,783 36	1,086 39				6 54	
66	Quebec, Montreal and Southern	39 70							
67	Red Mountain.	340 20	366 93	122 31					
68	Rutland and Noyan.	514 59	1,298 27						
69	Salsbury and Albert.	379 56	504 86						
70	Schomberg and Aurora.		1,154 53						
71	St. Clair Tunnel.							90 78	
72	St. Lawrence and Adirondack.	794 20	13,224 20						
73	St. Martins.	2,568 20	258 50					27 52	
74	Sydney and Louisburg.	41 61	37,395 63						2,875 84
75	Spokane and British Columbia.	2,947 48	184 70						
76	Temiscouata.	26,537 77	6,453 75						
77	Temiskaming and Northern Ontario.	598 98	22,818 21					120 99	
78	Thousand Islands.	10,627 78	4 50					11,570 21	
79	Toronto, Hamilton and Buffalo	7,624 20	15,696 64					929 99	
80	Vancouver, Victoria and Eastern.	33 12	10,963 31					4,591 45	615 34
81	Victoria Terminal Railway and Ferry Co.								
82	Victoria and Sidney, B. C.	30,849 20	449 16						
83	Welsh in Canada.		136,013 30						
84	Wellington Colliery Co.		27,394 20						
85	York and Carleton.								
86	Total.	3,480,546 88	229,517 21	7,243,600 61	1,001,559 92	698,592 58	141,530 79	137,694 15	

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TABLE 8.—SUMMARY of Operating Expenses

Number.	Name of Railway.	54	55	56	57	58
		MAINTENANCE OF				
		Shop Machinery and Tools.	Power Plant Equipment.	Injuries to Persons.	Stationery and Printing.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1	Alberta Railway and Irrigation Co. ....	718 69				35 08
2	Algoma Central and Hudson Bay . . . . .	225 02				98 31
3	Atlantic and Lake Superior. . . . .	598 40				
4	Atlantic, Quebec and Western. . . . .					
5	Bay of Quinté . . . . .					
6	Bedlington and Nelson. . . . .			0 83		
7	Bessemer and Barry's Bay. . . . .					
8	Brandon, Saskatchewan and Hudson Bay. . . . .	309 31		77 95		29 49
9	British Yukon . . . . .	838 45		1 28		50 46
10	Brockville, Westport and Northwestern. . . . .	5 40				
11	Canada Southern. . . . .	12,620 31		944 88		2,224 29
12	Canadian Government Railway (Intercolonial). . . . .	38,697 10		452 56		11,162 80
13	" " (P. E. Island). . . . .	3,382 78				294 14
14	Canadian Northern. . . . .	75,598 79		5,401 81		3,285 77
15	Canadian Northern, Ontario. . . . .	2,467 45		35 00		151 79
16	Canadian Northern, Quebec. . . . .	1,960 33		0 90		241 68
17	Canadian Pacific. . . . .	379,395 33		19,977 91		35,742 64
18	Cape Breton. . . . .					
19	Caragnet. . . . .	250 50				47 50
20	Carillon and Grenville . . . . .	50 00				
21	Central Ontario. . . . .	40 14				23 77
22	Crownst Southern. . . . .	475 08		151 93		46 81
23	Cumberland Railway and Coal Co. . . . .					
24	Dominion Atlantic . . . . .	880 26				23 32
25	Elgin and Havelock. . . . .					
26	Eastern British Columbia. . . . .					9 20
27	Grand Trunk . . . . .	206,132 49		10,427 27		11,328 81
28	Grand Trunk (Canada Atlantic). . . . .	10,026 26		412 61		821 95
29	Halifax and Southwestern. . . . .	1,042 83		22 34		58 51
30	Hereford. . . . .	444 00				66 88
31	Inverness Railway and Coal Co. . . . .	605 37				72 29
32	Iroudale, Bancroft and Ottawa . . . . .	18 23				
33	Kaslo and Slocan. . . . .	227 44				
34	Kent Northern. . . . .					
35	Kettle River Valley. . . . .					
36	Kingston and Pembroke. . . . .	373 18				12 90
37	Klondike Mines. . . . .	1 50				
38	Liverpool and Milton. . . . .					
39	Lotbinière and Megantic . . . . .	137 68				
40	London and Port Stanley . . . . .	419 58		62 20		35 61
41	Manitoulin and North Shore. . . . .	27 95				81 51
42	Maritime Coal Railway and Power Co. . . . .					
43	Massawippi Valley. . . . .	1 29		12 00		
44	Midland Railway Co. of Manitoba (now Manitoba Great Northern). . . . .	190 92		54 28		18 36
45	Montreal & Atlantic. . . . .	3,666 75				354 96
46	Montreal & Province Line. . . . .	43 52		3 00		30 14
47	Montreal & Vermont Junction. . . . .			7 44		75 32
48	Morrissey, Fernie & Michel. . . . .					
49	Moncton & Buctouche. . . . .					
50	Napierville Junction. . . . .	5 00				0 30
51	Nelson & Fort Sheppard. . . . .	249 50		59 79		23 43
52	New Brunswick Coal & Railway Co. . . . .	1,570 00				
53	New Brunswick & P. E. Island. . . . .					15 00



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for the Year ending June 30, 1910—Continued.

60	61	62	63	64	65	67	
EQUIPMENT—Continued.							
Other Expenses.	Total of Foregoing Accounts.	Maintaining Joint Equipment at Terminals—Dr.	Equipment Borrowed—Dr.	Maintaining Joint Equipment at Terminals—Cr.	Equipment Loaned Cr.	Total Maintenance of Equipment.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
2,417 44	23,665 57	1,893 07	11,950 01			37,508 65	1
27 67	41,712 18					41,712 18	2
640 14	12,479 35		4,173 75			16,653 10	3
3 00	2,634 84					2,634 84	4
28 19	20,293 17					20,293 17	5
	316 40					316 40	6
	432 07					432 07	7
16 73	8,614 60					8,614 60	8
	14,048 80					14,048 80	9
	2,855 47					2,855 47	10
3 00	1,002,261 41	5,031 21				1,007,292 62	11
30,185 35	1,864,066 66	3,645 24				1,867,711 90	12
7,133 56	79,120 03					79,120 03	13
Cr. 30 70	1,761,619 43	1,778 65		1,756 39		1,761,641 69	14
3,569 98	73,568 20					73,568 20	15
1,440 61	110,697 11					110,697 11	16
81 69	12,563,155 35	4,832 79		494 28		12,567,493 86	17
3 84	1,068 09		28 45			1,096 54	18
	7,422 78					7,422 78	19
253 00	1,033 00					1,033 00	20
30 00	16,610 27		244 30			16,854 57	21
25 79	23,276 95					23,276 95	22
	3,365 30					3,365 30	23
662 63	61,529 12					61,529 12	24
3 62	371 96					371 96	25
	5,407 00					5,407 00	26
Cr. 394 38	6,095,589 83	949 15		111,141 85		5,985,397 13	27
Cr. 6 43	253,437 19			147 39		253,289 80	28
39 66	47,613 66	300 00				47,913 66	29
	16,166 70			39 43		16,127 27	30
	21,587 84		1,685 24		428 04	22,845 04	31
	3,255 11					3,255 11	32
12 90	5,072 33					5,072 33	33
	250 00					250 00	34
2 00	901 56					901 56	35
4,695 42	24,084 55					24,084 55	36
30 19	4,564 74					4,564 74	37
	875 75					875 75	38
120 16	4,540 64					4,540 64	39
8 12	17,139 22					17,139 32	40
1 81	8,564 59					8,564 59	41
7 75	6,131 46					6,131 46	42
	20,468 20					20,468 20	43
	8,612 36					8,612 36	44
38 98	132,954 90					132,954 90	45
	1,002 41					1,002 41	46
	889 54					889 54	47
	14,381 98					14,381 98	48
	1,813 52					1,813 52	49
	6,697 91					6,697 91	50
13 11	7,698 03					7,698 03	51
	15,919 75					15,919 75	52
	3,447 55		1,442 78			4,890 33	53



1 GEORGE V., A. 1911

TABLE No. 8.—SUMMARY of Operating Expenses

No.	54	55	56	57	58
	Name of Railway.	MAINTENANCE OF			
		Shop machinery and tools.	Power plant equipment.	Injuries to persons.	Stationery and printing.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
54	New Brunswick Southern.....	11 02			
55	New Westminster Southern.....	63 89		19 23	5 37
56	North Shore Railway Co.....				
57	Nova Scotia Steel & Coal Co.....				
58	Orford Mountain.....				
59	Ottawa & New York.....	1,052 38		38 15	35 17
60	Père Marquette.....	4,448 26		652 08	378 97
61	Phillipsburg Ry. and Quarry Co.....				
62	Princeton Branch of Washington Co.....	18 47			1 99
63	Quebec Central.....	4,383 17	1,133 18	1,155 00	162 33
64	Quebec & Lake St. John.....	3,449 31		88 05	111 44
65	Quebec Railway, Light & Power Co.....	138 47			18 86
66	Quebec, Montreal & Southern.....	1,230 49			369 28
67	Red Mountain.....	94 65		27 73	9 11
68	Rutland & Noyan.....	70 67			
69	Salisbury & Albert.....	233 94			
70	Schomberg & Aurora.....	3 61			
71	Stanstead, Shefford & Chambly.....	310 21		3 00	30 14
72	St. Clair Tunnel.....				
73	St. Lawrence & Adirondack.....			0 76	1,273 40
74	St. Martins.....				
75	Sydney & Louisburg.....				
76	Spokane & British Columbia.....				
77	Teniscouata.....				48 37
78	Temiskaming & Northern Ontario.....	4,655 12	1,064 64	87 50	875 07
79	Thousand Islands.....				
80	Toronto, Hamilton & Buffalo.....	4,057 02	20 70	384 60	418 68
81	Vancouver, Victoria & Eastern.....	1,278 78		558 73	123 21
82	Victoria Terminal Railway & Ferry Co.....				
83	Victoria & Sidney, B.C.....				
84	Wabash in Canada.....	8,474 99		1 77	872 36
85	Wellington Colliery Co.....				
86	York & Carleton.....				
	Final total.. . . . .	777,666 28	2,218 52	41,122 58	71,196 77

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for the Year ending June 30, 1909—Continued.

60	61	62	63	64	65	67	
EQUIPMENT—Continued.							
Other Expenses.	Total of Foregoing Accounts.	Maintaining Joint Equipment at Terminals—Dr.	Equipment Borrowed—Dr.	Maintaining Joint Equipment at Terminals—Cr.	Equipment Loaned—Cr.	Total Maintenance of Equipment.	No.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
101 41	4,213 46		6,064 95			10,278 41	54
3 33	2,925 46					2,925 46	55
	120 60					120 60	56
	1,037 86					1,037 86	57
	3,068 29					3,068 29	58
12 19	17,051 73	99 72				17,151 45	59
85 83	322,385 89	456 74				322,842 63	60
	1,659 87					1,659 87	61
7,230 83	122,450 13		38,266 78		27,192 29	133,524 62	62
2,936 97	118,536 35					118,536 35	64
91 01	4,718 84		612 47		183 70	5,147 61	65
35 80	52,138 12					52,138 12	66
5 15	1,747 95					1,747 95	67
65 96	1,652 76					1,652 76	68
	4,133 46		1,039 54			5,173 00	69
	753 95					753 95	70
	2,575 18					2,575 18	71
	13,386 34					13,386 34	72
	34,051 94					34,051 94	73
	1,025 07					1,025 07	74
1,006 60	84,173 59		3,264 25			87,437 84	75
	776 09					776 09	76
6,766 87	26,994 76					26,994 76	77
2,780 56	140,746 23					140,746 23	78
25 05	2,904 09					2,904 09	79
9,617 36	92,553 53			6,068 06		86,485 47	80
68 88	66,276 93					66,276 93	81
	135 45					135 45	82
	1,840 68					1,840 68	83
11,355 63	378,014 49	96,274 72		39 24		474,249 97	84
	36,257 54					36,257 54	85
	16 00		149 00			165 00	86
93,254 29	25,965,609 16	115,261 29	68,921 52	119,686 64	27,804 03	26,002,301 30	

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

Number.	68	69	70	71
	Name of Railway.	TRAFFIC		
		Superintendence.	Outside Agencies.	Advertising.
	\$ cts.	\$ cts.	\$ cts.	
1	Alberta Railway and Irrigation Co. ....			
2	Algoma Central and Hudson Bay .....			86 20
3	Atlantic and Lake Superior.....	1,625 58		
4	Atlantic, Quebec and Western .....			
5	Bay of Quinté .....	2,671 24		274 34
6	Bedlington and Nelson.....			
7	Bessemer and Barry's Bay .....			
8	Brandon, Saskatchewan and Hudson Bay.....	485 07	1,226 58	686 88
9	British Yukon.....	2,028 05	2,814 48	1,542 84
10	Brockville, Westport and Northwestern.....			92 01
11	Canada Southern .....	50,781 49	43,366 90	22,107 59
12	Canadian Government Railways—Intercolonial .....	55,381 49	63,635 04	34,358 67
13	"    "    P.E. Island.....	32 50	75 00	1,028 55
14	Canadian Northern.....	49,223 89	57,158 77	30,265 35
15	Canadian Northern, Ontario.....	6,414 87	836 03	4,213 69
16	Canadian Northern, Quebec.....	6,091 14	2,328 86	4,220 95
17	Canadian Pacific .....	407,841 51	1,230,377 73	500,683 54
18	Cape Breton.....	370 00		55 00
19	Caraguet.....	720 00		
20	Carillon and Grenville.....			
21	Central Ontario.....	1,500 00	186 30	153 69
22	Crowsnest Southern.....	874 33	2,254 02	724 61
23	Cumberland Railway and Coal Co. ....			
24	Dominion Atlantic .....	6,760 76	9,224 12	14,300 00
25	Elgin and Havelock .....			
26	Eastern British Columbia.....			
27	Grand Trunk .....	170,566 40	447,853 08	138,924 19
28	Grand Trunk (Canada Atlantic).....	15,036 01	29,388 29	11,355 24
29	Halifax and Southwestern .....	3,803 63	1,319 44	3,909 59
30	Hereford .....	583 83	193 82	259 38
31	Inverness Railway and Coal Co .....	45 00		186 92
32	Irondale, Bancroft and Ottawa.....	3 18		
33	Kaslo and Slocan .....			
34	Kent Northern .....			50 00
35	Kettle River Valley.....	53 51		
36	Kingston and Pembroke .....	1,110 65		222 59
37	Klondike Mines .....			415 00
38	Liverpool and Milton .....			
39	Lotbinière and Megantic.....			
40	London and Port Stanley .....	1,731 10	1,750 06	849 28
41	Manitoulin and North Shore .....	239 28		
42	Maritime Coal, Railway and Power Co. ....			
43	Massawippi Valley .....	862 17	284 90	
44	Midland Railway Co. of Manitoba (now Manitoba and Great Northern) .....	376 67	980 11	251 83
45	Montreal & Atlantic.....	4 55		
46	Montreal & Province Line.....	406 18	616 59	218 98
47	Montreal & Vermont Junction.....	986 24	2,375 62	384 76
48	Morrissey, Fernie & Michel.....			
49	Moncton & Buctouche.....			
50	Napierville Junction.....	310 68	25 16	11 30
51	Nelson & Fort Sheppard.....	387 29	985 16	575 33
52	New Brunswick Coal & Railway Co.....			
53	New Brunswick & Prince Edward Island.....			

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for the Year ending June 30, 1910—Continued.

72	73	74	75	77	79	
EXPENSES.						
Traffic Associations.	Fast Freight Lines.	Industrial and Immigration Bureaus.	Stationery and Printing.	Other Expenses.	Total Traffic Expenses	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
70 05			361 62		2,143 45	1
						2
						3
			296 67	137 67	3,379 92	4
						5
						6
21 70		214 21	245 70	5 64	2,885 78	7
			106 49		6,491 86	8
			189 91	10 00	291 92	9
2,791 12	92,289 27	1,626 96	25,691 41	0 71	238,655 45	10
2,331 33			27,085 96	15 37	182,807 86	11
			32 00		1,168 05	12
1,122 13		1,564 03	14,058 13	119 72	153,512 02	13
261 66			829 65		12,555 90	14
174 01			2,434 49	3 83	15,253 28	15
35,293 83	48,919 76	31,798 03	176,879 34	4,857 52	2,436,651 26	16
					425 00	17
				119 36	839 36	18
						19
84 05			161 44		2,085 48	20
57 35		312 07	490 39	9 53	4,722 30	21
						22
			2,271 23	72 97	32,629 08	23
						24
						25
32,016 62	49,926 70		69,282 05	148 22	998,717 26	26
2,570 78	1,858 58		5,878 64	10 54	66,098 08	27
198 65			597 55		9,828 86	28
24 99	32 30	18 25	182 15	0 28	1,295 00	29
			36 14		268 06	30
70 49			28 00		101 67	31
						32
				50 00	100 00	33
			57 35		110 86	34
73 80			148 42		1,555 46	35
			55 00		470 00	36
						37
145 56	392 44		664 26	0 99	5,533 69	38
			26 38	2 50	268 16	39
						40
			306 22		1,453 29	41
						42
24 00		124 11	208 50	3 93	1,969 15	43
12 36	9,304 63				9,321 54	44
16 00			234 34		1,492 09	45
42 29	1,740 15		586 35		6,115 41	46
						47
						48
7 87			63 68		418 69	49
16 84		171 44	200 65	5 41	2,342 12	50
						51
						52
						53

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

		68	69	70	71
		TRAFFIC			
No.	Name of Railway.	Superin- tendence.	Outside Agencies.	Advertising.	
		§ cts.	§ cts.	§ cts.	
54	New Brunswick Southern.....			212 96	
55	New Westminster Southern.....	109 95	280 02	7 93	
56	North Shore Railway Co.....				
57	Nova Scotia Steel & Coal Co.....				
58	Orford Mountain.....				
59	Ottawa & New York.....	3,981 20	395 42	449 13	
60	Père Marquette.....	19,987 43	19,416 13	3,488 21	
61	Phillipsburg Railway & Quarry Co.....				
62	Princeton Branch of Washington Co.....	93 20	43	47 36	
63	Quebec Central.....	7,353 10	9,066 70	4,479 43	
64	Quebec & Lake St. John.....	5,393 41	1,334 64	4,455 71	
65	Quebec Railway, Light & Power Co.....	317 15	196 28	531 99	
66	Quebec, Montreal & Southern.....	2,855 61	434 05	116 55	
67	Red Mountain.....	113 42	266 99	17	
68	Rutland & Noyan.....	127 78	94 45	43 71	
69	Salisbury & Albert.....			53 99	
70	Schoenberg & Aurora.....				
71	Stanstead, Shefford & Chambly.....	394 61	692 84	225 42	
72	St. Clair Tunnel.....				
73	St. Lawrence & Adirondack.....	1,177 84	2,563 85	838 33	
74	St. Martins.....			213 30	
75	Sydney & Louisburg.....			181 90	
76	Spokane & British Columbia.....	25 19			
77	Temiscouata.....	1,989 71		903 58	
78	Temiskaming & Northern Ontario.....	9,246 63	54 56	3,765 59	
79	Thousand Islands.....	249 26		69 35	
80	Toronto, Hamilton & Buffalo.....	9,000 73	1,363 43	1,586 22	
81	Vancouver, Victoria & Eastern.....	2,237 34	5,762 18	2,508 56	
82	Victoria Terminal Railway & Ferry Co.....	65 76		3 86	
83	Victoria & Sidney, B. C.....	875 99		54 39	
84	Wabash in Canada.....	18,231 06	39,522 20	7,744 87	
85	Wellington Colliery Co.....				
86	York & Carleton.....				
	Final totals.....	873,134 66	1,980,700 23	804,392 81	

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for the Year ending June 30, 1910—Continued.

72	73	74	75	77	79	
EXPENSES.						
Traffic Associa- tions.	Fast Freight Lines.	Industrial and Immigration Bureaus.	Stationery and Printing.	Other Expenses.	Total Traffic Expenses.	No.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
					212 96	54
8 88		31 66	63 63	1 76	503 83	55
						56
						57
70 51			157 95		228 46	58
71 69	23 63	1 36	1,534 11		6,456 54	59
1,696 18	7,527 88		7,093 79	10 21	59,219 83	60
						61
		3 34	28 51		172 84	62
1,525 04			1,623 91	106 44	24,154 62	63
102 20		24 00	1,202 57		12,512 53	64
24 99			23 11	307 86	1,401 38	65
70 92		20 00	986 41	6 43	4,489 97	66
8 91		44 56	62 36	1 87	498 28	67
5 47	68 75	67	36 85	3 44	381 12	68
					55 99	69
						70
16 82	536 92		235 34		2,101 95	71
						72
	51 51	123 73	148 94	45 77	4,949 97	73
				181 76	395 06	74
					181 90	75
			41 48		66 67	76
105 34			360 10		3,358 73	77
41 00			1,098 95	24 72	14,231 45	78
			33 83	2 00	354 44	79
444 22	965 80		1,130 04		14,490 44	80
125 72		876 54	1,209 68	24 52	12,744 54	81
					69 62	82
					930 38	83
1,928 62	11,017 37		9,611 94		88,056 06	84
						85
						86
83,673 99	224,655 69	36,954 96	356,373 61	6,290 97	4,366,176 92	



1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses for the

No.	Name of Railway.	81	82	83	84	85
		TRANSPORTATION				
		Superintendence.	Despatching Trains.	Station Employees.	Weighing and Car-Service Associations.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1	Alberta Railway and Irrigation Co. ....	2,105 66	1,383 00	13,503 80		
2	Algoma Central and Hudson Bay. ....	5,827 56	697 50	5,210 78		253 71
3	Atlantic and Lake Superior. ....	477 35		5,197 00		
4	Atlantic, Quebec and Western. ....			2,084 26		
5	Bay of Quinté. ....	1,731 74	649 05	8,898 92		
6	Bedlington and Nelson. ....	22 17	17 79			
7	Bessemer and Barry's Bay. ....					570 63
8	Brandon, Saskatchewan and Hudson Bay. ....	1,272 78	559 20	7,727 13		45 06
9	British Yukon. ....	2,324 77	1,807 19	13,688 15		
10	Brockville, Westport and Northwestern. ....			2,587 79		
11	Canadian Southern. ....	53,718 17	14,165 61	191,079 93		666 50
12	Canadian Government Railways (Intercolonial). ....	80,813 08	139,077 76	623,923 64		1,601 92
13	Canadian Government Railways (P.E. Island). ....	6,351 32	2,575 87	45,165 18		
14	Canadian Northern. ....	114,029 51	50,870 47	648,963 87		5,888 13
15	Canadian Northern, Ontario. ....	9,524 34	2,417 49	22,420 98		135 77
16	Canadian Northern, Quebec. ....	11,148 01	3,718 29	61,042 78		234 95
17	Canadian Pacific. ....	702,420 22	423,245 89	3,933,486 03		12,918 74
18	Cape Breton. ....	390 00		930 00		
19	Caraquet. ....			2,618 00		2,042 35
20	Carillon and Grenville. ....	560 00		200 00		
21	Central Ontario. ....	1,200 00	870 95	11,532 76		114 04
22	Crowsnest Southern. ....	2,335 84	863 33	5,818 38		499 18
23	Cumberland Railway and Coal Co. ....	1,200 00	1,024 60	3,809 17		
24	Dominion Atlantic. ....	4,073 03	2,101 84	43,443 41		
25	Elgin and Havelock. ....			408 00		
26	Eastern British Columbia. ....	3,318 56		1,303 26		54 79
27	Grand Trunk. ....	178,603 55	82,640 64	1,897,338 59		8,823 65
28	Grand Trunk (Canada Atlantic). ....	24,834 40	9,965 86	165,497 29		747 48
29	Halfax and Southwestern. ....	7,589 97	1,315 56	14,484 81		
30	Hereford. ....	724 04	325 32	5,402 78		
31	Inverness Railway and Coal Co. ....	180 00	420 00	5,128 05		
32	Irondale, Bancroft and Ottawa. ....	1,380 34		1,601 10		
33	Kalso and Slocan. ....	1,720 64		3,468 03		
34	Kent Northern. ....			1,020 00		
35	Kettle River Valley. ....	70 50		92 37		
36	Kingston and Pembroke. ....	1,455 67	1,152 89	12,387 61		76 75
37	Klondike Mines. ....			2,824 60		
38	Liverpool and Milton. ....					
39	Lotbinière and Megantic. ....			1,070 31		
40	London and Port Stanley. ....	1,061 39	851 09	11,970 58		111 56
41	Manitoulin and North Shore. ....	2,228 79		55		
42	Maritime Coal, Railway and Power Co. ....			1,320 00		
43	Massawippi Valley. ....	225 00		18,272 62		
44	Midland Railway Co. of Manitoba (now Manitoba Great Northern). ....	781 30	245 51	5,250 42		54 49
45	Montreal and Atlantic. ....	6,926 73	5,686 45	43,838 53		
46	Montreal and Province Line. ....	561 08	244 61	4,803 64		0 10
47	Montreal and Vermont Junction. ....	1,087 12	733 97	3,289 00		0 25
48	Morrissey, Fernie and Michel. ....	1,920 00		2,087 70		
49	Moncton and Buctouche. ....			1,203 51		
50	Napierville Junction. ....	28 49	198 40	2,326 25		
51	Nelson and Fort Sheppard. ....	1,458 39	660 06	4,875 66		51 11
52	New Brunswick Coal and Railway Co. ....			2,454 49		6,141 00
53	New Brunswick and Prince Edward Island. ....	100 00		1,083 00		
54	New Brunswick Southern. ....	33 68	17 20	1,252 70		
55	New Westminster Southern. ....	250 28	118 05	4 60		17 69

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Year ending June 30, 1910—Continued.

87	88	89	90	91	92	93	No.
EXPENSES—Continued.							
Coal and Ore Docks.	Station Supplies and Expenses.	Yardmasters and their Clerks.	Yard Conductors and Brakemen.	Yard Switch and Signal Tenders.	Yard Supplies and Expenses.	Yard Enginemen.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
	871 78		4,215 30			3,826 19	1
44,934 55	252 91	443 11	21,608 26	322 29	77 48		2
	450 93						3
	543 99						4
	1,864 88	164 50		151 15	15 57		5
	13 33						6
	1,594 43						7
	963 82		596 27			523 31	8
	294 50						9
	15,919 22	50,104 80	121,311 92	14,774 45	2,440 04	73,662 27	11
	85,444 89	33,123 08	121,697 51	13,480 13	19,935 32	115,591 23	12
	5,592 47	1,968 02	1,935 91		27 39	4,348 12	13
	46,998 74	34,216 26	135,636 30	2,545 44	1,586 86	90,729 80	14
4,006 61	2,866 27		5,869 49	20 00	22 10	4,489 65	15
2,003 26	8,121 30	450 00	11,377 07	1,082 45	509 35	10,374 85	16
	348,611 00	157,839 65	866,655 02	66,946 42	19,008 30	620,301 88	17
			1,457 45				18
	645 45						19
	1,197 79		1,767 19			782 15	21
	473 19						22
							23
	5,183 80	1,827 97			2 20	6,696 01	24
							25
	59 99						26
Cr. 767 34	227,399 82	93,908 00	437,715 94	73,862 89	7,525 04	276,681 73	27
	16,091 43	8,505 57	25,426 04	5,965 35	597 61	21,707 57	28
	2,758 05		1,334 45		36 11	1,117 12	29
	534 20		327 79	5 44	2 00	1,423 76	30
	513 78		1,749 37			1,491 69	31
	50 31						32
	387 51						33
	25 00						34
	30 30						35
	1,100 98		1,263 26			1,316 96	36
	341 06						37
					391 50		38
	74 20						39
	794 94	1,925 63	7,421 19	204 16	109 81	4,558 62	40
	68						41
	18 25						42
	1,098 68		1,804 57			1,801 62	43
							44
	919 77						45
	6,587 52	1,536 15	5,982 42	236 47	66 80	4,005 63	46
	930 05						47
	833 50	29 21	85 55				48
	153 22		9,584 54	1,275 50		7,145 50	49
							50
	283 71						51
	436 71						52
							53
	435 32						54
	21 37						55

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses for the

No.	81	82	83	84	85
	Name of Railway.	TRANSPORTATION			
		Superintendence.	Despatching Trains.	Station Employees.	Weighing and Car Service Associations
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
56	North Shore Railway Co .....	300 00			
57	Nova Scotia Steel and Coal Co. ....			900 00	
58	Orford Mountain .....			3,754 29	
59	Ottawa and New York .....	2,094 03	873 28	11,004 77	60 00
60	Père Marquette .....	14,900 02	6,176 92	76,851 35	1,365 02
61	Phillipsburg Railway and Quarry Co. ....				
62	Princeton Branch of Washington Co. ....	173 62	83 77		
63	Quebec Central .....	6,113 05	4,844 66	59,141 04	508 61
64	Quebec and Lake St. John .....	9,401 87	3,622 68	26,380 99	158 03
65	Quebec Railway, Light and Power Co. ....	314 54	694 85	4,181 73	127 64
66	Quebec, Montreal and Southern .....	863 92	1,793 55	21,577 08	
67	Red Mountain .....	387 56	156 37	3,494 13	46 60
68	Rutland and Noyan .....	145 96	44 38	600 00	1 15
69	Salisbury and Albert .....			1,282 00	
70	Schomberg and Aurora .....				
71	Stanstead, Shefford and Chambly .....	670 96	244 61	7,495 98	0 10
72	St. Clair Tunnel .....		6,468 16		
73	St. Lawrence and Adirondaack .....	544 38	282 40	8,297 44	50 58
74	St. Martins .....			170 00	746 75
75	Sydney and Louisburg .....	1,800 00	4,705 00	12,313 90	6,412 62
76	Spokane and British Columbia .....	57 56		80 83	
77	Temiscouata .....	4,871 47	1,397 50	9,245 92	90 36
78	Temiskaming and Northern Ontario .....	10,004 05	4,936 04	67,304 94	286 12
79	Thousand Islands .....	603 60		3,490 29	
80	Toronto, Hamilton and Buffalo .....	13,089 82	6,706 25	71,291 15	263 75
81	Vancouver, Victoria and Eastern .....	7,069 85	3,335 01	33,113 34	1,230 13
82	Victoria Terminal Railway and Ferry Co. ....	28 56		251 26	3 40
83	Victoria and Sidney, B.C. ....	383 40		3,380 65	45 42
84	Wabash in Canada .....	15,972 37		20,047 46	4,255 69
85	Wellington Colliery Co. ....				
86	York and Carleton .....				
	Final total .....	1,327,856 06	796,991 87	8,315,042 55	56,701 82

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Year ending June 30, 1910—Continued.

86	87	88	89	90	91	92	No.
EXPENSES.							
Coal and Ore Dock.	Station Supplies and Expenses.	Yardmasters and their Clerks.	Yard Conductors and Brakemen.	Yard Switch and Signal Tenders.	Yard Supplies and Expenses.	Yard Enginemen.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
					186 00		56
	684 04						57
	8,388 03	29 83	541 41	50 38	1 50	442 39	58
	7,530 14	3,808 42	16,110 06	905 58	278 72	12,044 48	59
							60
	7,519 67						61
	3,118 50		2,799 92		184 57	3,687 94	62
	897 66	595 70	422 16	649 67		1,307 35	63
	3,318 39		32 32	60 00		603 75	64
	308 83						65
	132 83	75 93	122 40	954 72	12 94	98 67	66
	22 22						67
	1,250 24			384 00			68
							69
	2,288 00	25 05					70
							71
	296 16	4,303 72		737 46			72
	35 75						73
	1,053 37						74
	12,437 63	2,327 53	14,008 77	3,675 38	1,219 40	9,865 99	75
	672 15						76
	6,009 70	4,528 75	19,053 85	1,432 05	42 41	14,070 19	77
	4,866 27	855 72	4,409 01	79 85	11 78	3,319 77	78
	29 68						79
	389 64						80
	2,069 78		2,407 62			1,899 74	81
		3,212 45	3,212 46	3,212 46	3,212 46		82
							83
50,177 08	853,102 92	405,805 05	1,849,942 79	193,013 69	57,503 26	1,299,915 93	84
							85
							86

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TABLE 8.—SUMMARY of Operating Expenses for the

		94	95	96	97	98
Number.	Name of Railway.	TRANSPORTATION				
		Enginehouse Expenses—Yard.	Fuel for Yard Locomotives	Water for Yard Locomotives	Lubricants for Yard Locomotives	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1	Alberta Railway and Irrigation Co. . . . .	601 98	4,564 32	565 86	171 93	
2	Algoma Central and Hudson Bay . . . . .					
3	Atlantic and Lake Superior . . . . .					
4	Atlantic, Quebec and Western . . . . .					
5	Bay of Quinté . . . . .	9 68				
6	Bedlington and Nelson . . . . .					
7	Bessemer and Barry's Bay . . . . .					
8	Brandon, Saskatchewan and Hudson Bay . . . . .					
9	British Yukon . . . . .		598 80		17 63	
10	Brockville, Westport and Northwestern . . . . .					
11	Canada Southern . . . . .	24,296 62	95,226 79	5,737 67	1,468 20	
12	Algoma Central and Hudson Bay . . . . .	29,643 52	152,614 72	9,449 39	4,222 10	
13	Canadian Government Railways—Intercolonial. —P. E. Island. . . . .	1,000 96	3,442 81	75 00	145 06	
14	Canadian Northern . . . . .	21,624 65	137,350 61	7,509 91	3,633 96	
15	Canadian Northern, Ontario . . . . .	679 06	7,326 06	7 60	167 52	
16	Canadian Northern, Quebec . . . . .	3 29	22,398 32	321 72	237 08	
17	Canadian Pacific . . . . .	231,675 62	744,963 45	39,246 02	13,350 62	
18	Cape Breton . . . . .					
19	Caragnet . . . . .					
20	Carillon and Grenville . . . . .					
21	Central Ontario . . . . .		1,307 16	65 62	103 23	
22	Crowsnest Southern . . . . .		Cr. 0 75			
23	Cumberland Railway and Coal Co. . . . .					
24	Dominion Atlantic . . . . .	1,813 41	8,611 98	154 26	169 86	
25	Elgin and Havelock . . . . .					
26	Eastern British Columbia . . . . .					
27	Graud Trunk . . . . .	47,148 91	388,178 10	17,009 42	5,409 28	
28	Grand Trunk (Canada Atlantic) . . . . .	5,071 48	31,522 96	1,761 15	792 48	
29	Halifax and Southwestern . . . . .	62 77	1,722 66		41 46	
30	Hereford . . . . .	583 50	2,511 48	109 91	24 71	
31	Inverness Railway and Coal Co. . . . .	570 61	1,871 99		82 88	
32	Irondale, Bancroft & Ottawa . . . . .					
33	Kaslo and Slocan . . . . .					
34	Kent Northern . . . . .	30 00				
35	Kettle River Valley . . . . .					
36	Kingston and Pembroke . . . . .		1,159 60		38 95	
37	Klondike Mines . . . . .					
38	Liverpool and Milton . . . . .					
39	Lotbinière and Megantic . . . . .					
40	London and Port Stanley . . . . .	1,481 59	3,527 25	155 45	60 06	
41	Manitoulin and North Shore . . . . .					
42	Maritime Coal Railway and Power Co. . . . .					
43	Massawippi Valley . . . . .		2,845 02	29 00	50 68	
44	Midland Railway Co. of Manitoba (now Mani- toba Great Northern) . . . . .					
45	Montreal and Atlantic . . . . .	919 21	5,515 86	218 21	87 02	
46	Montreal and Province Line . . . . .	21 57				
47	Montreal and Vermont Junction . . . . .					
48	Morrissey, Fernie and Michel . . . . .		10,110 28	257 36		
49	Moncton and Buctouche . . . . .					
50	Napierville Junction . . . . .	14 48	648 67		1 92	
51	Nelson and Fort Sheppard . . . . .					
52	New Brunswick Coal and Railway Co. . . . .					
53	New Brunswick and P. E. Island . . . . .					
54	New Brunswick Southern . . . . .					



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Year ending June 30, 1910—Continued.

99	100	101	102	103	105	106	
EXPENSES—Continued.							
Other Supplies for Yard Locomotives	Total of last Fifteen Accounts.	Operating Joint Yards and Terminals—Dr.	Operating Joint Yards and Terminals—Cr.	Total Station and Yard Expenses.	Road Enginemn.	Enginehouse Expenses—Road.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
21 07	28,282 23	5,182 88		33,465 11	14,192 31	1,824 03	1
	73,103 09			73,103 09	25,551 64	3,570 18	2
	5,647 93			5,647 93	5,340 58		3
	2,628 25			2,628 25	1,690 35	691 65	4
	11,104 70	2,600 00		13,704 70	6,575 63		5
	13 33			13 33	156 35	23 80	6
	570 63			570 63	1,400 00		7
	9,366 62			9,366 62	6,026 36	1,464 54	8
22 39	16,410 37			16,410 37	3,879 88	3,083 35	9
	2,882 24			2,882 29	3,244 65		10
1,910 64	598,593 05	348,597 04	15,821 65	931,374 44	273,387 85	85,737 82	11
2,603 00	1,213,330 45	104,576 21	87,580 44	1,230,326 22	489,722 18	234,430 16	12
99 83	63,800 75			63,860 75	23,906 15	10,915 92	13
3,228 26	1,139,912 79	23,507 80	17,333 27	1,146,087 32	617,331 25	247,114 34	14
13 46	48,024 57			48,024 57	26,878 16	13,188 53	15
202 25	118,378 67	2,297 75	474 31	120,112 11	51,928 71	15,223 81	16
20,098 48	7,075,101 23	254,556 72	105,687 08	7,223,970 87	3,368,859 28	1,060,565 93	17
	2,387 45			2,387 45	1,977 85		18
	5,305 80			5,305 80	1,220 52	857 61	19
	200 00			200 00	269 00		20
	16,869 94			16,869 94	8,995 65	3,943 88	21
	6,790 00			6,790 00	12,887 48	1,229 19	22
	3,809 17			3,809 17	4,389 61	1,403 61	23
33 85	67,936 75	1,070 50	521 89	68,485 36	29,075 49	12,817 66	24
	408 00			408 00	481 54	289 00	25
	1,418 04			1,418 04	2,644 10	908 83	26
8,299 49	3,488,533 52	21,184 28	427,646 11	3,082,071 39	1,180,079 47	245,337 26	27
968 06	284,654 47	4,223 75	6,015 84	282,862 38	94,889 15	24,732 63	28
	21,557 43	16,541 89		38,099 32	20,208 71	5,088 98	29
28 57	10,954 14	1,347 73	365 56	11,936 31	5,300 37	2,075 47	30
36 60	11,444 97			11,444 97	5,397 81	1,923 32	31
	1,651 41			1,651 41	1,172 05	493 87	32
	3,855 54			3,855 54	1,360 03	518 99	33
	1,075 00			1,075 00	1,100 00		34
	122 67			122 67	410 11	88 54	35
21 27	17,365 38	2,900 72		20,266 10	7,321 45	3,964 80	36
	3,165 66			3,165 66	2,503 30	783 10	37
	391 50			391 50	1,134 95	50 00	38
	1,144 51			1,144 51	1,163 40	654 43	39
9 59	32,329 53	190 64		32,520 17	7,975 74	2,747 95	40
	1 23	999 96		1,001 19	2,870 56	948 27	41
	1,338 25			1,338 25	3,739 06	3,448 44	42
	25,902 19			25,902 19	15,356 64	3,206 68	43
	6,224 68	1,923 60		81,148 28	3,813 10	901 76	44
109 13	69,102 95	38,040 93		107,143 88	45,983 86	11,989 24	45
	5,755 36	180 00	1 50	5,933 86	3,373 11	977 38	46
	4,237 51		7 50	4,230 01	4,865 49	66 21	47
1,318 96	31,933 06			31,933 06			48
	1,203 51			1,203 51	1,809 01		49
0 62	3,275 65	430 83	300 00	3,406 48	1,765 41	704 18	50
	5,363 48	4,281 59	435 58	9,209 49	4,636 27	476 04	51
	8,593 49			8,595 49	5,360 01		52
	1,083 00			1,083 00	2,044 77		53
	1,688 02	8,864 21		10,552 23	2,484 53		54



1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses for the

Number.	94	95	96	97	98
	Name of Railway.	TRANSPORTATION			
		Enginehouse Expenses—Yard.	Fuel for Yard Locomotives	Water for Yard Locomotives	Lubricants for Yard Locomotives
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
55	New Westminster Southern.....				
56	North Shore Railway Co. ....				
57	Nova Scotia Steel and Coal Co. ....				
58	Orford Mountain.....				
59	Ottawa and New York.....	32 36	1,361 90	69 32	62 28
60	Père Marquette.....	5,049 43	30,792 52	1,238 80	547 16
61	Phillipsburg Railway and Quarry Co. ....				
62	Princeton Branch of Washington Co. ....				
63	Quebec Central.....				
64	Quebec and Lake St. John ....	4 98	5,428 51	178 33	59 81
65	Quebec Railway Light and Power Co. ....	122 96	1,565 30	8 75	28 14
66	Quebec Montreal and Southern.....	412 98	3,501 20	57 65	11 65
67	Red Mountain.....				
68	Rutland and Noyan.....	31 65	183 86	5 71	3 08
69	Salisbury and Albert.....				
70	Schomberg and Aurora.....				
71	Stanstead, Shefford and Chambly .....	26 60		6 00	
72	St. Clair Tunnel.....				
73	St. Lawrence and Adirondack.....	22 16			
74	St. Martin's .....				
75	Sydney and Louisburg.....				
76	Spokane and British Columbia.....				
77	Temiscouata.....				
78	Temiskaming and Northern Ontario.....	1,587 01	25,159 37	1,099 25	492 22
79	Thousand Islands.....				
80	Toronto, Hamilton & Buffalo.....	2,599 15	27,639 04	1,183 89	425 32
81	Vancouver, Victoria and Eastern .....	811 59	7,260 41	1 69	130 94
82	Victoria Terminal Railway and Ferry Co. ....				
83	Victoria and Sidney, B.C. ....				
84	Wabash in Canada .....	1 14	3,389 31		0 37
85	Wellington Colliery Co. ....		3,276 00	48 00	
86	York and Carleton.....				
	Final total.....	377,954 92	1,737,575 56	86,510 94	32,057 60

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Year ending June 30, 1910—Continued.

99	100	101	102	103	105	106	
EXPENSES—Continued.							
Other Supplies for Yard Locomotives	Total of last Fifteen Accounts.	Operating Joint Yards and Terminals—Dr.	Operating Joint Yards and Terminals—Cr.	Total Station and Yard Expenses.	Road Enginem.	Enginehouse Expenses—Road.	Number.
\$ cts	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
	43 66			43 66	1,815 66	536 97	55
					1,002 45		56
	1,086 00			1,086 00	1,533 70		57
	4,438 33			4,438 33	2,590 94		58
9 48	22,053 65	4,994 15	101 75	26,446 05	6,065 28	1,296 73	59
67 14	156,588 92	29,353 34		185,942 26	84,574 81	17,579 87	60
							61
					1,488 46	694 85	62
	67,169 32			67,169 32	44,753 67	7,313 11	63
64 32	42,065 90		3,766 75	38,299 15	30,368 48	14,355 64	64
13 57	9,920 63			9,920 63	2,638 80	269 60	65
4 32	29,579 34	1,354 50	699 50	30,234 34	10,106 24	4,937 41	66
	3,849 56			3,849 56	1,666 59	446 18	67
	2,222 94			2,222 94	635 18	244 70	68
	1,304 22			1,304 22	2,841 70	75 67	69
							70
	9,162 92	282 43		9,445 35	3,618 13	955 99	71
	3,943 31			3,943 31			72
	10,683 23	3,300 04	220 00	13,763 27	16,552 45	4,557 16	73
	916 75			916 75	1,115 50	385 00	74
	24,063 86	780 00		24,843 86	28,197 40	8,534 44	75
	116 58			116 58	136 53	81 45	76
	10,389 65			10,389 65	8,316 30		77
89 56	139,553 17	31,297 39		170,850 56	58,121 51	15,537 50	78
	4,162 44			4,162 44	2,311 65		79
249 33	148,788 58	7,717 94	53,915 06	102,591 46	35,318 67	10,406 68	80
110 66	56,200 56			56,200 56	40,770 57	6,315 76	81
	284 34			284 34	161 87	45 10	82
	3,815 71			3,815 71	2,152 43	599 35	83
0 20	34,071 31	276,674 87	226 33	310,519 85	91,099 52	19,787 68	84
1,173 88	17,347 71			17,347 71			85
					1,080 00		86
40,807 38	15,360,054 80	1,198,663 69	721,120 42	15,837,598 07	6,891,165 42	2,125,418 22	

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses for the

No.	Name of Railway.	107	108	109	110	111
		TRANSPORTATION				
		Fuel for Road Locomotives	Water for Road Locomotives	Lubricants for Road Locomotives.	Other Supplies for Road Locomotives.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1	Alberta Ry. and Irrigation Co.....	22,931 61	2,541 52	828 10	283 04	
2	Algoma Central and Hudson Bay.....	26,473 85	1,149 24	829 87	225 05	
3	Atlantic and Lake Superior.....	13,829 24	207 03	573 58	175 60	
4	Atlantic, Quebec and Western.....	5,303 65	5 00	197 93	61 19	
5	Bay of Quinté.....	26,026 98	309 59	280 30	342 54	
6	Bedlington and Nelson.....	206 94	.....	3 71	2 41	
7	Bessemer and Barry's Bay.....	2,055 99	.....	178 07	.....	
8	Brandon, Saskatchewan and Hudson Bay..	9,295 79	840 36	112 48	76 44	
9	British Yukon.....	6,458 04	820 62	144 62	101 90	
10	Brockville, Westport and Northwestern....	6,648 35	201 13	439 70	.....	
11	Canada Southern.....	584,443 43	34,199 01	12,679 14	7,602 44	
	Canadian Government Railways—					
12	Intercolonial.....	1,499,373 01	49,336 42	28,140 75	13,614 97	
13	Prince Edward Island.....	45,858 46	1,942 86	1,071 23	944 66	
14	Canadian Northern.....	1,445,456 71	82,167 03	39,769 85	35,882 25	
15	Canadian Northern, Ontario.....	85,915 00	3,812 19	2,259 48	835 76	
16	Canadian Northern, Quebec.....	184,911 53	6,537 69	2,968 76	2,276 87	
17	Canadian Pacific.....	7,407,584 02	385,428 85	108,890 28	159,860 72	
18	Cape Breton.....	2,318 81	.....	240 17	.....	
19	Caraquet.....	8,066 92	480 00	470 00	100 25	
20	Carillon and Grenville.....	442 50	.....	47 20	20 30	
21	Central Ontario.....	34,201 34	731 99	598 49	.....	
22	Crownsnest Southern.....	24,021 96	1,138 86	354 96	260 75	
23	Cumberland Ry. and Coal Co.....	4,292 00	79 50	.....	525 96	
24	Dominion Atlantic.....	80,247 27	1,566 13	1,630 67	363 99	
25	Elgin and Havelock.....	1,744 88	29 70	112 05	159 49	
26	Eastern British Columbia.....	1,284 41	29 50	180 48	86 17	
27	Grand Trunk.....	3,351,100 34	122,193 63	31,402 29	56,671 75	
28	Grand Trunk (Canada Atlantic).....	284,168 94	12,363 68	3,559 81	4,849 61	
29	Halifax and Southwestern.....	68,525 50	2,081 76	1,304 19	356 90	
30	Hereford.....	11,539 96	541 50	107 00	173 82	
31	Inverness Ry. and Coal Co.....	14,628 05	186 72	489 25	332 11	
32	Irondale, Bancroft and Ottawa.....	4,537 56	5 32	84 50	234 48	
33	Kaslo and Slocan.....	2,521 14	102 00	83 53	22 59	
34	Kent Northern.....	2,000 00	25 00	100 00	100 00	
35	Kettle River Valley.....	493 83	17 59	3 43	13 42	
36	Kingston and Pembroke.....	19,501 96	716 46	355 47	244 41	
37	Klondike Mines.....	8,647 08	223 00	100 79	79 53	
38	Liverpool and Milton.....	1,679 74	25 00	98 51	49 65	
39	Lotbinière and Megantic.....	3,749 38	25 50	130 22	38 25	
40	London and Port Stanley.....	22,409 02	1,007 50	351 84	244 18	
41	Manitoulin and North Shore.....	8,083 22	166 15	83 17	53 83	
42	Maritime Coal, Railway and Power Co.....	10,814 76	559 16	726 20	219 16	
43	Massawippi Valley.....	24,250 42	247 20	432 03	177 51	
44	Midland Ry. Co. of Manitoba, (now Manitoba Great Northern).....	5,605 80	201 21	58 66	75 25	
45	Montreal and Atlantic.....	113,685 02	1,834 04	1,501 20	1,803 33	
46	Montreal and Province Line.....	11,750 24	748 79	182 93	121 71	
47	Montreal and Vermont Junction.....	16,356 57	866 08	146 09	83 52	
48	Morrissey, Fernie and Michel.....	.....	.....	.....	.....	
49	Moncton and Buctouche.....	3,242 22	.....	199 56	49 20	
50	Napierville Junction.....	9,544 58	440 34	117 37	33 09	
51	Nelson and Fort Sheppard.....	10,837 98	176 96	180 26	176 53	
52	New Brunswick Coal and Railway Co.....	10,963 72	322 23	705 34	318 50	
53	New Brunswick and Prince Edward Island..	4,345 10	50 00	139 42	.....	
54	New Brunswick Southern.....	7,771 68	504 27	148 46	3 96	



1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

Number.	107	108	109	110	111
	Name of Railway.	TRANSPORTATION			
		Fuel for Road Locomotives	Water for Road Locomotives	Lubricants for Road Locomotives.	Other Supplies for Road Locomotives.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
55	New Westminster Southern.....	1,616 59	.....	30 66	21 12
56	North Shore Railway Co.....	833 94	.....	83 88	.....
57	Nova Scotia Steel and Coal Co.....	1,683 33	.....	.....	161 05
58	Orford Mountain.....	4,822 92	79 25	168 81	53 80
59	Ottawa and New York ..	13,767 06	946 04	428 53	27 25
60	Père Marquette.....	237,324 73	9,268 22	3,656 01	2,547 76
61	Phillipsburg Railway and Quarry Co.....	.....	.....	.....	.....
62	Princeton Branch of Washington Co.....	2,067 23	.....	16 05	18 62
63	Quebec Central.....	140,055 65	.....	3,582 59	263 80
64	Quebec and Lake St. John.....	113,630 07	5,361 92	2,152 27	2,013 73
65	Quebec Railway, Light and Power Co.....	5,744 50	129 16	120 39	64 49
66	Quebec, Montreal and Southern.....	40,216 00	2,247 61	722 46	493 83
67	Red Mountain.....	3,962 05	197 59	51 20	45 15
68	Rutland and Noyan.....	1,130 78	52 53	40 15	17 41
69	Salisbury and Albert.....	7,289 18	.....	312 48	.....
70	Schomberg and Aurora .....	2,208 47	.....	.....	240 37
71	Stanstead, Sheffield and Chambly.....	11,656 37	362 59	183 73	167 46
72	St. Clair Tunnel.....	.....	.....	.....	.....
73	St. Lawrence and Adirondack.....	72,453 67	654 81	931 09	634 67
74	St. Martins.....	2,457 09	.....	53 00	48 00
75	Sydney and Louisburg ..	24,764 87	3,763 45	2,026 77	1,970 00
76	Spokane and British Columbia.....	444 86	18 70	2 70	4 25
77	Temiscouata.....	29,817 25	1,633 10	436 26	281 97
78	Temiskaming and Northern Ontario.....	189,111 06	9,998 92	3,491 27	1,902 88
79	Thousand Islands.....	6,926 42	.....	106 19	69 16
80	Toronto, Hamilton and Buffalo.....	90,118 31	3,534 19	1,651 67	1,019 00
81	Vancouver, Victoria and Eastern.....	75,411 53	2,835 51	1,180 75	867 50
82	Victoria Terminal Railway and Ferry Co..	346 93	12 55	14 09	1 30
83	Victoria and Sidney, B.C.....	4,616 77	168 25	188 51	17 31
84	Wabash Railroad Co. in Canada.....	185,743 00	8,313 32	3,387 20	3,305 63
85	Wellington Colliery Co.....	.....	.....	.....	.....
86	York and Carleton.....	450 00	.....	60 00	.....
	Final total.....	16,832,817 13	768,167 84	270,872 01	306,586 55



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for the Year ending June 30, 1910—Continued.

112	113	114	115	116	117	118	
EXPENSES—Continued.							
Operating Power Plants	Road Trainmen.	Train Supplies and Expenses.	Interlockers, Block and other Signals—Operation.	Crossing Flagmen and Gatemen.	Drawbridge Operation.	Clearing Wrecks.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
	3,118 05	374 58				184 53	55
	1,220 70	81 00					56
	1,900 46	75 07					57
	7,224 73	1,128 28	3,232 91		714 00		58
	88,675 14	25,611 71	4,447 65	845 15	354 00	1,353 09	59
							60
	979 47	187 20					61
	42,253 50	8,408 96				183 18	62
	29,486 89	9,689 20	17 88	1,001 13	416 22	1,077 36	63
	4,069 60		0 30	775 51	162 36	8 52	64
	10,912 09	10,496 56	2,421 01		573 37	263 72	65
	2,062 45	339 85				7 95	66
	689 08	164 90	4 87			14 00	67
	1,945 00	92 07				162 80	68
			949 00				69
	3,449 12	2,831 82			741 20	190 63	70
							71
	21,502 55	7,380 85	1,607 88	8 86		70 92	72
	1,945 37						73
	24,022 76	266 12		360 00			74
	145 67	13 11					75
	9,030 30	1,621 65				1,623 47	76
175 48	58,589 67	16,955 50				4,613 15	77
	1,118 00	133 43				62 75	78
	37,992 80	18,084 17	2,098 37	3,834 73		616 20	79
	37,691 99	9,278 36	1,454 60	800 00	2,908 36	5,779 44	80
	139 70	23 69					81
	1,856 60	319 73				4 27	82
	91,330 24	36,885 88		10 19		935 03	83
							84
	600 00	5 00					85
							86
175 48	7,247,121 40	2,428,155 75	230,629 58	128,315 59	41,167 50	314,005 59	



1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

Number.	120	121	122	123	124
	Name of Railway.	TRANSPORTATION			
		Telegraph and Telephone—Operation.	Operating Floating Equipment.	Express Service.	Stationery and Printing.
	§ cts.	§ cts.	§ cts.	§ cts.	
1	Alberta Railway and Irrigation Co. . . . .	1,383 01		655 12	3,769 30
2	Algoma Central and Hudson Bay. . . . .	989 69			673 41
3	Atlantic and Lake Superior. . . . .	215 39			
4	Atlantic, Quebec and Western. . . . .				53 79
5	Bay of Quinté . . . . .	46 27			1,336 61
6	Bedlington and Nelson. . . . .	0 45			
7	Bessemer and Barry's Bay. . . . .				
8	Brandon, Saskatchewan and Hudson Bay. . . . .	208 35			268 83
9	British Yukon. . . . .	1,371 25			529 10
10	Brockville, Westport and Northwestern. . . . .	127 05			
11	Canada Southern. . . . .	21,348 25	139,807 05		25,079 37
12	Canadian Government Railways—Intercolonial. . . . .	10,758 53	42,223 71		56,166 27
13	" " P. E. Island. . . . .	7,051 57	223 88		6,135 03
14	Canadian Northern. . . . .				57,813 30
15	Canadian Northern, Ontario. . . . .	1 60			3,921 96
16	Canadian Northern, Quebec. . . . .				5,778 58
17	Canadian Pacific. . . . .	129,509 70	47,726 16		233,063 98
18	Cape Breton. . . . .				
19	Caraget. . . . .	588 45			75 50
20	Carillon and Grenville. . . . .				
21	Central Ontario. . . . .	4 70			597 70
22	Crowsnest Southern. . . . .	212 60			463 76
23	Cumberland Railway and Coal Co. . . . .				
24	Dominion Atlantic. . . . .	30 59			3,657 30
25	Elgin and Havelock. . . . .				10 00
26	Eastern British Columbia. . . . .				251 02
27	Grand Trunk. . . . .	29,562 14	126,087 02		107,915 34
28	Grand Trunk (Canada Atlantic). . . . .	878 21			7,404 14
29	Halifax and Southwestern. . . . .	207 87		5,637 11	2,873 95
30	Hereford. . . . .	2 82			207 92
31	Inverness Railway and Coal Co. . . . .	78 14			216 87
32	Irondale, Bancroft and Ottawa. . . . .	1 75			85 27
33	Kaslo and Slocan. . . . .	158 38		120 00	68 58
34	Kent Northern. . . . .	100 69			
35	Kettle River Valley. . . . .				27 13
36	Kingston and Pembroke. . . . .				1,140 11
37	Klondike Mines. . . . .				167 45
38	Liverpool and Milton. . . . .				
39	Lotbinière and Mégantic. . . . .				181 49
40	London and Port Stanley. . . . .	409 78			735 07
41	Manitoulin and North Shore. . . . .				292 80
42	Maritime Coal Railway and Power Co. . . . .				5 90
43	Massawippi Valley. . . . .				506 26
44	Midland Railway Co. of Manitoba now Manitoba Great Northern. . . . .	106 32			190 73
45	Montreal and Atlantic. . . . .	134 82			4,117 13
46	Montreal and Province Line. . . . .	118 18			294 36
47	Montreal and Vermont Junction. . . . .	230 65			816 94
48	Morrissey, Fernie and Michel. . . . .				
49	Moncton and Buctouche. . . . .				
50	Napierville Junction. . . . .	372 54			273 45
51	Nelson and Fort Sheppard. . . . .	668 95			217 30
52	New Brunswick Coal and Ry. Co. . . . .				
53	New Brunswick and P. E. Island. . . . .				
54	New Brunswick Southern. . . . .				1,000 47
55	New Westminster Southern. . . . .	31 49			57 97
56	North Shore Railway Co. . . . .				

RAILWAY STATISTICS

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for the Year ending June 30, 1910—Continued

126	127	128	129	130	131	132	
EXPENSES—Continued.							
Other Expenses.	Loss and Damage—Freight.	Loss and Damage—Baggage.	Damage to Property.	Damage to Stock on Right of Way.	Injuries to Persons.	Total of Last Twenty-six Accounts.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
5 00	386 06		2,143 78	270 00		68,516 51	1
820 35	1 68		148 30	23 95	62 50	69,055 58	2
1,386 85	222 75					27,075 16	3
91 90	39 95					10,666 26	4
7,219 20	2 35			24 00	11 25	52,233 30	5
	1 88				0 89	594 88	6
						3,634 06	7
1,503 63	149 80	Cr. 5 01	300 17	29 53	18 41	35,453 81	8
1,753 41	58 92				0 96	23,555 24	9
	90 43				77 80	14,702 83	10
237 79	48,468 85	578 94	4,923 73	2,734 41	14,791 02	1,689,667 78	11
20,378 22	25,994 39	131 76	5,007 49	2,309 74	7,662 45	3,341,821 31	12
4 54	235 26		50 88	24 50		138,970 62	13
3,784 96	47,441 37	217 56	21,162 62	3,040 43	31,558 07	3,557,866 06	14
258 83	565 41	103 14	2,565 79	597 50	1,296 35	189,643 25	15
2,082 00	3,801 73	298 57	2,320 10	493 98	5,642 35	354,950 48	16
58,397 61	463,365 00	9,872 04	67,274 10	23,672 86	371,395 55	19,050,891 88	17
	11 25		15 00			4,595 07	18
	250 04			36 50		16,071 70	19
						1,009 00	20
4,821 49	64 74		57 00	95 00		68,172 59	21
2,518 83	509 77	Cr. 5 02	27 56	1,076 77	811 62	62,284 38	22
2,019 24						21,199 72	23
360 50	113 01	307 95	438 50	308 60	125 20	184,706 43	24
41 78						4,412 26	25
	0 28					7,539 68	26
98,257 57	171,992 91	2,840 46	24,596 10	13,169 60	124,088 92	7,349,720 63	27
1,287 62	13,552 46	Cr. 338 41	2,378 67	761 47	1,236 81	589,557 47	28
	538 35	42 50		28 00	208 13	134,339 46	29
	346 95	5 75	150 24	25 44	284 05	28,812 70	30
51 30	31 67			62 00		31,890 09	31
5 30	11 63			11 00		8,121 16	32
	13 48					7,362 78	33
						4,450 00	34
8 08						1,526 70	35
607 35	156 60	32 21	960 49	55 50	27 00	46,823 62	36
553 50	135 75		20 00			16,880 87	37
						4,022 23	38
1,169 38	13 05					9,241 73	39
8 40	1,198 80		193 68	21 47	1,961 63	47,723 22	40
1,868 58			4 18			18,170 60	41
99 37	55 60		807 77	119 00		25,680 69	42
	786 77				791 05	64,050 88	43
1,049 62	129 99	Cr. 3 52	47 99	2 62	16 00	24,511 45	44
126 29	4,782 91	134 85	8,682 43	324 00	19,182 04	269,628 94	45
	580 46	28 00	229 50	70 00	27 00	24,399 47	46
	1,203 13		141 50	24 27		31,068 22	47
1,543 98	16 25					1,560 23	48
305 20	11 11			9 00		7,315 66	49
11 24	42 94		3 05	10 00	13 40	17,075 19	50
1,239 51	81 19	Cr. 2 70	8 28	396 53	288 29	25,640 00	51
	22 40			25 00		23,548 83	52
				20 00		9,144 62	53
	19 21		302 80	84 00		16,761 91	54
92 00	361 47	1 08	7 95	528 89	51 02	8,830 03	55
						1,920 27	56

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

		120	121	122	123	124
Number.	Name of Railway.	TRANSPORTATION				
		Transportation and Telephone—Operations.	Operating Floating Equipment.	Express Service.	Stationery and Printing.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	
57	Nova Scotia Steel and Coal Co. ....					
58	Oxford Mountain .....					227 40
59	Ottawa and New York .....	1,665 75				1,056 52
60	Père Marquette .....	4,928 51	22,521 29			7,819 33
61	Phillipsburg Ry. and Quarry Co. ....					
62	Princeton Branch of Washington Co . . . . .					0 97
63	Quebec Central .....	2,903 17				4,405 46
64	Quebec and Lake St. John .....					2,391 57
65	Quebec Ry. Light and Power Co. ....					495 18
66	Quebec, Montreal and Southern .....	61 13				2,553 23
67	Red Mountain .....	32 48				69 76
68	Rutland and Noyan .....	14 79				63 52
69	Salisbury and Albert .....					36 13
70	Schomberg and Aurora .....					
71	Stanstead, Shefford and Chambly .....	140 52				328 12
72	St. Clair Tunnel .....					
73	St. Lawrence and Adirondack .....					596 98
74	St. Martins .....	98 50				
75	Sydney and Louisburg .....					
76	Spokane and British Columbia .....					24 22
77	Temiscouta .....					1,900 11
78	Temiskaming and Northern Ontario .....	16,193 64				11,722 23
79	Thousand Islands .....				305 02	279 39
80	Toronto, Hamilton and Buffalo .....	425 25				6,356 05
81	Vancouver, Victoria and Eastern .....	2,380 40	11,712 81			1,204 14
82	Victoria Terminal Ry. and Ferry Co. ....					
83	Victoria and Sidney, B.C. ....					
84	Wabash (in Canada) .....	1,435 86				5,298 12
85	Wellington Colliery Co. ....					
86	York and Carleton .....					
	Final total .....	237,189 55	390,301 92		6,717 25	575,269 34

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for the Year ending June 30, 1910—Continued.

126	127	128	129	130	131	132	
EXPENSES—Continued.							
Other Expenses.	Loss and Damage—Freight.	Loss and Damage—Baggage.	Damage to Property.	Damage to Stock on Right of Way.	Injuries to Persons.	Total of Last Twenty-six Accounts.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
						4,679 78	57
229 07	12 63			25 00		10,185 35	58
20 90	254 61		3,744 02	110 00	2,034 55	43,717 16	59
3,080 26	22,735 77		4,028 79	1,205 36	20,744 38	563,301 83	60
							61
	47 58	1 18				5,501 61	62
28,813 63	1,146 08	190 07	86 94	740 00	6,765 35	291,865 16	63
337 22	808 32	78 75	247 81	21 00	217 75	213,673 21	64
15 29	72 04			96 25	4 95	14,666 94	65
230 31	885 85		158 98	5 45	Cr. 55 35	87,229 90	66
438 37	184 21		7,879 19	1 28	124 31	17,508 61	67
1 70	73 39			6 33		3,153 33	68
6 00	35 17			34 00		12,830 20	69
87 00						3,484 84	70
	806 34		948 87	66 00	6,110 40	32,557 29	71
						44,153 83	72
	1,201 56	17 28	109 29	143 72	33 63	128,457 37	73
						6,102 46	74
					5,975 62	99,881 43	75
126 24	0 23					997 96	76
	300 16	146 50	671 60	63 50	28 00	55,270 17	77
389 25	1,369 49	168 46	247 09	890 65	5,327 60	394,805 35	78
2,753 62						14,065 63	79
339 50	2,152 05	0 35	1,148 21	672 00	1,658 88	217,427 08	80
7,361 95	846 46	1 21	1,678 77	1,890 68	23,985 87	235,856 66	81
0 30	3 37		2 45	14 86	1 78	767 99	82
	50 02		32 66	197 64	24 22	10,227 76	83
10,219 79	44,843 25	163 41	6,475 47	1,111 98	3,293 35	513,638 92	84
							85
						2,195 00	86
270,420 72	865,688 58	15,007 36	172,429 79	57,281 26	658,205 05	40,877,262 71	

TABLE 8.—SUMMARY of Operating Expense<sup>s</sup>

	133	134	135	136	138	139
Number.	TRANSPORTATION EXPENSES—Continued.					
	Name of Railway.					
	Operating Joint Tracks.— Dr.	Operating Joint Tracks.— Cr.	Total Movement Expenses.	Total Transportation Expenses.	Salaries and Expenses of General Officers.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1	Alberta Ry. and Irrigation Co.			101,981 62	105,470 28	9,270 00
2	Algoma Central and Hudson Bay			142,158 67	148,683 73	3,368 42
3	Atlantic and Lake Superior			32,723 09	33,200 44	2,529 16
4	Atlantic, Quebec and Western			13,294 51	13,294 51	2,280 00
5	Bay of Quinte	5,200 00		71,138 00	73,518 79	4,688 13
6	Bedlington and Nelson			608 21	648 17	52 03
7	Bessemer and Barry's Bay			4,204 69	4,204 69	125 00
8	Brandon, Saskatchewan and Hudson Bay			44,820 43	46,652 41	496 29
9	British Yukon			39,965 61	44,097 57	3,876 44
10	Brockville, Westport and North-western			17,585 12	17,585 12	4,702 93
11	Canada Southern	23,671 64	28,507 79	2,616,206 07	2,684,089 85	33,561 40
	Canadian Government Rys.—					
12	Intercolonial	10,885 69		4,583,033 22	4,802,924 06	20,462 83
13	Prince Edward Island			202,771 37	211,698 56	1,667 90
14	Canadian Northern			4,703,953 38	4,868,853 36	38,062 45
15	Canadian Northern, Ontario	12,508 07		250,175 89	262,117 72	4,028 34
16	Canadian Northern, Quebec	625 00	125 00	475,562 59	490,428 89	4,159 47
17	Canadian Pacific	30,360 00	5,701 25	26,299,521 50	27,425,187 61	285,035 26
18	Cape Breton			6,982 52	7,372 52	1,846 98
19	Caraguet			21,377 50	21,377 50	3,700 00
20	Carillon and Grenville			1,209 06	1,769 00	
21	Central Ontario			85,042 53	87,113 48	3,930 00
22	Crowsnest Southern			69,074 38	72,278 55	989 46
23	Cumberland Ry. and Coal Co.			24,999 89	27,224 49	
24	Dominion Atlantic			253,191 79	259,366 66	15,225 29
25	Elgin and Havelock			4,820 26	4,820 26	668 70
26	Eastern British Columbia			8,957 72	12,276 28	
27	Grand Trunk	10,181 97	126,355 93	10,315,618 06	10,576,862 25	164,116 83
28	Grand Trunk (Canada Atlantic)	1,196 34	1,582 63	872,033 56	906,833 82	8,178 82
29	Halifax and Southwestern			172,438 78	181,344 31	5,829 89
30	Hereford		27 20	40,721 81	41,771 17	678 63
31	Inverness Ry. and Coal Co.			43,335 06	43,935 06	1,758 91
32	Irondale, Bancroft and Ottawa			9,772 57	11,152 91	2,040 00
33	Kaslo and Slocan			11,218 32	12,938 96	9 66
34	Kent Northern			5,525 00	5,525 00	1,200 00
35	Kettle River Valley			1,649 37	1,719 87	253 93
36	Kingston and Pembroke			67,089 72	69,698 28	3,792 14
37	Klondike Mines			20,046 53	20,046 53	6,900 00
38	Liverpool and Milton			4,413 73	4,413 73	300 00
39	Lotbiniere and Megantic			10,386 24	10,386 24	3,878 40
40	London and Port Stanley		2,336 98	77,906 41	79,818 89	565 60
41	Manitoulin and North Shore			19,171 19	21,399 98	1,696 73
42	Maritime Coal, Ry. & Power Co.			27,018 94	27,018 94	2,380 00
43	Massawippi Valley	525 00		90,478 07	90,703 07	599 11
44	Midland Ry. Co. of Manitoba, now Manitoba Great Northern			32,650 73	33,686 54	324 22
45	Montreal and Atlantic	611 73		377,384 55	389,997 73	
46	Montreal and Province Line	165 00		30,498 33	31,304 02	381 36
47	Montreal, Vermont Junction			35,298 23	37,119 32	1,081 72
48	Morrissey, Fernie and Michel			33,493 29	35,413 29	2,068 13
49	Montreal and Buctouche			8,519 17	8,519 17	1,800 00
50	Napierville Junction			20,481 67	20,708 56	507 26
51	Neison and Fort Sheppard			34,849 49	36,967 94	574 24
52	New Brunswick Coal and Ry. Co.			32,144 32	32,144 32	2,337 41



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for the Year ending June 30, 1910—Continued.

140	141	142	143	144	145	146	
GENERAL EXPENSES.							
Salaries and Expenses of Clerks and Attendants.	General Office Supplies and Expenses.	Law Expenses.	Insurance.	Relief Department Expenses.	Pensions.	Stationery and Printing.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
4,579 20	822 94	517 50	1,726 26			2,024 83	1
2,778 01	2,326 02	1,454 57	3,567 61	415 27	2,352 21	597 25	2
1,554 65	653 48		435 10			270 93	3
	463 88		223 83			50 50	4
720 12	518 09	2,622 71	2,663 13			31 60	5
22 37		316 31	138 32				6
		40 00					7
1,026 21	70 90	760 48	1,156 64			163 75	8
3,486 24	1,843 37	605 73	1,432 65			207 43	9
435 00	372 35	625 00	178 50			54 15	10
56,179 33	2,474 24	30,570 49	2,756 44		3,619 83	7,149 66	11
85,495 17	3,955 50	7,625 47		8,349 98	62,859 50	12,912 42	12
5,723 86	312 85	73 35		6,273 29		1,136 43	13
113,529 19	21,371 17	45,138 23	101,088 68			15,734 65	14
9,646 25	1,460 44	2,579 33	8,452 57			661 60	15
10,037 11	1,812 33	5,856 96	11,548 73			1,179 23	16
459,612 19	74,617 39	270,743 42	307,280 00			86,844 09	17
	55 93		313 62			81 78	18
	105 00	61 95	191 75			101 00	19
	15 00					17 00	20
1,285 68	1,277 71	85 00	1,206 11			126 94	21
1,897 99	106 45	1,714 13	1,865 76			176 20	22
							23
8,410 58	4,484 75	3,837 47	6,092 26	90 00		1,055 55	24
	23 45		43 50			36 07	25
624 06	1 00		380 75			11 20	26
226,581 07	43,875 45	78,862 02	101,555 94	11,869 87	105,312 22	28,236 06	27
19,055 30	2,951 34	6,465 79	18,728 60		978 93	1,729 03	28
8,293 57	867 01	593 34	2,715 43			643 94	29
1,260 66	99 08	454 77	811 20		29 53	166 62	30
3,086 70	605 80	259 31	959 94			416 33	31
1,414 10	49 80		25 54			88 35	32
366 43	24 68		274 37			13 33	33
390 00	10 00		120 00			50 00	34
28 19	58 88		230 52			4 50	35
1,116 69	58 25	516 59	2,156 49			95 30	36
1,641 25	728 99	124 50	420 00			165 00	37
	71 77	62 78					38
1,232 85	61 84		616 00			76 92	39
2,302 76	143 15	514 78	764 79			193 15	40
1,414 02	771 45	881 67	522 08	190 12		240 59	41
51 75						252 28	42
1,731 65	97 41	1,458 07	460 72				43
766 61	39 98	1,145 24	1,110 11			72 52	44
18,604 02	6 80	3,788 44	3,776 56				45
832 03	51 76	294 48	297 03			111 47	46
2,046 94	124 91	200 19	517 52			278 84	47
1,750 25			294 51	1,369 90		411 35	48
	284 47					198 29	49
726 71	111 60					101 57	50
889 27	56 05	1,364 11	404 42			83 25	51
1,140 00			101 24			274 78	52



1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses for

Number.	133	134	135	136	138	139
	TRANSPORTATION EXPENSES—Continued.					
	Name of Railway.	Operating Joint Tracks. — Dr.	Operating Joint Tracks. — Cr.	Total Movement Expenses.	Total Transporta- tion Expenses.	Salaries and Expenses of General Officers.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
53	New Brunswick and P. E. Island			10,227 62	10,327 62	1,038 83
54	New Brunswick Southern			27,314 14	27,365 02	2,320 56
55	New Westminster Southern			8,873 69	9,242 02	189 49
56	North Shore Railway Co.			1,920 27	2,220 27	
57	Nova Scotia Steel and Coal Co.			5,765 78	5,765 78	
58	Orford Mountain			14,623 68	14,623 68	2,000 00
59	Ottawa and New York	1,250 86		71,414 07	74,381 38	1,536 70
60	Père Marquette	23,827 39	101 57	772,969 91	794,046 85	6,131 88
62	Princeton Branch of Washington Co.					2,500 00
63	Quebec Central			5,501 61	5,759 00	16 92
64	Quebec and Lake St. John			359,034 48	369,992 19	15,771 95
65	Quebec Ry., Light & Power Co.			251,972 36	264,996 91	6,683 50
66	Quebec, Montreal and Southern		2,424 20	24,587 57	25,596 96	1,117 32
67	Red Mountain			115,040 04	117,697 51	4,842 00
68	Rutland and Noyan			21,358 17	21,902 10	194 53
69	Salisbury and Albert			5,376 27	5,566 61	179 74
70	Schomberg and Aurora			14,134 42	14,134 42	1,514 20
71	Stanstead, Shefford & Chambly	127 79		3,484 84	3,484 84	
72	St. Clair Tunnel			42,130 43	43,046 00	387 56
73	St. Lawrence and Adirondack	36,324 99		48,097 14	54,565 30	
74	St. Martins			178,545 63	179,372 41	1,116 82
75	Sydney and Louisburg			7,019 21	7,019 21	360 06
76	Spokane and British Columbia			124,725 29	131,230 29	
77	Temiscouata			1,114 54	1,172 10	256 29
78	Temiskaming & Northern Ontario			65,659 82	71,928 79	5,839 55
79	Thousand Islands			565,655 91	580,596 00	16,727 56
80	Toronto, Hamilton and Buffalo	532 90	298 50	18,228 07	18,831 67	2,798 25
81	Vancouver, Victoria and Eastern			320,252 94	340,049 01	10,126 63
82	Victoria Terminal Ry. and Ferry Co.			292,057 22	302,462 08	2,532 83
83	Victoria and Sidney, B.C.			1,052 33	1,080 89	
84	Wabash in Canada	98,070 14	141 43	14,043 47	14,426 87	
85	Wellington Colliery Co.			922,087 48	938,059 85	9,995 42
86	York and Carleton			17,347 71	17,347 71	
				2,195 00	2,195 00	
	Final total	256,064 51	167,602 48	56,803,322 81	58,928,170 74	754,158 00

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the Year ending June 30, 1910—Continued.

140		141		142		143		144		145		146		Number.		
GENERAL EXPENSES.																
Salaries and Expenses of Clerks and Attendants.		General Office Supplies and Expenses.		Law Expenses.		Insurance.		Relief Department Expenses.		Pensions.		Stationery and Printing.				
\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.			
250	00	50	00											15	00	53
882	83	322	12	75	50	970	32			302	40			32	59	54
280	08	11	94	498	32	180	53							35	05	55
		64	95													56
																57
		161	64	342	15											58
2,165	64	362	32	1,580	41	785	89			1	13			263	31	59
26,598	09	1,523	96	5,464	50	6,688	39							2,050	41	60
600	00	10	00													61
184	15			99	41	25	74							9	55	62
7,915	30	1,893	74	342	20	7,200	00			5,786	56			1,207	96	63
8,400	43	2,190	72	1,850	71	4,313	65							699	95	64
1,629	91	331	30	119	96	1,178	71							121	59	65
6,731	09	1,296	85	47	14	1,948	00							607	42	66
335	28	21	85	1,120	71	220	48							31	61	67
158	82	23	69	62	56									25	38	68
		1	00			54	50							48	60	69
				90	24	108	00							22	14	70
824	25	50	72	263	88	207	03							111	80	71
		61	21			3,135	90									72
3,625	97	593	65	941	89	309	85			13	10			422	08	73
300	00					78	25							132	30	74
3,856	44															75
23	38	110	54			237	90							1	25	76
636	65	909	82	268	35	1,699	41							389	53	77
20,584	38	5,319	71	5,024	20	19,160	76							2,317	97	78
301	85	39	19	157	10	232	08									79
8,207	11	841	35	2,735	77	1,940	00							549	03	80
4,796	76	298	76	3,638	80	5,649	12							441	82	81
147	72	19	32	185	20									47	69	82
1,540	53	174	63	469	65									646	89	83
33,117	01	6,046	91	14,067	14	8,758	80							2,916	31	84
																85
						35	00							15	00	86
1,197,850	70	193,026	52	511,659	98	654,633	93	28,558	43	181,255	41	177,661	48			

1 GEORGE V., A. 1911

TABLE 8.—SUMMARY of Operating Expenses

		147	148	149	150	151
Number.	Name of Railway.	GENERAL EXPENSES—Continued.				
		Other Expenses.	Total of Foregoing Accounts.	General Administration, Joint Tracks Yards and Terminals. Dr.	General Administration, Joint Tracks, Yards and Terminals. Cr.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Alberta Railway and Irrigation Co . . . . .	3,576 36	22,517 09			
2	Algoma Central and Hudson Bay . . . . .	1,178 03	18,037 39			
3	Atlantic and Lake Superior . . . . .	1,949 20	7,392 52			
4.	Atlantic, Quebec and Western . . . . .	1,590 04	4,608 25			
5	Bay of Quinté . . . . .	114 10	11,357 88			
6	Bedlington and Nelson . . . . .	17 69	546 72			
7	Bessemer and Barry's Bay . . . . .	99 71	264 71			
8	Brandon, Saskatchewan and Hudson Bay . . . . .	118 58	3,732 86			
9	British Yukon . . . . .	31 88	11,483 74			
10	Brockville, Westport and Northwestern . . . . .	277 50	6,645 43			
11	Canada Southern . . . . .	876 17	137,178 56	320 60		
12	Canadian Government Railways—Intercolonial.	5,057 37	206,718 24			
13	" " " P. E. Island.	228 17	15,415 85			
14	Canadian Northern . . . . .	27,747 38	362,671 75			
15	" " Ontario . . . . .	270 09	27,101 69			
16	" " Quebec . . . . .	2,908 13	37,501 96			
17	Canadian Pacific . . . . .	200,137 39	1,684,269 65			
18	Cape Breton . . . . .	103 97	2,402 28			
19	Caracquet . . . . .	304 00	4,463 70			
20	Carillon and Grenville . . . . .	10 21	42 21			
21	Central Ontario . . . . .		7,911 44			
22	Crowsnest Southern . . . . .	193 82	6,943 81			
23	Cumberland Railway and Coal Co. . . . .					
24	Dominion Atlantic . . . . .	8,225 83	47,421 73			
25	Elgin and Havelock . . . . .	31 20	802 92			
26	Eastern British Columbia . . . . .		1,017 01			
27	Grand Trunk . . . . .	24,408 80	784,818 26	2,080 61		15,064 56
28	" " —Canauda Atlantic . . . . .	575 79	58,663 60			10 60
29	Halifax and Southwestern . . . . .	186 98	19,130 16			
30.	Hereford . . . . .	108 13	3,608 62			
31	Inverness Railway and Coal Co. . . . .	216 25	7,303 24			
32	Irondale, Bancroft and Ottawa . . . . .	5 10	3,623 29			
33	Kaslo and Slocan . . . . .	10 03	698 50			
34	Kent Northern . . . . .	20 00	1,790 00			
35	Kettle River Valley . . . . .	100 32	676 14			
36	Kingston and Pembroke . . . . .	1,809 76	9,545 22			
37	Klondike Mines . . . . .	787 98	10,767 72			
38	Liverpool and Milton . . . . .	161 09	595 64			
39	Lotbinière and Megantic . . . . .	3,907 01	9,773 02			
40	London and Port Stanley . . . . .	226 26	4,710 49			105 74
41	Manitoulin and North Shore . . . . .	1,609 39	7,326 05			
42	Maritime Coal, Railway and Power Co. . . . .	57 48	2,741 51			
43	Massawippi Valley . . . . .		4,346 96			
44	Midland Railway Co. of Manitoba (now Manitoba Great Northern). . . . .	65 42	3,524 10	96 87		
45	Montreal and Atlantic . . . . .	304 00	26,479 82			
46	Montreal and Province I ne. . . . .	25 21	1,903 34			
47	Montreal and Vermont Junction . . . . .	63 14	4,313 26			
48	Morrissey, Fernie and Michel . . . . .	484 09	6,378 23	11,846 28		
49	Moncton and Buctouche . . . . .		2,282 68			
50	Napierville Junction . . . . .	208 84	1,635 98			
51	Nelson and Fort Sheppard . . . . .	107 14	3,478 48			
52	New Brunswick Coal and Coke Co. . . . .	5,756 93	9,610 36			
53	New Brunswick and Prince Edward Island . . . . .		1,353 83			
54	New Brunswick Southern . . . . .		4,906 32			

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for the Year ending June 30, 1910—Continued.

153		154		155		156		157		158		160		Number.
RECAPITULATION OF EXPENSES.														
Total General Expenses.		Maintenance of Way and Structures.		Maintenance of Equipment.		Traffic Expenses.		Transportation Expenses.		General Expenses.		Total Operating Expenses.		Number.
\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
22,517 09		74,957 19		37,508 65				105,470 28		22,517 09		240,453 21		1
18,037 39		77,420 98		41,712 18		2,143 45		148 683 73		18,037 39		287,997 73		2
7,392 52		27,922 46		16,653 10				33,200 44		7,392 52		85,168 52		3
4,608 25		5,906 34		2,634 84				13,294 51		4,608 25		26,443 94		4
11,357 88		24,134 69		20,253 17		3,379 92		73,518 79		11,357 88		132,688 45		5
546 72		4,464 46		316 40				648 17		546 72		5,975 75		6
264 71		2,092 88		432 07				4,204 69		264 71		6,994 37		7
3,732 86		33,189 79		8,614 60		2,885 78		46,652 41		3,732 86		95,075 44		8
11,483 74		40,543 40		14,048 80		6,491 86		44,097 57		11,483 74		116,665 37		9
6,645 43		10,533 55		2,855 47		291 92		17,585 12		6,645 43		37,911 49		10
137,499 16		1,045,650 76		1,007,292 62		238,655 45		2,684,089 85		137,499 16		5,113,187 84		11
206,718 24		1,755,106 06		1,867,711 90		182,807 86		4,802,924 06		206,718 24		8,815,268 12		12
15,415 85		121,811 38		79,120 03		1,168 05		211,698 56		15,415 85		429,213 87		13
362,671 75		2,047,830 97		1,761,641 69		153,512 02		4,868,853 36		362,671 75		9,194,509 79		14
27,101 62		101,880 82		73,568 20		12,555 90		262,117 72		27,101 62		477,224 26		15
37,501 96		233,408 28		110,697 11		15,253 28		490,428 89		37,501 96		887,289 52		16
1,684,269 65		13,653,938 04		12,567,493 86		2,436,651 26		27,425,187 61		1,684,269 65		57,767,540 42		17
2,462 28		5,522 02		1,096 54		425 00		7,372 52		2,462 28		16,818 36		18
4,463 70		19,136 90		7,422 78		839 36		21,377 50		4,463 70		53,240 24		19
42 21		1,857 00		1,033 00				1,769 00		42 21		4,701 21		20
7,911 44		54,889 68		16,854 57		2,085 48		87,113 48		7,911 44		168,854 65		21
6,943 81		89,308 40		23,276 95		4,722 30		72,278 55		6,943 81		196,530 01		22
.....		12,793 74		3,365 30				27,224 49		.....		43,383 53		23
47,421 73		113,007 33		61,529 12		32,629 08		259,366 66		47,421 73		513,953 92		24
802 92		5,765 87		371 96				4,820 26		802 92		11,761 01		25
1,017 01		10,319 71		5,407 00				12,976 28		1,017 01		29,020 00		26
771,834 31		4,292,685 11		5,985,397 13		908,717 26		10,576,862 25		771,834 31		22,535,496 06		27
58,653 00		382,558 76		253,289 80		66,098 08		906,833 82		58,653 00		1,667,433 46		28
19,130 16		87,100 39		47,913 66		9,828 86		181,344 31		19,130 16		345,317 38		29
3,608 62		34,102 22		16,127 27		1,295 00		41,771 17		3,608 62		96,904 28		30
7,303 24		30,278 80		22,845 04		268 06		43,935 06		7,303 24		104,630 20		31
3,623 29		12,269 42		3,255 11		101 67		11,152 91		3,623 29		30,402 40		32
68 50		16,248 39		5,072 33				12,938 96		68 50		34,958 18		33
1,790 00		3,625 00		250 00		100 00		5,525 00		1,790 00		11,290 00		34
676 14		2,499 22		901 56		110 86		1,719 87		676 14		5,907 65		35
9,545 22		55,084 89		24,084 55		1,555 46		69,698 28		9,545 22		159,968 40		36
10,767 72		17,217 72		4,564 74		470 00		20,046 53		10,767 72		53,066 71		37
595 64		1,360 60		875 75				4,413 73		595 64		7,245 72		38
9,773 02		7,793 10		4,540 64				10,386 24		9,773 02		32,493 00		39
4,604 75		18,827 59		17,139 32		5,533 69		79,818 89		4,604 75		125,924 24		40
7,346 05		11,214 08		8,564 59		268 16		21,399 98		7,326 05		48,772 86		41
2,741 51		7,930 38		6,131 46				27,018 94		2,741 51		43,822 29		42
4,346 96		31,510 05		20,468 20		1,453 29		90,703 07		4,346 96		148,481 57		43
3,620 97		37,216 06		8,612 36		1,969 15		33,686 54		3,620 97		85,105 08		44
26,479 82		261,453 12		132,954 90		9,321 54		889,997 73		26,479 82		820,207 11		45
1,903 34		28,612 40		1,002 41		1,492 09		31,304 02		1,903 34		64,314 26		46
4,313 26		12,211 28		8-9 54		6,115 41		37,119 32		4,313 26		60,648 81		47
18,224 51		10,825 52		14,381 98				35,413 29		18,224 51		78,845 30		48
2,282 76		10,203 25		1,813 52				8,519 17		2,282 76		22,818 70		49
1,655 98		5,340 24		6,697 91		418 69		20,708 56		1,655 98		34,821 38		50
3,478 48		69,716 64		7,698 03		2,342 12		36,967 94		3,478 48		120,203 21		51
9,610 36		20,166 57		15,919 75				32,144 32		9,610 36		77,841 00		52
1,353 83		9,548 80		4,890 33				10,327 62		1,353 83		26,120 58		53
4,906 32		33,975 89		10,278 41		212 96		27,365 02		4,906 32		76,738 60		54

1 GEORGE V., A. 1911

TABLE 8.—Summary of Operating Expenses

		147	148	149	150	151
GENERAL EXPENSES—Continued.						
Number.	Name of Railway.	Other	Total	General	General	
		Expenses.	of Foregoing	Administra- tion Joint	Administra- tion Joint	
			Accounts.	Tracks, Yards, and Terminals. Dr.	Tracks, Yards, and Terminals. Cr.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	
55	New Westminster Southern.....	26 81	1,222 22			
56	North Shore Railway Co.....		64 96			
57	Nova Scotia Steel and Coal Co.....					
58	Orford Mountain.....		2,532 57			
59	Ottawa and New York.....	95 06	6,790 49	7 74		
60	Père Marquette.....	2,427 95	50,885 18			
61	Phillipsburg Railway and Quarry Co.....		3,110 00			
62	Princeton Branch of Washington Co.....	31 87	367 44			
63	Quebec Central.....	28,796 55	68,914 26			
64	Quebec and Lake St. John.....	8,316 30	32,455 26			
65	Quebec Railway Light and Power Co.....	5,562 25	10,061 04			
66	Quebec, Montreal and Southern.....	288 26	15,760 76			
67	Red Mountain.....	45 17	1,669 63			
68	Rutland and Noyan.....	9 12	459 31			
69	Salisbury and Albert.....	52 17	1,670 47			
70	Schomberg and Anrova.....	127 89	348 27			
71	Stanstead, Shefford and Chambly.....	30 07	1,875 31			
72	St. Clair Tunnel.....		3,197 11			
73	St. Lawrence and Adirondack.....	72 50	7,095 86			
74	St. Martins.....	212 85	1,083 40			
75	Sydney and Louisburg.....	12,214 15	16,070 59			
76	Spokane and British Columbia.....	9 91	639 27			
77	Temiscouata.....	4,375 02	14,118 33	540 00		
78	Teniskaming and Northern Ontario.....	500 16	69,634 74			
79	Thousand Islands.....	21 27	3,549 65			
80	Toronto, Hamilton and Buffalo.....	154 64	24,554 53			
81	Vancouver, Victoria and Eastern.....	504 90	17,862 99			
82	Victoria, Terminal Railway and Ferry Co.....	1 00	400 93			
83	Victoria and Sidney, B. C.....	1 00	2,832 70			
84	Wabash in Canada.....	628 34	75,529 93	14,019 80		104 42
85	Wellington Colliery Co.....					
86	York and Carleton.....		50 00			
		360,756 97	4,059,561 42	28,911 90		15,285 32



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for the Year ending June 30, 1910 — *Continued.*

153	154	155	156	157	158	160	
RECAPITULATION OF EXPENSES.							
Total General Expenses.	Maintenance of Way and Structures.	Maintenance of Equipment.	Traffic Expenses.	Transporta- tion Expenses.	General Expenses.	Total Operating Expenses.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1,222 22	12,438 92	2,925 46	503 83	9,242 02	1,222 22	26,332 45	55
64 96	949 65	120 60	.....	2,220 27	64 96	3,355 48	56
.....	3,692 85	1,037 86	.....	5,765 78	.....	10,496 49	57
2,532 57	13,415 66	3,068 29	228 46	14,623 68	2,532 57	33,868 66	58
6,798 23	45,867 98	17,151 45	6,456 54	74,381 38	6,798 23	150,655 58	59
50,885 18	273,589 68	322,842 63	59,219 83	794,046 85	50,885 18	1,500,584 17	60
3,110 00	.....	.....	.....	.....	3,110 00	3,110 00	61
367 44	2,808 04	1,659 87	172 84	5,759 00	367 44	10,767 19	62
68,914 26	162,970 06	133,524 62	24,154 62	369,992 19	68,914 26	759,555 75	63
32,455 26	118,416 04	118,536 35	12,512 53	264,996 91	32,455 26	546,917 09	61
10,061 04	6,092 44	5,147 61	1,401 38	25,596 96	10,061 04	48,299 43	65
15,760 76	65,217 95	52,138 12	4,489 97	117,697 51	15,760 76	255,304 31	66
1,969 63	16,612 15	1,747 95	498 28	21,902 10	1,969 63	42,730 11	67
459 31	1,358 78	1,652 76	381 12	5,566 61	459 31	9,418 58	68
1,670 47	13,510 21	5,173 00	55 99	14,134 42	1,670 47	34,544 09	69
548 27	8,377 27	753 95	.....	3,484 84	348 27	12,964 33	70
1,875 31	22,368 04	2,575 18	2,101 95	43,046 00	1,875 31	71,966 48	71
3,197 11	42,051 04	13,386 34	.....	54,565 50	3,197 11	113,199 79	72
7,095 86	68,516 48	34,051 94	4,949 97	179,372 41	7,095 86	293,986 66	73
1,083 40	6,150 32	1,025 07	395 06	7,019 21	1,083 40	15,673 06	74
16,070 59	58,885 74	87,437 84	181 90	131,230 29	16,070 59	293,806 36	75
639 27	2,508 26	776 09	66 67	1,172 10	639 27	5,162 39	76
14,658 33	51,936 41	26,994 76	3,358 73	71,928 79	14,658 33	168,877 02	77
69,634 74	337,001 74	149,746 23	14,231 45	580,596 00	69,634 74	1,142,210 16	78
3,549 65	5,270 91	2,904 09	354 44	18,831 67	3,549 65	30,910 76	79
24,554 53	122,993 04	86,485 47	14,490 44	340,049 01	24,554 53	588,572 49	80
17,862 99	265,739 38	66,276 93	12,744 54	302,462 05	17,862 99	665,085 92	81
400 93	539 53	135 45	69 62	1,080 89	400 93	2,226 42	82
2,832 70	7,236 59	1,840 68	930 38	14,426 87	2,832 70	27,267 22	83
89,445 31	202,768 10	474,249 97	88,056 06	938,059 85	89,445 31	1,792,579 29	84
.....	9,893 01	36,257 54	.....	17,347 71	.....	63,498 26	85
50 00	1,455 00	165 00	.....	2,195 00	50 00	3,865 00	86
4,073,188 00	27,035,603 46	26,002,301 30	4,366,176 92	58,928,170 74	4,073,188 00	120,405,440 42	



TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage and Mileage Operated for the Year ending June 30, 1910.

Number.	Name of Railway.	Passengers Carried.		Passengers Carried (One Mile.	Mileage of Revenue Passenger Trains.	Mileage of Revenue Mixed Trains.	Total Passenger Revenue.		Total Passenger Earnings.	Total other Earnings.
		No.	No.				\$	cts.		
1	Alberta Railway and Irrigation Co.	87,619	3,641,180	44,750	44,880	99,050	12	111,202	78	21,292
2	Algona Central and Hudson Bay	16,206	545,549	1,433	36,215	20,597	03	20,605	18	140,927
3	Atlantic and Lake Superior	25,836	1,363,498		93,900	28,868	30	33,626	78	4,488
4	Atlantic, Quebec and Western	12,546	176,154		17,044	5,621	88	5,663	28	20
5	Bay of Quinte	93,071	1,483,422		158,428	31,246	98	40,088	31	5,854
6	Bedlington and Nelson	438	3,033		1,421	106	88	160	81	
7	Bessener and Barry's Bay				3,000					
8	Brandon, Saskatchewan and Hudson Bay	35,850	1,125,777	43,970		20,558	04	33,338	18	136
9	British Yukon	11,015	987,998	1,556	55,620	71,619	56	78,283	49	4,293
10	Brockville, Westport and Northwestern	61,721	1,851,630	28,950	27,880	27,169	78	32,139	80	10
11	Canada Southern	1,164,119	95,298,437	1,074,207	132,817	2,634,844	54	2,634,309	09	32,081
12	Canadian Government—Intercolonial	3,176,154	156,861,219	2,506,804	379,227	2,653,156	87	3,234,156	83	99,996
13	" " P. E. Island.	352,528	7,932,277	132,386	186,114	139,905	77	168,175	49	929
14	Canadian Northern	1,268,296	106,217,424	1,912,582	528,288	2,320,520	52	2,631,993	57	1,095,861
15	Canadian Northern, Ontario	136,275	6,280,002	198,071	133,651	138,160	86	151,944	29	17,832
16	Canadian Northern, Quebec	441,498	13,868,889	297,063	170,682	257,499	68	283,002	62	10,195
17	Canadian Pacific	11,050,924	1,341,255,609	16,119,543	1,672,993	24,428,281	82	27,537,231	29	1,516,009
18	Cape Breton	7,332	166,680		19,468	4,741	55	5,000	36	21
19	Caraguet	15,632	576,216		43,241	15,417	21	18,309	84	
20	Carillon and Grenville	3,560	43,480		2,418	1,287	98	1,287	98	791
21	Central Ontario	147,388	3,431,460	104,440	45,072	75,305	72	80,382	87	7,652
22	Crowsnest Southern	22,528	588,711	46,104		21,080	00	23,774	09	1,308
23	Cumberland Railway and Coal Co.	28,102	457,019		36,132	12,629	71	16,207	12	
24	Dominion Atlantic	370,843	16,317,092	305,061	184,545	347,340	63	397,509	58	2,678
25	Elgin and Havelock	10,903	141,739		18,720	3,135	69	3,119	74	3,908
26	Eastern British Columbia	6,131	71,128		7,584	3,842	10	4,073	60	61
27	Grand Trunk	10,476,669	511,285,206	7,679,627	522,467	9,084,100	92	10,772,106	84	326,221
28	Grand Trunk, Canada Atlantic	544,323	17,901,491	602,554	136,610	339,283	41	460,425	83	42,729
29	Halifax and Southwestern	177,644	7,227,160	83,821	227,537	180,081	09	209,403	89	2,118
30	Herford	26,730	653,158	33,529	21,412	14,676	69	18,205	62	1,540
31	Inverness Railway and Coal Co.	34,597	817,082		42,660	21,096	42	22,487	59	1,306
32	Irontale, Bancroft and Ottawa	11,392	268,931		31,814	5,977	57	7,310	08	291

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33	Kaslo and Sloacan.....	40,503	7,033	2,630 18	3,029 44
34	Kent Northern.....	256,500	16,902	7,136 02	8,303 06
35	Kettle River Valley.....	10,447	2,136	415 75	415 75
36	Kingston and Pembroke	1,905,720	97,884	48,364 08	4,342 61
37	Klondike Mines.....	72,277	3,886	10,697 00	11,563 50
38	Liverpool and Milton.....	36,960	3,430	462 00	402 00
39	London and Port Stanley	2,995,373	15,500	33,528 16	39,524 76
40	Lotbiniere and Megantic	175,326	18,780	4,656 85	6,156 25
41	Manitounin and North Shore	77,049	13,613	3,063 70	3,063 90
42	Maritime Coal, Railway and Power Co.	208,557	21,180	6,919 10	7,834 46
43	Massawippi Valley.....	2,879,969	3,768	64,028 06	68,443 50
44	Manitoba Great Northern.....	318,298	27,589	7,365 56	8,439 87
45	Moncton and Buctouche.....	21,625	21,390	8,819 36	9,772 09
46	Montreal and Atlantic.....	7,436,203	163,166	176,465 72	202,625 18
47	Montreal and Province Line.....	2,382,795	16,786	48,312 53	54,740 75
48	Montreal and Vermont Junction.....	2,706,863	63,166	55,805 03	64,349 06
49	Morrissey Fernie and Michel	642,391	35,424	10,681 65	10,681 65
50	Napierville Junction Railway.....	157,498	16,902	4,277 03	5,062 65
51	Nelson and Fort Sheppard.....	682,133	37,157	24,356 86	29,540 31
52	New Brunswick Coal and Railway Co.	516,336	70,326	13,681 98	15,425 52
53	New Brunswick and Prince Edward Island.....	364,820	24,610	8,580 09	9,738 58
54	New Brunswick Southern.....	746,171	52,105	17,665 61	23,187 72
55	New Westminster Southern.....	323,690	10,680	11,631 04	14,547 96
56	North Shore.....	6,256	4,800	199 55	139 55
57	Nova Scotia Steel and Coal Co.	51,429	17,628	1,581 50	1,893 30
58	Orford Mountain.....	189,255	34,927	5,037 50	5,739 93
59	Ottawa and New York.....	2,933,630	76,549	64,745 11	72,873 21
60	Pere Marquette (in Canada).....	6,161,438	4,890	125,269 30	155,437 25
61	Phillipsburg Railway and Quarry Co. Railway	363,566	6,316	6,767 65	7,429 29
62	Princeport Branch of Washington Co. Railway	15,901,287	238,609	331,172 83	367,967 19
63	Quebec Central.....	11,052,901	41,107	205,599 49	237,473 69
64	Quebec and Lake St. John.....	1,253,091	11,327	14,041 87	14,041 87
65	Quebec Railway, Light and Power Co.	4,450,880	66,875	107,150 42	120,012 63
66	Quebec, Montreal and Southern.....	84,929	6,652	2,970 84	3,867 60
67	Red Mountain.....	411,102	4,614	9,184 02	9,421 38
68	Ridland and Noyan.....	336,653	38,276	8,970 45	11,790 22
69	Salisbury and Harvey.....	152,118	21,843	4,659 51	4,659 51
70	Schomberg and Antrora.....	1,216,076	17,811	28,521 84	36,739 07
71	Stamstead, Shefford and Chambly	11,921,528	182,052	182,652 84	194,697 61
72	St. Clair Tunnel.....	204,155	18,020	3,121 91	6,139 16
73	St. Lawrence and Adirondack	660,490	36,695	16,651 80	19,531 94
74	St. Martins.....	2,767	1,144	97 62	99 10
75	Sydney and Lonsburg Dom. Coal Co.	2,755,791	70,670	67,954 39	76,646 39
76	Spokane and British Columbia	25,609,325	355,446	636,613 61	693,657 98
77	Temiscouata.....	183,858	33,312	8,388 46	11,913 83
78	Temisaming and Northern Ontario.....	13,970,010	282,623	271,645 55	290,014 80
79	Thousand Islands.....	6,023,850	134,282	179,809 37	196,433 96
80	Toronto, Hamilton and Buffalo.....	880,376	6,822	20,370 06	20,793 21
81	Vancouver, Victoria and Eastern	72,464	7,347	84 38	84 38
82	Victoria and Sidney, B.C.....	7,347	2,887 61	2,887 61	2,887 61
		11,470	8,543 59	8,543 59	8,543 59
		303,486	103 39	103 39	103 39
		23,034	229 16	229 16	229 16
		782	135 96	135 96	135 96
		7,347	139 55	139 55	139 55
		11,470	1,893 30	1,893 30	1,893 30
		303,486	5,739 93	5,739 93	5,739 93
		23,034	89 00	89 00	89 00
		782	2,815 23	2,815 23	2,815 23
		7,347	7,025 21	7,025 21	7,025 21
		11,470	155,437 25	155,437 25	155,437 25
		303,486	7,429 29	7,429 29	7,429 29
		782	6,842 11	6,842 11	6,842 11
		7,347	3,708 53	3,708 53	3,708 53
		11,470	76,700 35	76,700 35	76,700 35
		303,486	9,386 97	9,386 97	9,386 97
		782	290,014 80	290,014 80	290,014 80
		7,347	196,433 96	196,433 96	196,433 96
		11,470	307 47	307 47	307 47

TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage, and Mileage Operated, for the Year ending June 30, 1910—Continued.

Number.	1 Name of Railway.	2 Passengers Carried.	3 Passengers Carried one mile	4 Mileage of Revenue Passenger Trains.	5 Mileage of Revenue Mixed Trains.	6 Total Passenger Revenue.	7 Total Passenger Earnings.	B Total other Earnings.
83	Victoria Terminal and Ferry Co.....	56,609	64,534	479	1,010	2,002 74	2,034 32	22 88
84	Wabash Railway Co. (in Canada).....	574,785	36,562,834	713,586	.....	630,216 04	667,447 54	5,589 72
85	Wellington Colliery Co.....	6,185	55,738	4,504	.....	2,976 65	3,215 65	.....
86	York and Carleton.....	6,950	38,200	.....	8,502	2,159 00	2,419 70	.....
	Total.....	35,804,575	2,466,729,664	35,023,541	6,441,440	46,018,879 56	52,956,218 51	3,562,394 59

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TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage and Mileage Operated for the Year ending June 30, 1910—Continued.

Number.	Name of Railway.	Tons Carried.		Tons Carried One Mile.		Mileage of Revenue Mixed Trains.		Mileage of Freight Trains.		Total Freight Revenue.		Total Freight Earnings.		Total Revenue Train Mileage.		Total Gross Earnings.		Total Operating Expenses.		Mileage Operated on June 30		
		Number.		Number.		Miles.		Miles.		\$	cts.	\$	cts.	Miles.		\$	cts.	\$	cts.		Miles.	
1	Alberta Ry. and Irrigation Co.	178,090		8,727,325		44,880		39,486		244,956		64		129,116		377,452		28		240,453		21
2	Algonia Central and Hudson Bay	277,946		6,341,160		36,245		15,726		234,546		58		53,423		396,079		73		287,997		73
3	Atlantic and Lake Superior	31,169		1,122,084		93,900		47,806		47,806		07		93,900		85,168		00		85,168		00
4	Atlantic, Quebec and Western	14,974		5,207,252		17,044		10,887		10,887		12		17,044		16,571		37		26,443		94
5	Bay of Quinte	159,097		5,807,569		158,428		5,735		121,792		89		164,163		167,735		32		132,688		45
6	Bedington and Nelson	6,000		19,741		1,421		31		1,050		07		1,452		1,910		88		5,975		75
7	Bessemer and Barry's Bay	24,375		124,875		3,000		3,710		3,710		59		3,000		3,710		59		6,994		85
8	Brandon, Sask., & Hudson Bay	66,623		2,881,863		25,006		41,730		41,990		75		68,976		73,465		18		95,075		44
9	British Yukon	23,744		2,023,641		55,620		1,112		246,507		73		58,258		328,494		60		116,665		37
10	Brookville, Westport and Northwestern	22,456		673,680		27,880		370		27,653		85		57,330		59,863		65		37,911		49
11	Canada Southern	6,752,247		1,084,838,260		132,817		1,888,435		6,117,596		94		6,167,553		49		2		8,833,944		02
	Canadian Government—																					
12	Intercolonial	3,984,054		1,106,777,165		379,227		6,120,691		6,181,392		12		6,781,677		9,515,554		93		8,815,268		12
13	P. E. Island	103,100		3,503,868		186,114		146,631		148,926		31		325,018		318,031		58		429,213		87
14	Canadian Northern	3,809,856		1,326,351,140		598,288		3,370,992		9,955,299		93		5,814,446		13,833,061		63		9,194,509		79
15	Canadian Northern, Ontario	431,261		38,264,663		133,051		114,923		337,749		83		446,361		510,989		72		477,224		26
16	Canadian Northern, Quebec	641,052		49,293,363		170,682		169,181		642,343		81		617,448		940,646		63		887,289		52
17	Canadian Pacific	20,551,368		7,569,824,352		1,672,993		20,574,376		58,904,000		20		59,243,881		88,397,562		33		57,707,540		42
18	Cape Breton	2,869		58,092		19,468		2,271		2,271		66		19,468		7,293		83		16,818		36
19	Caracou	26,218		1,179,810		43,241		34,961		34,961		40		43,241		53,271		24		53,240		24
20	Carillon and Grenville	45		585		2,418		64		64		12		2,418		2,143		60		4,701		21
21	Central Ontario	273,145		9,941,384		45,072		49,866		209,761		16		199,378		306,796		80		168,854		65
22	Crownst Southern	224,166		10,906,894		36,132		63,274		133,340		07		109,378		158,483		07		196,530		01
23	Cumberland Ky. and Coal Co.	92,764		1,350,160		184,545		65,166		437,189		16		536,342		837,377		08		43,383		53
24	Dominion Atlantic	342,257		17,112,850		184,720		9,805		9,805		92		18,720		10,594		22		11,761		01
25	Elgin and Havelock	13,531		189,434		18,720		25,526		25,526		21		7,584		29,659		98		29,020		00
26	Eastern British Columbia	112,488		1,306,063		7,584		9,044		19,968		630		34		31,342		500		22,535		496
27	Grand Trunk	16,751,345		2,972,874,528		522,467		9,044,555		19,968,630		34		17,250,320		31,342,500		46		22,535,496		06
28	Grand Trunk, Canada Atlantic	1,534,984		216,811,025		136,610		673,680		1,439,373		09		1,412,926		2,035,805		94		1,647,433		46
29	Grand Trunk and Southwestern	173,850		10,701,033		227,537		28,414		199,066		39		341,926		412,013		85		365,317		38
30	Halifax and Southwestern	263,224		4,505,633		21,412		47,054		47,054		16		55,066		66,802		07		36,901		28
31	Inverness Ry. and Coal Co.	290,658		16,202,735		42,660		168,592		168,592		19		168,808		192,612		88		101,630		20



TABLE 9.—SUMMARY OF PASSENGERS AND TONS CARRIED, EARNINGS, EXPENSES, TRAIN MILEAGE AND MILEAGE OPERATED FOR THE YEAR ENDING JUNE 30, 1910—Continued.

Number.	Name of Railway.	Tons Carried.		Tons Carried One Mile.	Mileage of Revenue Mixed Trains.		Total Freight Revenue.		Total Freight Earnings.		Total Revenue Train Mileage.		Total Gross Earnings.		Total Operating Expenses.		Mileage Operated on June 30
		Number.	Value.		Miles.	cts.	\$	cts.	Miles.	\$	cts.	\$	cts.	\$	cts.	Miles.	
32	Irondale, Bancroft and Ottawa	29,107	110,300	31,814	20,449	15	18,430	43	20,449	15	32,120	27,990	55	30,402	40	19	
33	Kaslo and Slocan	15,081	278,188	7,033	14,964	66	48,510	67	14,964	66	7,033	17,991	10	34,358	18	19	
34	Kent Northern	6,961	187,947	16,902	9,043	32	72,270	50	9,043	32	17,010	17,346	38	11,290	00	19	
35	Kettle River Valley	2,104	30,574	2,136	1,839	15	58,017	46	1,839	15	2,136	2,254	90	5,907	65	18,50	
36	Kingston and Pembroke	106,983	5,242,167	97,884	112,135	84	128,667	77	130,940	17	131,850	185,922	59	159,968	40	109,80	
37	Klondike Mines	14,961	150,718	9,886	41,806	18	61,703	38	41,806	18	9,886	54,032	29	53,066	71	6,00	
38	Liverpool and Milton	40,503	202,000	9,450	10,179	64	18,430	43	10,179	64	9,450	10,641	64	7,245	72	6,00	
39	London and Port Stanley	486,302	8,238,062	15,500	75,471	99	18,430	43	83,995	21	121,568	124,228	93	123,324	24	19	
40	Lotbiniere and Megantic	55,874	766,952	18,780	28,955	59	28,955	59	28,955	59	19,636	35,487	99	32,493	00	19	
41	Manitoulin and North Shore	412,486	3,307,418	13,613	72,270	50	76,432	10	76,432	10	23,719	81,012	59	48,772	86	19	
42	Maritime Coal, Ry. & Power Co	199,390	1,795,151	21,180	58,017	46	58,017	46	58,017	46	28,755	65,869	67	43,822	29	19	
43	Massawippi Valley	493,719	14,413,793	5,768	127,296	13	128,667	77	128,667	77	177,620	197,963	62	148,481	57	19	
44	Manitoba Great Northern	102,436	6,050,436	27,539	61,703	38	61,703	38	61,703	38	38,489	70,272	47	85,105	08	19	
45	Moncton and Buctouche	23,255	618,188	21,390	18,430	43	18,430	43	18,430	43	21,390	28,202	52	22,818	70	19	
46	Montreal and Atlantic	1,110,564	59,614,174	163,166	707,255	43	712,832	21	712,832	21	544,004	933,112	12	820,207	11	19	
47	Montreal and Province Line	73,805	1,908,402	16,786	48,510	67	48,510	67	48,510	67	36,890	105,041	21	64,314	26	19	
48	Montreal and Vermont Jct.	94,915	1,842,505	36,188	39,750	51	39,750	51	39,750	51	39,354	104,276	77	60,648	81	19	
49	Morrissey, Fermie and Michel	573,149	3,438,894	35,424	93,744	35	93,841	15	93,841	15	35,424	110,522	80	78,845	30	19	
50	Napierville Junction Railway	228,879	6,485,250	16,902	57,234	88	57,234	88	57,234	88	20,699	62,381	91	34,821	38	19	
51	Nelson and Fort Sheppard	38,494	1,503,993	4,800	41,667	13	42,055	48	42,055	48	55,721	74,483	40	120,203	21	19	
52	New Brunswick Coal and Ry. Co	67,637	3,063,077	70,326	41,573	99	41,573	99	41,573	99	70,326	65,543	10	77,841	00	19	
53	New Brunswick and P. E. Island	36,300	538,588	24,610	21,046	63	21,046	63	21,046	63	33,880	30,888	60	26,120	58	19	
54	New Brunswick Southern	20,562	1,256,443	52,105	20,937	80	20,937	80	20,937	80	58,682	44,356	68	76,738	60	19	
55	New Westminster Southern	40,644	1,256,443	10,680	24,668	32	24,668	32	24,668	32	10,741	39,605	92	26,332	45	19	
56	North Shore	8,173	65,360	4,800	3,269	21	3,269	21	3,269	21	4,800	3,468	76	3,355	48	19	
57	Nova Scotia Steel and Coal Co.	7,109	59,010	17,628	3,058	58	3,058	58	3,058	58	17,523	4,951	88	10,406	49	19	
58	Orford Mountain	27,006	432,696	34,027	16,755	17	16,755	17	16,755	17	34,043	22,609	30	33,868	66	19	
59	Ottawa and New York	141,486	5,506,691	37,278	76,462	25	76,462	25	76,462	25	113,877	132,150	69	150,655	58	19	
60	Pere Marquette in Canada	2,162,247	433,963,451	4,890	2,295,138	13	2,295,138	13	2,295,138	13	1,290,387	2,457,620	01	1,590,584	17	19	
61	Phillipsburg Ry. & Quarry Co.	13,281	79,686	5,492	5,492	97	5,492	97	5,492	97	5,988	5,492	97	3,110	00	19	
62	Princeton Branch of Washing- ton County Ry.	169,474	818,417	6,316	15,038	00	15,038	00	15,038	00	10,632	22,467	29	10,767	19	19	
63	Quebec Central	698,151	48,562,639	238,609	729,873	54	729,873	54	729,873	54	617,609	1,104,682	84	759,355	75	19	

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64 Quebec and Lake St. John	260,134	41,107	158,053	353,912 55	335,350 17	391,104	581,061 25	546,917 09
65 Quebec Ry., Light and Power Co.	111,317	6	20,096	43,058 22	44,028 02	31,429	62,787 85	48,299 43
66 Quebec, Montreal and Southern	273,046	143,980	7,082	156,460 99	158,123 33	217,937	278,471 48	255,304 31
67 Red Mountain	19,722	6,552	6,489	8,304 76	11,014 76	13,079	15,446 78	42,730 11
68 Ratland and Noyan	170,944	4,614	.....	4,166 61	4,166 61	6,732	13,587 99	9,418 58
69 Salisbury and Harvey	54,600	98,276	.....	22,471 24	22,471 24	38,366	35,476 31	34,544 09
70 Schomberg and Aurora	8,188	21,848	.....	5,527 06	5,527 06	21,843	10,186 57	12,964 33
71 Stanstead, Shefford and Chambly	120,297	17,811	28,158	40,835 76	41,098 26	90,546	78,185 64	71,966 48
72 St. Clair Tunnel	.....	.....	.....	287,004 50	287,004 50	.....	287,004 50	113,199 79
73 St. Lawrence and Adirondack	669,564	.....	104,359	319,908 06	320,022 56	287,116	516,101 47	293,986 06
74 St. Martins	18,715	18,020	.....	12,469 05	12,469 05	18,020	18,838 42	15,673 66
75 Sidney and Louisburg (Dom. Coal Co.)	2,660,644	41,203,162	160,020	280,562 82	293,133 28	196,715	315,101 29	293,806 36
76 Spokane and British Columbia	15,235	1,144	.....	2,678 86	3,137 52	1,144	3,274 62	5,162 30
77 Temiscouata	138,254	70,670	13,398	150,870 70	151,270 70	161,316	231,625 62	168,877 02
78 Temiskaming and North n Ont.	692,387	62,036,261	366,909	957,149 59	966,707 07	752,370	1,737,065 40	1,142,210 16
79 Thousand Islands	34,513	33,312	.....	23,060 74	23,060 74	33,312	37,361 54	30,910 76
80 Toronto, Hamilton and Buffalo	1,648,719	63,868,558	188,850	678,332 61	719,856 10	473,392	1,018,417 90	588,572 49
81 Vancouver, Victoria and Eastern	1,157,738	32,800,719	87,071	433,952 26	436,237 47	291,865	637,932 52	665,085 92
82 Victoria & Sydney, B.C.	35,766	495,843	.....	23,252 01	25,465 01	22,656	46,565 69	27,267 22
83 Victoria Terminal and Ferry Co.	34,252	39,047	.....	2,163 53	2,163 53	1,489	4,220 73	2,226 42
84 Wabash Railway Co. (in Can.)	1,366,666	324,598,514	907,776	1,717,099 59	1,726,648 01	1,622,206	2,369,685 27	1,732,579 29
85 Wellington Colliery Co.	378,560	4,069,520	31,200	70,252 61	70,252 61	35,704	73,498 26	63,498 26
86 York and Carleton	8,501	46,756	.....	3,448 30	3,448 30	8,502	5,868 00	3,865 00
Final total	74,482,836	15,712,127,701	43,742,668	116,229,894 06	117,497,694 03	85,409,241	173,856,217 13	120,465,440 42



TABLE 10.—SUMMARY of Train Mileage for the Year ending June 30, 1910.

Number.	Name of Railway.	1	2	5	6	9	10	11
		Mileage of Passenger Trains.	Mileage of Revenue Mixed Trains.	Mileage of Revenue Freight Trains.	Special Train-Mileage.	Total Revenue Train Mileage.	Mileage of Non-Revenue Trains.	
		Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1	Alberta Railway and Irrigation Co.	44,750	44,880	39,486	129,116	2,777		
2	Algoma Central and Hudson Bay	1,453	36,245	15,726	58,424	1,341		
3	Atlantic and Lake Superior		93,900		93,900			
4	Atlantic, Quebec and Western		17,014		17,044	127		
5	Bay of Quinte		158,428	5,735	164,163			
6	Bedfordton and Nelson		1,421	31	1,452	5		
7	Bessmer and Barry's Bay		3,000		3,000			
8	Brandon, Saskatchewan and Hudson Bay	43,970	55,620	25,005	68,976	518		
9	British Yukon	1,556	27,880	1,112	58,288	9,003		
10	Brockville, Westport and Northwestern	28,909	379,297	370	57,330	180		
11	Canada Southern	1,674,297	1,888,435	2,863	3,638,322	166,835		
12	Canadian Government—Intercolonial	2,596,804	379,297	3,805,616	6,781,677	250,750		
13	Canadian Government—P. E. Island	1,322,386	186,114		328,018	34,455		
14	Canadian Northern, Ontario	1,912,582	528,288	3,370,992	5,814,146	510,976		
15	Canadian Northern, Quebec	198,071	133,651	114,923	446,361	15,772		
16	Canadian Northern, Quebec	267,063	170,582	169,181	613,912	14,139		
17	Canadian Pacific	16,119,543	1,972,993	20,571,576	38,397,532	2,006,290		
18	Cape Breton		43,241		43,241			
19	Caraguet		2,418		2,418			
20	Carillon and Grenville		49,866		199,378	6,416		
21	Central Ontario	104,440	45,972	63,274	109,378	10,060		
22	Crowsnest Southern	46,104			36,132			
23	Cumberland Railway and Coal Co.		36,132		556,342			
24	Dominion Atlantic	305,061	184,545	65,165	18,720	8,056		
25	Elgin and Havelock		18,720		7,584			
26	Eastern British Columbia		7,584					
27	Grand Trunk	7,679,627	522,467	9,044,555	3,671	805,386		
28	Grand Trunk (Canada Atlantic)	602,554	136,610	673,680	103	73,812		
29	Halifax and Southwestern	83,821	227,537	28,414	341,926	9,510		
30	Hereford	33,529	21,412	24,125	79,066	881		
31	Inverness Railway and Coal Co.		42,650	63,047	105,707	1,514		
32	Ironclade, Bancroft and Ottawa		31,814		39,120	816		
33	Kaslo and Slooan		7,033		7,033			
34	Kent Northern		16,502		17,010	510		
35	Kettle River Valley		2,136		2,136			
36	Kingston and Pembroke	30,382	97,884	3,099	131,850			
37	Klondike Mines		9,886		9,886			
38	Liverpool and Milton		9,450		9,450			
39	London and Fort Stanley	64,851	15,500	41,202	121,568	84		

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40	Lothière and Megantic.....	18,780	11,852	856	19,636	1,489
41	Manitoulin and North Shore.....	13,613	7,575		23,719	
42	Maritime Coal, Railway and Power Co.....	21,180	90,868		28,753	1,340
43	Massawippi Valley.....	5,768	5,434	36	177,620	38,489
44	Manitoba Great Northern.....	27,539	21,390		152	1,024
45	Moncton and Buctouche.....	21,390	243,893	131	544,004	17,727
46	Montreal and Atlantic.....	163,166	25,645	64	96,890	3,870
47	Montreal and Province Line.....	54,335	36,138		99,354	384
48	Montreal and Vermont Junction.....	33,424	3,797		35,424	57
49	Morrissey, Fernie & Michel.....	16,902	18,444	120	20,699	4,755
50	Napierville Junction Railway.....				70,326	
51	Nelson and Fort Sheppard.....	70,326	27,530		53,380	
52	New Brunswick Coal and Railway Co.....	24,610	65,77		38,682	10,980
53	New Brunswick and Prince Edward Island.....	52,105	32		10,741	48
54	New Brunswick Southern.....	10,680			4,800	
55	New Westminster Southern.....	4,800			17,528	
56	North Shore.....	17,528			34,043	5,655
57	Nova Scotia Steel and Coal Co.....	34,027	37,278	16	14,701	
58	Orford Mountain.....	4,890	1,008,897	143	113,877	8,472
59	Ottawa and New York.....	76,549	5,988		5,988	
60	Pere Marquette (in Canada).....	276,457			1,290,387	
61	Phillipsburg Railway and Quarry Co.....	3,734	562	20	10,632	106
62	Princeton Branch of Washington County Railway.....	213,279	62,400	103,321	617,609	189,737
63	Quebec Central.....	189,088	158,053	2,856	391,104	14,156
64	Quebec and Lake St. John.....	41,107	20,096		31,420	1,665
65	Sydney Railway, Light and Power Co.....	6	7,082		217,937	1,894
66	Quebec, Montreal and Southern.....	143,980	6,489		13,079	182
67	Red Mountain.....	66,875			6,732	
68	Rutland and Noyan.....	38		90	38,366	
69	Salisbury and Harvey.....	4,614			21,843	
70	Schomberg and Aurora.....	38,276			90,546	3,074
71	Scanstead, Sheford and Chamblly.....	21,843	28,158		287,116	5,363
72	St. Clair Tunnel.....	17,811	104,953	105	18,020	
73	St. Lawrence and Adirondack.....	18,020	160,020		196,715	
74	St. Martins.....				1,144	
75	Spokane and Louisburg (Dominion Coal Co.).....	36,695	15,398		161,316	24,435
76	Spokane and British Columbia.....	75,248	366,909	30,015	752,370	157,206
77	Teniscouata.....	355,446			33,312	
78	Teniskaming and Northern Ontario.....	70,670			473,392	19,209
79	Thousand Islands.....	33,312	188,850	1,919	291,865	130,621
80	Toronto, Hamilton and Buffalo.....	282,623	87,071	757	22,656	
81	Vancouver, Victoria and Eastern.....	134,282			1,480	
82	Victoria and Sidney, B.C.....	6,822			1,622,205	29,171
83	Victoria Terminal and Ferry Co.....	479	907,776	844	33,704	
84	Wabash Railway Co. (in Canada).....	713,586	31,200		8,502	
85	Wellington Colliery Co.....					
86	York and Carleton.....					
	Total.....	6,441,440	43,742,668	202,592	85,409,241	4,581,534

1 GEORGE V., A. 1911

TABLE 11. - SUMMARY of Freight Traffic Movement

Number.	1	2	3	4	5	6	7
	Name of Railway.	PRODUCTS OF					
		GRAIN.			FLOUR.		
		Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co .....	8,267	42	8,309	611	29	640
2	Algoma Central and Hudson Bay .....	925	128	1,053	162	57	219
3	Atlantic and Lake Superior .....	81	703	784	248	1,610	1,858
4	Atlantic, Quebec and Western .....	4	327	331	114	858	972
5	Bay of Quinte .....	1,175	640	1,815	123	2,046	2,169
6	Bedlington and Nelson .....		25	25			
7	Bessemer and Barry's Bay .....						
8	Brandon, Saskatchewan and Hudson Bay ..	46,004		46,004	54		54
9	British Yukon .....	2,182		2,182	966		966
10	Brockville, Westport and Northwestern ..	140	3,087	3,227	1,440	1,303	2,743
11	Canada Southern .....	21,892	652,788	674,680	24,902	140,929	165,831
12	Canadian Government—Intercolonial .....	16,499	140,802	157,301	27,980	135,335	163,315
13	"    "    P. E. Island .....	12,758		12,758	4,431		4,431
14	Canadian Northern .....	1,047,172	31,950	1,079,122	58,898	3,018	61,916
15	Canadian Northern, Ontario .....	5,437	712	6,149	888	462	1,350
16	Canadian Northern, Quebec .....	1,121	16,885	18,006	982	15,318	16,300
17	Canadian Pacific .....	2,546,892	396,657	2,943,549	595,473	153,508	748,981
18	Cape Breton .....				4	283	287
19	Caraget .....	80		80		2,060	2,060
20	Carillon and Grenville .....						
21	Central Ontario .....	4,759	3,458	8,217	21	2,297	2,318
22	Crowsnest Southern .....	109	648	757	86	20	106
23	Cumberland Ry. and Coal Co. ....		756	756		867	867
24	Dominion Atlantic .....	1,952	1,919	3,871			
25	Elgin and Havelock .....	130	50	180	186	660	846
26	Eastern British Columbia .....		92	92		37	37
27	Grand Trunk .....	290,288	1,400,263	1,690,551	277,172	243,442	470,614
28	Grand Trunk, Canada Atlantic .....	232,395	2,065	234,460	33,686	93	33,779
29	Halifax and Southwestern .....	487	622	1,109	3,369	5,205	8,574
30	Hereford .....	3,138	638	3,776	439	347	786
31	Inverness Ry. and Coal Co. ....	32	227	259	175	2,787	2,962
32	Irondale, Bancroft and Ottawa .....		40	40		203	203
33	Kaslo and Slovan .....	64		64			
34	Kent Northern .....					850	850
35	Kettle River Valley .....	31		31			
36	Kingston and Pembroke .....	6,035	4,353	10,388	2,029	2,373	4,402
37	Klondike Mines .....						
38	Liverpool and Milton .....						
39	London and Port Stanley .....	14,146	9,561	23,707	738	3,555	4,293
40	Lotbinière and Megantic .....	99	172	271	113	582	695
41	Manitoulin and North Shore .....	137		137	61		61
42	Maritime Coal, Railway and Power Co. ....	76	123	199	51	143	194
43	Massawippi Valley .....	670	8,193	8,863	223	1,978	2,201
44	Manitoba Great Northern .....	26,845	40,791	67,636	335	183	518
45	Moncton and Buctouche .....						
46	Montreal and Atlantic .....	1,012	63,853	64,865	779	103,222	104,001
47	Montreal and Province Line .....	191	1,082	1,273	30	1,566	1,596
48	Montreal and Vermont Junction .....	12	14,861	14,873	40	2,693	2,733
49	Morrissey, Fernie and Michel .....						
50	Napierville Junction Railway .....	900	570	1,470		411	411
51	Nelson and Fort Sheppard .....	60	182	242	148	20	168





1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic Movement

Number.	1	2	3	4	5	6	7
	Name of Railway.	GRAIN.			FLOUR.		
		Tonnage originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.
52	New Brunswick Coal and Railway Co. ....		467	467		612	612
53	New Brunswick and Prince Edward Island .....		805	805		1,114	1,114
54	New Brunswick Southern .....	317	65	382	177	25	202
55	New Westminster Southern .....	1,512		1,512	48		48
56	North Shore .....						
57	Nova Scotia Steel and Coal Co. ....	2	208	210		64	64
58	Orford Mountain .....	13	741	754		524	524
59	Ottawa and New York .....	711	452	1,163	200	1,378	1,578
60	Pere Marquette in Canada .....	78,010	23,458	101,468	4,070	8,721	12,791
61	Phillipsburg Railway and Quarry Co. ....		80	80			
62	Princeton Br. of Washington County Ry. ....	732		732	167		167
63	Quebec Central .....		10,543	10,543		18,865	18,865
64	Quebec and Lake St. John .....	1,952	3,858	5,810	1,912	3,826	5,738
65	Quebec Railway, Light and Power Co ..	4,126	3,051	7,177	302	204	506
66	Quebec, Montreal and Southern .....	1,173	1,110	2,283	46	4,433	4,479
67	Red Mountain .....	40		40	39		39
68	Rutland and Noyan .....		981	981			
69	Salisbury and Harvey .....	79	400	479	25	960	925
70	Schomberg and Aurora .....	2,396		2,396		774	774
71	Stanstead, Shefford and Chambly .....	23	27,840	27,863	48	3,934	3,982
72	St. Clair Tunnel .....						
73	St. Lawrence and Adirondack .....	349	1,183	1,532	653	935	1,588
74	St. Martins .....		220	220		280	280
75	Sydney and Louisburg (Dom. Coal Co.) ..	62	1,260	1,322		3,120	3,120
76	Spokane and British Columbia .....	34		34		90	90
77	Temiscouata .....	389	2,050	2,439	525	1,575	2,100
78	Temiscaming and Northern Ontario .....	6,189	3,942	10,131	4,030	2,049	6,079
79	Thousand Islands .....		208	208	147	807	954
80	Toronto Hamilton and Buffalo .....	8,907	5,979	14,886	1,640	4,133	5,773
81	Vancouver, Victoria and Eastern .....	6,455	105	6,560	1,626	290	1,916
82	Victoria and Sidney, B.C. ....	57	813	870		311	311
83	Victoria Terminal and Ferry Co. ....	378	449	827	251	23	274
84	Wabash Railway Co. (in Canada) .....	137,658		137,658	24,671		24,671
85	Wellington Colliery Co. ....		279	279		63	63
86	York and Carleton .....						
	Final total .....	4,545,761	2,889,812	7,435,573	1,027,534	889,400	1,916,934

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for the Year ending June 30, 1910—Continued.

8	9	10	11	12	13	14	15	16
AGRICULTURE—Continued.								
OTHER MILL PRODUCTS.			HAY.			TOBACCO.		
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.
								Number.
	501	501	4,260	261	261			52
307		307	288	41	4,260			53
346		346	4,826		329	4		54
407		407			4,826			55
	220	220		14				56
	858	858	10	428	14		1	57
226	1,025	1,251	2,558	1,085	3,643		2	58
1,696	7,508	9,204	51,216	7,275	58,491	170	513	59
			12		12			60
125		125	105		05			61
								62
532	1,479	2,011	660	3,328	3,988			63
122	20	142	244	75	319	6		64
15	155	170	33,449	606	34,055			65
63		63	205		205			66
			143	7,006	7,149			67
			1,214		1,214			68
			50		50		13	69
16	10,187	10,203	178	15,785	15,963			70
								71
953	1,703	2,659	3,311	23,851	27,162		191	72
				70	70			73
	110	110		2,170	2,170		2	74
			453		453			75
507	293	800	881	134	1,015	11	37	76
495	186	681	2,939	10,995	13,934			77
48		48	13	180	193			78
1,227	1,850	3,077	1,179	437	1,616	96	315	79
1,198	60	1,258	8,452		8,452	44		80
	1,855	1,855		833	833			81
1,669	100	1,769	849		849			82
24,550		24,550	13,010		13,010	489		83
	145	145						84
			175	520	695			85
								86
557,120	480,162	1,037,282	687,150	397,816	1,084,966	16,724	24,156	40,880



1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic Movement

Number.	17	18	19	20	21	22	23
	PRODUCTS OF						
	Name of Railway.	COTTON.			FRUIT AND VEGETABLES.		
Tonnage Originating on Road.		Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	
1	Alberta Railway and Irrigation Co.		1	1	1,820	546	2,366
2	Algoma Central and Hudson Bay				272	85	357
3	Atlantic and Lake Superior						
4	Atlantic, Quebec and Western		3	3	8	11	19
5	Bay of Quinté						
6	Bedlington and Nelson				15		15
7	Bessemer and Barry's Bay						
8	Brandon, Saskatchewan and Hudson Bay				1,467		1,467
9	British Yukon				1,251		1,251
10	Brockville, Westport and Northwestern				26	73	99
11	Canada Southern		16,304	16,304	14,297	63,066	77,363
12	Canadian Government—Intercolonial	2,661	1,198	3,859	21,799	15,017	36,816
13	" " P. E. Island	45		45	4,051		4,051
14	Canadian Northern				15,693	13,274	28,967
15	Canadian Northern, Ontario				1,217	202	1,419
16	Canadian Northern, Quebec				386	3,474	3,860
17	Canadian Pacific	1,195	13,746	14,941	195,089	79,853	274,442
18	Cape Breton						
19	Caraquet				525	210	735
20	Carillon and Grenville						
21	Central Ontario				10,560	352	10,912
22	Crowsnest Southern				624		624
23	Cumberland Railway and Coal Co						
24	Dominion Atlantic	1,359	275	1,634	88,090	202	88,292
25	Elgin and Havelock				40		40
26	Eastern British Columbia					54	54
27	Grand Trunk	1,619	12,797	14,416	134,606	95,237	234,843
28	Grand Trunk (Canada Atlantic)	10,026	5,926	15,952	833	5,851	6,684
29	Halifax and Southwestern				2,988	581	3,569
30	Hereford	4		4	181	6	187
31	Inverness Railway and Coal Co.				26	151	177
32	Irondale, Bancroft and Ottawa					18	18
33	Kaslo and Slocan						
34	Kent Northern						
35	Kettle River Valley						
36	Kingston and Pembroke	10	403	413	254	95	349
37	Klondike Mines						
38	Liverpool and Milton						
39	London and Port Stanley		228	228	11,224	3,042	14,266
40	Lotbinière and Megantic				62	16	78
41	Manitoulin and North Shore	103		103			
42	Maritime Coal, Railway and Power Co.					103	103
43	Massawippi Valley						
44	Manitoba Great Northern				271		271
45	Moncton and Buétouche						
46	Montreal and Atlantic		7,769	7,769	294	5,884	6,178
47	Montreal and Province Line						
48	Montreal and Vermont Junction				60	147	207
49	Morrissey, Fernie and Michel						
50	Napierville Junction Railway		27	27	24	1,439	1,463
51	Nelson and Fort Sheppard				498	20	518

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for the Year ending June 30, 1910—Continued.

24	25	26	27	28	29	30	31	32	
AGRICULTURE—Continued.			PRODUCTS OF ANIMALS.						
OTHER PRODUCTS OF AGRICULTURE.			LIVE STOCK.			DRESSED MEATS.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
			5,633	755	6,388	105	100	205	1
			693	150	843		12	130	2
67	6	73	20	187	207	54	3	57	3
			143	3	146	1	64	65	4
2,074	105	2,179	3,094	27	3,121	244	8	252	5
									6
									7
14		14	147		147				8
			2,297		2,297	75		75	9
			2,122	74	2,196		72	72	10
20,212	87,893	108,105	22,493	222,055	244,548	2,939	103,199	106,138	11
			15,429	5,755	21,184	3,192	15,218	18,410	12
			3,611		3,611	2,300		2,300	13
			37,438	3,688	41,126	3,005	632	3,637	14
			4,421	245	4,666	185	12	197	15
			1,611	447	2,058				16
			334,030	58,103	392,133	29,329	135,700	165,029	17
			1	1	2				18
			35		35				19
7,988		7,988	6	24	30				20
144		144	4,265	119	4,384	78		78	21
			68	60	128	14		14	22
			10	7	17				23
297	165	462	1,993	318	2,311	1,078	7	1,085	24
			86	10	96	133	20	153	25
				14	14				26
25,447	24,546	49,993	274,296	168,298	442,594	34,878	57,639	92,517	27
			8,813	3,266	12,079	89	1,073	1,162	28
			382	64	446				29
100		100	462		462	31	1	32	30
			405	13	418	17	7	24	31
			241		241		30	30	32
									33
	100	100	100		100	25		25	34
									35
			2,056	429	2,485	158	37	195	36
									37
20,265	4,144	24,409	4,520	475	4,995	523	1,198	1,721	38
				10	10		15	15	40
			10		10	41		41	41
				22	22		32	32	42
528	266	794	693	856	1,549	195	1	196	43
			671	20	691	30		30	44
3,921		3,921							45
			3,237	10,952	14,189	13	109,386	109,399	46
			806	47	853				47
	2,970	2,970	31	1,000	1,031				48
									49
			808	123	931				50
25		25	55		55		12	12	51

1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic

Number.	17	18	19	20	21	22	23
	Name of Railway.	PRODUCTS OF					
		COTTON.			FRUIT AND VEGETABLES.		
		Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from connecting Roads and Other Carriers.	Total Freight Tonnage.
52	New Brunswick Coal and Railway Co. ....						
53	New Brunswick and Prince Edward Island .....						
54	New Brunswick Southern .....				176	2	178
55	New Westminster Southern .....				1,436		1,436
56	North Shore .....						
57	Nova Scotia Steel and Coal Co. ....	11	8	19	11	1	12
58	Orford Mountain .....				16		16
59	Ottawa and New York .....	345	684	1,029	172	513	685
60	Père Marquette—in Canada .....		560	560	87,678	13,198	100,876
61	Phillipsburg Railway and Quarry Co. ....						
62	Princeton Branch of Washington Co. Ry. ....				1,326		1,326
63	Quebec Central .....						
64	Quebec and Lake St. John .....				1,422		1,422
65	Quebec Railway, Light and Power Co. ....	13	3,036	3,049	146	102	248
66	Quebec, Montreal and Southern .....		26	26	315	229	544
67	Red Mountain .....				217		217
68	Rutland and Noyan .....						
69	Salisbury and Harvey .....						
70	Schomberg and Aurora .....				482		482
71	Stanstead, Shefford and Chambly .....				8	388	396
72	St. Clair Tunnel .....						
73	St. Lawrence and Adirondack .....	126	1,880	2,006	87	3,756	3,843
74	St. Martins .....						
75	Sydney and Louisburg (Dominion Coal Co.) .....				10	212	222
76	Spokane and British Columbia .....				160		160
77	Temiscouata .....	1	4	5	3,386	125	3,511
78	Temiskaming and Northern Ontario .....				1,709	5,880	7,589
79	Thousand Islands .....						
80	Toronto, Hamilton and Buffalo .....		761	761	6,356	4,400	10,756
81	Vancouver, Victoria and Eastern .....	240		240	4,361		4,361
82	Victoria and Sidney, B. C. ....				455	238	693
83	Victoria Terminal and Ferry Co. ....				17	713	730
84	Wabash Railway Co. (in Canada) .....	1,534		1,534	27,263		27,263
85	Wellington Colliery Co. ....					96	96
86	York and Carleton .....						
	Totals .....	19,292	65,636	84,928	650,760	318,362	969,122

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Movement for the Year ending June 30, 1910—Continued.

24	25	26	27	28	29	30	31	32	
AGRICULTURE—Continued.			PRODUCTS OF ANIMALS—Continued.						
OTHER PRODUCTS OF AGRICULTURE.			LIVE STOCK.			DRESSED MEATS.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Number.
			176		176				52
			175		175	73		73	53
			487		487				54
									55
									56
							6		57
492		492	341		341	1	32		33
23	168	191	1,508	37	1,545				58
85,982	4,430	90,412	24,931	1,166	26,097	2,883	2,938	5,821	59
									60
			10		10				61
6,469	414	6,883	5,751		5,751				62
			749	2,250	2,999		198		63
171		171	433		584				64
			1,203		1,335				65
60		60	11		11	11			66
			76	12	88				67
			148		148		311		68
			797		797				69
	5,732	5,732	55	1,623	1,678				70
									71
53	2,932	2,985	683	237	923	19	274	293	72
									73
120	300	420	61	410	471	40	3,220	3,260	74
									75
			304	178	482	93	198	291	76
201	834	1,035	3,995	3,294	7,289	517	4,546	5,063	77
			823	20	843				78
954	3,721	4,675	3,388	5,411	8,799	5	10	15	79
1,233		1,233	3,091		3,091	301		301	80
	87	87	97	107	204	60	269	329	81
17	23	40	49	162	211	64	260	324	82
5,966		5,966	35,289		35,289	26,980		26,980	83
				108	108				84
									85
									86
182,830	138,836	321,666	821,866	492,915	1,314,781	110,051	436,740	546,791	

1 GEORGE V., A. 1911

TABLE No. 11.—SUMMARY of Freight Traffic

Number.	33	34	35	36	37	38	39
	Name of Railway.	OTHER PACKING HOUSE PRODUCTS.			POULTRY, GAME AND FISH.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co. ....	26	143	169	71	2	73
2	Algoma Central and Hudson Bay .....	8	12	20	7	5	12
3	Atlantic and Lake Superior .....				277	422	699
4	Atlantic, Quebec and Western .....				895	1	896
5	Bay of Quinté .....	75		75			
6	Bedlington and Nelson .....						
7	Bessemer and Barry's Bay .....						
8	Brandon, Saskatchewan and Hudson Bay .....						
9	British Yukon .....	473		473	27		27
10	Brockville, Westport and Northeastern .....		36	36	48	12	60
11	Canada Southern .....	9,309	41,179	50,488	1,781	13,637	15,418
12	Canadian Government—Intercolonial .....				19,415	11,851	31,266
13	" " P. E. Island .....	2,657		2,657	3,271		3,271
14	Canadian Northern .....	11,992	1,808	13,795	4,331	254	4,585
15	Canadian Northern, Ontario .....	627	115	742	11	56	67
16	Canadian Northern, Quebec .....		2,849	2,849	927	3,751	4,678
17	Canadian Pacific .....	28,485	50,657	79,142	31,886	17,102	48,988
18	Cape Breton .....				24	2	26
19	Caraguet .....				42		42
20	Carillon and Grenville .....						
21	Central Ontario .....	985		985	1,485		1,485
22	Crowsnest Southern .....				57		57
23	Cumberland Railway and Coal Co. ....						
24	Dominion Atlantic .....	520	23	543	2,008	15	2,023
25	Elgin and Havelock .....					10	10
26	Eastern British Columbia .....		22	22			
27	Grand Trunk .....	10,548	37,743	48,291	1,424	11,831	13,255
28	Grand Trunk (Canada Atlantic) .....	23	831	854	1,365		1,365
29	Halifax and Southwestern .....	58		58	4,430	25	4,455
30	Hereford .....	22		22	10	2	12
31	Inverness Railway and Coal Co. ....	18	6	24	516	161	677
32	Irondale, Bancroft and Ottawa .....		10	10	4		4
33	Kaslo and Slocan .....						
34	Kent Northern .....				750		750
35	Kettle River Valley .....						
36	Kingston and Penbroke .....	93	19	112	21	28	49
37	Klondike Mines .....						
38	Liverpool and Milton .....						
39	London and Port Stanley .....	1,415	1,711	3,126	123	152	275
40	Lotbinière and Mégantic .....	4		4			
41	Manitoulin and North Shore .....	3		3	2		2
42	Maritime Coal Railway and Power Co. ....	1	45	46		7	7
43	Massawippi Valley .....	203	68	271	6	49	55
44	Manitoba Great Northern .....						
45	Moncton and Buctouche .....						
46	Montreal and Atlantic .....	32	21,291	21,323	6	6,465	6,471
47	Montreal and Province Line .....						
48	Montreal and Vermont Junction .....		3,897	3,897		1,423	1,423
49	Morrissey, Fernie and Michel .....						
50	Napierville Junction Railway .....		90	90	9		9
51	Nelson and Fort Sheppard .....	56		56			
52	New Brunswick Coal and Railway Co. ....						







1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic

Number.	33	34	35	36	37	38	39
	Name of Railway.	PRODUCTS OF					
		OTHER PACKING-HOUSE PRODUCTS.			POULTRY, GAME AND FISH.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
53	New Brunswick and Prince Edward Island.				344		344
54	New Brunswick Southern.	18		18	169		169
55	New Westminster Southern.						
56	North Shore.						
57	Nova Scotia Steel and Coal Co.		2	2	1	5	6
58	Orford Mountain.					19	19
59	Ottawa and New York.	52	67	119	14	5	19
60	Père Marquette (in Canada)	7,801	4,197	11,998	678	373	1,051
61	Phillipsburg Railway and Quarry Co.						
62	Princeton Branch of Washington Co. Ry.						
63	Quebec Central.						
64	Quebec and Lake St. John.		766	766			
65	Quebec Railway, Light and Power Co.	408	64	472	20	1	21
66	Quebec, Montreal and Southern.	90	26	116	75		75
67	Red Mountain.						
68	Rutland and Noyan.					18	18
69	Salisbury and Harvey.						
70	Schomberg and Aurora.						
71	Stanstead, Shefford and Chambly.		6,831	6,831	316	1,046	1,362
72	St. Clair Tunnel.						
73	St. Lawrence and Adirondack.	9	325	334		4,608	4,608
74	St. Martins.						
75	Sydney and Louisburg (Dom. Coal Co.).		260	260	22	18	40
76	Spokane and British Columbia.						
77	Temiscouata.	121	30	151	42	41	83
78	Temiskaming and Northern Ontario.						
79	Thousand Islands.				12		12
80	Toronto, Hamilton and Buffalo.	2,759	1,386	4,145	59	63	122
81	Vancouver, Victoria and Eastern.	44		44	1,367		1,367
82	Victoria and Sidney, B.C.	40	176	210	23	70	93
83	Victoria Terminal and Ferry Co.	31	175	206	17	80	97
84	Wabash Railway Co. (in Canada).	21,884		21,884	2,681		2,681
85	Wellington Colliery Co.				109	32	141
86	York and Carleton.						
	Final total.	100,890	176,849	277,739	81,178	73,642	154,820

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Movement for the Year ending June 30, 1910--*Continued.*

40	41	42	43	44	45	46	47	48
ANIMALS-- <i>Continued.</i>								
WOOL.			HIDES AND LEATHER.			OTHER PRODUCTS OF ANIMALS.		
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
								Number.
2		2	7	125	125			53
					7			54
								55
								56
4	1	5	3	1	4			57
			19		19			58
2	26	28	47	107	154	2,324	209	2,533
170	140	310	1,017	3,544	4,561	10,175	746	10,921
								61
								62
								63
			58	114	172	1,894		1,894
2		2	144		144	129		129
			22	101	123			66
			6		6	17		17
			3	31	34			68
			1,500		1,500			69
						172		172
	463	463	304	969	1,273		2,362	2,362
	33	33	97	1,497	1,594	256	1,998	2,254
			3	1	4			74
								75
3	1	4	44	13	57			76
								77
31		31						78
80	167	247	297	983	1,280	888	5,023	5,911
26	37	63	21		21	2,266	188	2,454
22	44	66	20	39	59	495	115	610
35	32	67	3	131	134	1	514	515
699		699	6,000		6,000	8,761		8,761
							140	140
								86
5,828	22,986	28,814	70,033	129,820	199,853	95,663	146,545	242,208

1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic Movement

Number.	Name of Railway.	49	50	51	52	53	54	55
		PRODUCTS						
		ANTHRACITE COAL.			BITUMINOUS COAL.			
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	
1	Alberta Railway and Irrigation Co.		54		54	34,434	4,126	38,560
2	Algoma Central and Hudson Bay...	1			1	212	6,124	6,336
3	Atlantic and Lake Superior						2,573	2,573
4	Atlantic, Quebec and Western.					2	1,062	1,064
5	Bay of Quinte			2,718	2,718		22,153	22,153
6	Bedlington and Nelson					359		359
7	Bessemer and Barry's Bay							
8	Brandon, Saskatchewan and Hudson Bay	6,910			6,910	1,878		1,878
9	British Yukon					266		266
10	Brockville, Westport and North-western			664	664		123	123
11	Canada Southern		1,151,649		1,151,649		462,092	462,092
12	Canadian Govt.—Intercolonial					690,403	357,282	1,047,685
13	" P. E. Island.	340			340	7,534		7,534
14	Canadian Northern	33,514	59,770		93,284	49,795	136,538	186,333
15	Canadian Northern, Ontario	299	5,892		6,191	1,950	10,956	12,906
16	Canadian Northern, Quebec		5,265		5,265		31,590	31,590
17	Canadian Pacific	134,895	712,753		847,648	1,191,737	848,469	2,040,206
18	Cape Breton.					40	262	302
19	Caraquet			125	125		2,100	2,100
20	Carillon and Grenville							
21	Central Ontario	706	2,712		3,418	6,173	25,600	31,773
22	Crowsnest Southern					8,304	26,625	34,929
23	Cumberland Railway and Coal Co.					53,633	5,273	58,806
24	Dominion Atlantic					3,049	17,228	20,277
25	Elgin and Havelock						346	346
26	Eastern British Columbia					106,732		106,732
27	Grand Trunk	75,649	1,840,594		1,916,243	55,104	1,787,823	1,842,927
28	Grand Trunk, (Canada Atlantic)	55	89,489		89,544	162	83,468	83,630
29	Halifax and Southwestern					1,013	7,277	8,290
30	Hereford.	30	39		69	25		25
31	Inverness Railway and Coal Co.			31	31	273,949		273,949
32	Irondale, Bancroft and Ottawa		24		24		610	610
33	Kaslo and Stocan					35		35
34	Kent Northern						500	500
35	Kettle River Valley							
36	Kingston and Pembroke	162			162	33	41	74
37	Klondike Mines							
38	Liverpool and Milton							
39	London and Port Stanley	1,876	14,258		16,134	36,871	62,657	99,528
40	Lotbinière and Megantic						78	78
41	Manitoulin and North Shore	21			21	1,142		1,142
42	Maritime Coal, Railway & Power Co.					188,154		188,154
43	Massawippi Valley		7,860		7,860		1,516	1,516
44	Manitoba Great Northern	3,252			3,252	11,504	20	11,524
45	Moncton and Buctouche						4,403	4,403
46	Montreal and Atlantic	123	6,820		6,943	26	5,337	5,363
47	Montreal and Province Line		937		937		16,963	16,963
48	Montreal and Vermont Junction		3,896		3,896		8,293	8,293
49	Morrissey, Fernie and Michel					548,197		548,197



1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic Movement

Number.	49	50	51	52	53	54	55
	Name of Railway.	PRODUCTS					
		ANTHRACITE COAL.			BITUMINOUS COAL.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
50	Napierville Junction Railway . . . . .	74	102,295	102,369	42	10,009	10,051
51	Nelson and Fort Sheppard . . . . .				505		505
52	New Brunswick Coal and Ry. Co. . . . .				43,718		43,718
53	New Brunswick and P. E. Island . . . . .					2,910	2,910
54	New Brunswick Southern . . . . .	20		20	100	30	130
55	New Westminster Southern . . . . .				304		304
56	North Shore . . . . .				7,211		7,211
57	Nova Scotia Steel and Coal Co. . . . .					235	235
58	Orford Mountain . . . . .		1	1		13	13
59	Ottawa and New York . . . . .		31,336	31,336		19,279	19,279
60	Père Marquette (in Canada). . . . .	10,345	34,977	45,322	203,338	153,710	357,048
61	Phillipsburg Railway and Quarry Co. . . . .					4,617	4,617
62	Princeton Branch Wash'n Co. Ry. . . . .	16		16	41,239		41,239
63	Quebec Central . . . . .		2,600	2,600		8,300	8,300
64	Quebec and Lake St. John . . . . .		2,400	2,400		8,569	8,569
65	Quebec Ry., Light and Power Co. . . . .	202		202	10,833	20	10,853
66	Quebec, Montreal and Southern . . . . .	167	20,857	21,024	176	6,346	6,522
67	Red Mountain . . . . .				2,432		2,432
68	Rutland and Noyan . . . . .		429	429		1,108	1,108
69	Salisbury and Harvey . . . . .					3,731	3,731
70	Schomberg and Aurora . . . . .					1,179	1,179
71	Stanstead, Shefford and Chambly . . . . .		690	690		2,361	2,361
72	St. Clair Tunnel . . . . .						
73	St. Lawrence and Adirondack . . . . .		183,283	183,283		153,486	153,486
74	St. Martins . . . . .		180	180			
75	Sydney and Louisburg (Dom. Coal Co.) . . . . .	2,526,255		2,526,255			
76	Spokane and British Columbia . . . . .					443	443
77	Temiscouata . . . . .	843	1,892	2,735	704	115	819
78	Timiskaming and Northern Ontario . . . . .	39	10,173	10,212		174,045	174,045
79	Thousand Islands . . . . .		68	68		848	848
80	Toronto, Hamilton and Buffalo . . . . .		359,309	359,309		381,581	381,581
81	Vancouver, Victoria and Eastern . . . . .				12,292		12,292
82	Victoria and Sidney, B.C. . . . .					13	136
83	Victoria Terminal and Ferry Co. . . . .				52	87	139
84	Wabash Railway Co. (in Canada). . . . .	46,675		46,675	323,113		323,113
85	Wellington Colliery Co. . . . .				375,231		375,231
86	York and Carleton . . . . .						
	Total . . . . .	2,842,523	4,655,986	7,498,509	4,293,906	4,872,666	9,166,572

SESSIONAL PAPER No. 20b

for the Year ending June 30, 1910—Continued.

56	57	58	59	60	61	62	63	64	
OF MINES.									
COKE.			ORES.			STONE, SAND AND OTHER LIKE ARTICLES.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
	693	693	9,663	9,832	19,495	44	1,060	1,060	50
								44	51
									52
						620		620	53
						1,439		1,439	54
						155		155	55
									56
						7	1		57
			846		846		153	153	58
	365	365		45	45	510	7,046	7,556	59
7,462	1,353	8,815	1,357	2,145	3,502	200,454	14,783	215,237	60
						5,389	1,324	6,713	61
						3,185		3,185	62
			1,204		1,204	715		715	63
				29	29	2,182		2,182	64
			42	23	65	50,145	37	50,182	65
	413	413				7,614	6,162	13,776	66
59		59	4,116	152	4,268				67
							10,314	10,314	68
									69
				109	109	38	2,685	2,723	71
	22,921	22,921		287	287				72
						5,300	8,362	8,367	73
								5,300	74
									75
			7,563		7,563				76
						24	23		77
			32,875	100	32,975	25,344	1,861	27,205	78
	49	49				2,793	612	3,405	79
	217,248	217,248		2,977	2,977	41,720	24,609	66,329	80
125,105	33	125,138	833,757		833,757	5,495		5,495	81
	25	25				4,160	182	4,342	82
							2	4,273	83
2,813		2,813	24,533		24,533	49,369		49,369	84
									85
				29	29				86
393,567	990,687	1,384,254	3,102,779	533,828	3,636,607	3,212,113	872,855	4,084,968	



1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic

Number.	65	66	67	68	69	70	71
	Name of Railway.	PRODUCTS OF MINES— <i>Con.</i>			PRODUCTS OF		
		OTHER PRODUCTS OF MINES.			LUMBER.		
		Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.
1	Alberta Railway and Irrigation Co.	37	98	135	4,221	17,807	22,028
2	Algoma Central and Hudson Bay				17	801	818
3	Atlantic and Lake Superior				8,427	383	8,810
4	Atlantic, Quebec and Western				2,065	3,783	5,848
5	Bay of Quinte				7,679	11,635	19,314
6	Bedlington and Nelson				38		38
7	Bessemer and Barry's Bay				4,623		4,623
8	Brandon, Saskatchewan and Hudson Bay				1,507		1,507
9	British Yukon				451		451
10	Brockville, Westport and North-western				604	729	1,333
11	Canada Southern	63,516	47,052	110,568	7,211	185,860	193,071
12	Canadian Govt.—Intercolonial	8,457	3,756	12,213	425,663	104,592	530,255
13	" " —P. E. Island				13,414		13,414
14	Canadian Northern				574,562	97,295	671,857
15	Canadian Northern, Ontario				57,357	1,614	58,971
16	Canadian Northern, Quebec	4,927	6,443	11,370	60,175	18,718	78,893
17	Canadian Pacific				1,642,798	504,454	2,147,252
18	Cape Breton				275	158	433
19	Caraquet				11,697		11,697
20	Carillon and Grenville				3		3
21	Central Ontario	54	706	760	40,035	3,423	43,458
22	Crowsnest Southern				33,213	55	33,268
23	Cumberland Railway and Coal Co.				25,076		25,076
24	Dominion Atlantic				80,879	5,337	86,216
25	Elgin and Havelock				7,638	1	7,639
26	Eastern British Columbia				445		445
27	Grand Trunk	33,180	29,412	62,592	719,560	663,066	1,382,566
28	Grand Trunk (Canada Atlantic)	153	1,321	1,474	390,349	12,688	403,037
29	Halifax and Southwestern				66,980	784	67,764
30	Hereford	49	66	115	22,058	2	22,060
31	Inverness Railway and Coal Co.	604		604	286	1,152	1,438
32	Irondale, Bancroft and Ottawa	40		40	5,782		5,782
33	Kaslo and Slocan				275		275
34	Kent Northern				750		750
35	Kettle River Valley				102		102
36	Kingston and Pembroke				22,541	7,714	30,255
37	Klondike Mines				311		311
38	Liverpool and Milton				13,250		13,250
39	London and Port Stanley	4,797	4,525	9,322	14,053	20,892	34,945
40	Lotbinière and Megantic		35	35	17,008	114	17,122
41	Manitoulin and North Shore				723		723
42	Maritime Coal, Ry. and Power Co.				1,248	4,016	5,264
43	Massawippi Valley				3,698	104,273	107,971
44	Manitoba Great Northern				2,537	94	2,631
45	Moncton and Buctouche						
46	Montreal and Atlantic				75,914	85,628	161,542
47	Montreal and Province Line				781	15,051	15,834
48	Montreal and Vermont Junction					12,833	12,896
49	Morrissey, Fernie and Michel		739	739	63	18,634	18,634





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Movement for the Year ending June 30, 1910—Continued.

72	73	74	75	76	77	78	79	80	
FORESTS.			MANUFACTURES.						
OTHER PRODUCTS OF FORESTS.			PETROLEUM AND OTHER OILS.			SUGAR.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
7,826	93,683	93,683	39	1,218	1,218				50
1,351		7,826			39				51
860		1,351							52
		860		90	90		710	710	53
4,201		4,201	106			15		91	54
				20	20			28	55
10,465	40	10,505		44	44	5	95	100	56
1,086	10,030	11,116	228	693	921	43	117	160	57
192,653	18,468	211,121	8,140	6,296	14,436	12,550	5,690	18,240	58
				1	1				59
44,607		44,607	359		359	32		32	60
281,164		2,116,4		5,012	5,012		3,645	3,645	61
44,351	15,532	59,883		457	457		830	830	62
12,988	60	13,048	113	140	253	204		204	63
2,507	111,507	114,014	38	971	1,009				64
10,261		10,261							65
	117,869	117,869		114	114				66
5,803		5,803							67
94		94		37	37		69	69	68
	1,639	1,639		322	322		1,747	1,747	69
									70
711	29,042	29,753	22	5,213	5,235	6	54,240	54,246	71
740		740							72
120	410	530		610	610				73
1,564	13	1,577					86	86	74
									75
			141	388	529	305	128	433	76
171,895	631	172,526	1,795	2,399	4,194	528	160	688	77
	133	133		61	61				78
2,399	3,020	5,419	645	11,254	11,899	42	333	375	79
10,148	141	10,289	1,391		1,391	141		141	80
11,537	513	12,050	2	954	956		67	67	81
30	11,853	11,883	531	467	998	75		75	82
26,455		26,455	15,447		15,447	7,433		7,433	83
									84
									85
									86
4,286,055	1,480,848	5,766,903	220,728	279,439	500,167	261,150	356,081	617,231	

1 GEORGE V., A. 1911

## No. 11.--SUMMARY OF Freight Traffic Movement

	81	82	83	84	85	86	87
	MANUFAC-						
	NAVAL STORES.			IRON, PIG AND BLOOM.			
Name of Railway.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	
Number.							
1 Alberta Ry. and Irrigation Co. ....	6	14	20	6	348	354	
2 Algoma Central and Hudson Bay ..							
3 Atlantic and Lake Superior. ....				114	1,063	1,177	
4 Atlantic, Quebec and Western ....				1	47	48	
5 Bay of Quinte .....				6,687	25	6,712	
6 Bedlington and Nelson .....							
7 Bessemer and Barry's Bay .....							
8 Brandon, Sask. and Hudson Bay ..							
9 British Yukon .....	388		388	209		209	
10 Brockville, Westport and North-western .....							
11 Canada Southern .....				65	65	65	
12 Canadian Government—Intercolonial .....				7,497	43,533	51,030	
13 Canadian Government—P. E. Island .....				86,916	23,800	110,716	
14 Canadian Northern .....	49		49	446	446	446	
15 Canadian Northern, Ontario .....				15,982	7,661	23,643	
16 Canadian Northern, Quebec .....	74	148	222				
17 Canadian Pacific .....		28,952	28,952	1,629	22,338	23,967	
18 Cape Breton .....	237	190	427	92,340	123,138	215,478	
19 Caraqueet .....					44	44	
20 Carillon and Grenville .....							
21 Central Ontario .....				2,063	57	2,120	
22 Crowsnest Southern .....							
23 Cumberland Ry. and Coal Co. ....							
24 Dominion Atlantic .....	62		62	252	148	400	
25 Elgin and Havelock .....							
26 Eastern British Columbia .....							
27 Grand Trunk .....		1,069	1,069	130,164	239,357	369,521	
28 Grand Trunk, Canada Atlantic .....	47		47	1,902	5,580	7,482	
29 Halifax and Southwestern .....							
30 Hereford .....	10	35	45	43		43	
31 Inverness Railway and Coal Co. ....				33		33	
32 Irondale, Bancroft and Ottawa .....							
33 Kaslo and Slecan .....							
34 Kent Northern .....							
35 Kettle River Valley .....							
36 Kingston and Pembroke .....				2	28	30	
37 Klondike Mines .....							
38 Liverpool and Milton .....							
39 London and Port Stanley .....	492	114	606	1,445	1,787	3,232	
40 Lotbinière and Megantic .....							
41 Manitoulin and North Shore .....					24	24	
42 Maritime Coal, Ry. and Power Co. ....					22	179	
43 Massawippi Valley .....		26	26	103	1,278	1,381	
44 Manitoba Great Northern .....							
45 Moncton and Buctouche .....							
46 Montreal and Atlantic .....		134	134	109	761	870	
47 Montreal and Province Line .....							
48 Montreal and Vermont Junction .....							
49 Morrissey, Fernie and Michel .....							



SESSIONAL PAPER No. 20b

for the Year ending June 30, 1910—Continued.

88	89	90	91	92	93	94	95	96	
TUNES.									
IRON AND STEEL RAILS.			OTHER CASTINGS AND MACHINERY.			BAR AND SHEET METAL.			
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
1	357	358	313	1,263	1,576	3	96	99	1
2	982	984	66	157	223	..	20	20	2
..	4	4	146	767	913	..	..	..	3
..	709	709	282	1,893	2,175	..	..	..	4
71	..	71	164	179	643	..	..	..	5
..	..	..	29	..	29	..	..	..	6
..	..	..	..	..	..	..	..	..	7
..	..	..	1,167	..	1,167	57	..	57	8
..	..	..	2,625	..	2,625	..	..	..	9
..	..	..	..	170	170	..	70	70	10
2,041	12,188	14,229	36,608	190,059	226,667	5,167	170,325	175,492	11
121,542	12,815	134,357	230,212	24,677	254,889	11,951	937	12,888	12
600	..	600	422	..	422	157	..	157	13
74,268	89,215	163,483	23,347	9,992	33,339	3,176	1,588	4,764	14
2,804	1,876	4,680	807	879	1,686	474	136	610	15
..	4,539	4,539	1,117	2,215	3,332	..	..	..	16
51,691	72,749	124,440	89,768	169,058	258,826	42,832	61,626	104,458	17
..	..	..	..	..	..	..	..	..	18
..	..	..	..	..	..	..	..	..	19
271	761	1,032	454	1,121	1,575	283	20	303	21
712	..	712	548	27	575	80	..	80	22
..	..	..	..	..	..	..	..	..	23
366	..	366	709	900	1,609	195	181	376	24
..	44	44	70	..	70	..	20	20	25
..	76	76	22	155	177	..	..	..	26
64,479	113,732	178,211	55,525	153,197	208,722	35,340	81,061	116,401	27
1,252	3,965	5,217	1,515	2,852	4,367	369	728	1,097	28
1	1,019	1,020	664	739	1,444	..	..	..	29
102	..	102	125	37	162	116	3	119	30
..	30	30	53	156	209	..	..	..	31
..	..	..	15	20	35	..	..	..	32
..	..	..	10	12	22	..	..	..	33
..	..	..	..	..	..	..	..	..	34
..	..	..	..	..	..	..	..	..	35
23	3	26	367	781	1,148	..	20	20	36
..	..	..	508	..	508	..	..	..	37
..	..	..	..	..	..	..	..	..	38
31	684	715	2,122	1,768	3,890	1,138	1,008	2,146	39
..	23	23	71	139	210	..	3	3	40
984	..	984	591	..	59	72	..	72	41
..	294	294	43	314	357	..	36	36	42
95	2,485	2,580	238	334	572	36	173	209	43
86	..	86	305	33	392	3,031	..	3,031	44
..	..	..	..	..	..	..	..	..	45
29	7,181	7,210	702	17,828	18,530	16	954	1,000	46
..	..	..	..	493	493	..	..	..	47
..	..	..	..	3,976	3,976	..	..	..	48
..	..	..	..	..	..	..	..	..	49



TABLE 11.—SUMMARY of Freight Traffic Movement

Number.	81	82	83	84	85	86	87
	Name of Railway.	MANUFACTURES					
		NAVAL STORES.			IRON, PIG AND BLOOM.		
		Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
50	Napierville Junction . . . . .				15	18	33
51	Nelson and Fort Sheppard. . . . .						
52	New Brunswick Coal and Ry. Co. . . . .						
53	New Brunswick and Prince Edward Island. . . . .						
54	New Brunswick Southern. . . . .	1		1			
55	New Westminster Southern. . . . .						
56	North Shore. . . . .						
57	Nova Scotia Steel and Coal Co. . . . .						
58	Orford Mountain. . . . .				5	3	8
59	Ottawa and New York. . . . .	11	233	244	95	433	528
60	Père Marquette, in Canada. . . . .	2,713	280	2,993	7,971	4,384	12,355
61	Phillipsburg Ry. and Quarry Co. . . . .						
62	Princeton Branch of Wash. Co. Ry. . . . .				645		645
63	Quebec Central. . . . .					3,190	3,190
64	Quebec and Lake St. John. . . . .						
65	Quebec Railway, Light and Power Co. . . . .	2		2	334	23	357
66	Quebec, Montreal and Southern. . . . .	12	57	69	635	840	1,475
67	Red Mountain. . . . .						
68	Rutland and Noyan. . . . .						
69	Salisbury and Albert. . . . .						
70	Schomberg and Aurora. . . . .						
71	Stanstead, Shefford and Chambly. . . . .					1,210	1,210
72	St. Clair Tunnel. . . . .						
73	St. Lawrence and Adirondack. . . . .		1,411	1,411		1,234	1,234
74	St. Martins. . . . .						
75	Sydney and Louisburg, Dom. Coal Co. . . . .						
76	Spokane and British Columbia. . . . .						
77	Temiscouata. . . . .				9	150	159
78	Temiskaming and Northern Ontario. . . . .						
79	Thousand Islands. . . . .				46	4,786	4,832
80	Toronto, Hamilton and Buffalo. . . . .				5,629	19,295	23,924
81	Vancouver, Victoria and Eastern. . . . .				53		53
82	Victoria and Sidney, B. C. . . . .					99	99
83	Victoria Terminal and Ferry Co. . . . .				111		111
84	Wabash, in Canada. . . . .	240		240	15,464		15,454
85	Wellington Colliery Co. . . . .						
86	York and Carleton. . . . .						
	Final total. . . . .	4,344	32,663	37,007	383,066	506,815	889,881

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for the Year ending June 30, 1910.—Continued.

88	89	90	91	92	93	94	95	96	
TUNES—Continued.									
IRON AND STEEL RAILS.			OTHER CASTINGS AND MACHINERY.			BAR AND SHEET METAL.			Number.
Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	
233		233	7	854	861		1,295	1,295	50
223		223	134		134	52		52	51
	230	230		135	135		150	150	53
			225	18	243	75	1	76	54
45		45	118		118	88		88	55
									56
38		38	53	4	57		3	3	57
			31	164	195		53	53	58
	547	547	503	598	1,101	73	2,904	2,977	59
169	1,679	1,848	11,702	4,337	16,039	6,275	2,472	8,747	60
				632	632				61
			125		125	6			62
	3,900	3,900	1,500	1,234	2,734		4,556	4,556	63
	175	175	1,150	3,453	4,603				64
23		23	305	121	426	73	8	81	65
151	200	351	359	1,365	1,724	122	1,957	2,079	66
48		48	28		28	21		21	67
	251	251		146	146				68
									69
									70
									71
									72
6	863	869	466	8,380	8,846	1	2,940	2,941	73
			80	100	180				74
610	280	890	40	120	160	8	160	168	75
			4	17	21				76
37	8,138	8,175	608	713	1,321	24	1,382	1,406	77
325	30,112	30,437				1,578	3,504	5,082	78
			50		50	1,097	2,972	4,069	79
131	3,872	4,003	9,245	53,421	62,666	5,470	55,286	60,756	80
1,599		1,599	4,990		4,990	2,263		2,263	81
	13	13	13	265	278		102	102	82
5	10	15	107	170	277	78	14	92	83
15,986		15,986	42,802		42,802	48,310		48,310	84
									85
									86
341,080	376,001	717,081	526,735	662,479	1,189,214	170,107	398,794	568,901	

1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic Movement

Number.	Name of Railway.	97	98	99	100	101	102	103
		MANUFAC						
		CEMENT, BRICK AND LIME.			AGRICULTURAL IMPLEMENTS.			
		Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	
1	Alberta Railway and Irrigation Co.	1,528	1,832	3,360	679	1,008	1,687	
2	Algoma Central and Hudson Bay	8	3	46				
3	Atlantic and Lake Superior	46	109	155	13	25	38	
4	Atlantic, Quebec and Western	113	455	568		10	10	
5	Bay of Quinte	28,365	336	28,701	140	300	440	
6	Bedlington and Nelson							
7	Bessemer and Barry's Bay							
8	Brandon, Saskatchewan and Hudson Bay	724		724	720	17	746	
9	British Yukon	357		357				
10	Brockville, Westport and North-western	826	228	1,054		158	158	
11	Canada Southern	8,660	78,857	87,517	9,404	39,864	49,268	
	Canadian Government:—							
12	Intercolonial	47,360	64,161	111,521	2,969	6,616	9,585	
13	Prince Edward Island	1,823		1,823		665	665	
14	Canadian Northern	61,779	56,241	118,020	35,690	15,159	50,859	
15	Canadian Northern, Ontario	1,520	2,258	3,778	2,574	65	2,639	
16	Canadian Northern, Quebec	59,895	25,029	84,834		536	536	
17	Canadian Pacific	487,079	240,307	727,386	95,474	72,256	167,730	
18	Cape Breton		5	5				
19	Caraquet		250	250		50	50	
20	Carillon and Grenville							
21	Central Ontario	391	8,522	8,913	12	87	99	
22	Crowsnest Southern	1,730		1,730				
23	Chamberland Railway and Coal Co.							
24	Dominion Atlantic	7,835	362	8,197	572	19	591	
25	Elgin and Havelock	120	20	140		10	10	
26	Eastern British Columbia		175	175				
27	Grand Trunk	430,192	264,554	694,746	59,463	21,911	81,380	
28	Grand Trunk, Canada Atlantic	44,519	21,219	65,738	1,047	1,756	2,803	
29	Halifax and Southwestern	1,547	225	1,772	35	24	59	
30	Hereford	8,583	215	8,798	57	13	70	
31	Inverness Railway and Coal Co.	11	185	196	3		3	
32	Irondale, Bancroft and Ottawa		31	31		15	15	
33	Kaslo and Slocan							
34	Kent Northern							
35	Kettle River Valley							
36	Kingston and Pembroke	681	782	1,463	35	15	50	
37	Klondike Mines							
38	Liverpool and Milton							
39	London and Port Stanley	9,379	6,311	15,690	123	723	846	
40	Lotbinière and Megantic	279	48	327	6	47	53	
41	Manitoulin and North Shore	124		124	1		1	
42	Maritime Coal, Ry. and Power Co.	6	960	946		7	7	
43	Massawippi Valley	128	487	615	34	30	64	
44	Manitoba Great Northern	127		127	799		799	
45	Moncton and Buctouche							
46	Montreal and Atlantic	7,696	6,364	14,060	551	1,195	1,746	
47	Montreal and Province Line	594	1,579	2,173				
48	Montreal and Vermont Junction	15	112	127		79	79	
49	Morrissey, Fernie and Michel							



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TABLE NO. 11.—SUMMARY of Freight Traffic Movement

	97	98	99	100	101	102	103
	MANUFAC						
	CEMENT, BRICK AND LIME.			AGRICULTURAL IMPLEMENTS.			
Number	Name of Railway.						
	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	
50		50	1,421	1,471		43	43
51		219		219	16		16
52							
53			175	175		400	400
54		528		528	15	1	16
55		471		471			
56							
57			10	10		8	8
58		3	244	247	1	56	57
59		7,490	2,230	9,720	37	43	80
60		51,725	15,483	67,208	678	1,772	2,450
61			555	555			
62		3,399		3,399			
63		24,386		24,386		6,379	6,379
64		7,201	4,242	11,443		445	445
65		5,573	50	5,623	54	5	59
66		2,715	2,767	5,482		37	37
67		222		222			
67			363	363			
69							
70			283	283		12	12
71		19	468	487		236	236
72							
73		28	8,825	8,853	1	525	526
74							
75		840	208	1,048			
76							
77		272	771	1,043	169	119	288
78		11,198	14,423	25,621	2,083	3,154	5,237
79		106	581	687		21	21
80		2,723	17,604	20,327	38,405	1,000	39,405
81		5,884	132	6,016	363		363
82		600	62	662		240	240
83		55	676	731	161	89	250
84		60,770		60,770	5,224		5,224
85							
86		100	577	677			
	Total	1,400,527	854,407	2,254,934	258,332	176,596	434,928



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for the Year ending June 30, 1910—Continued.

104	105	106	107	108	109	110	111	112	
TUNES—Continued.									
WAGONS, CARRIAGES, TOOLS, & C.			WINES, LIQUORS AND BEERS.			HOUSEHOLD GOODS AND FURNITURE.			
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
.....	6	6	.....	.....	.....	62	16	78	50
51	.....	51	31	12	43	42	5	47	51
.....	.....	.....	.....	130	150	.....	.....	.....	52
.....	10	10	223	1	224	69	2	71	53
12	.....	12	.....	.....	.....	10	.....	10	54
.....	.....	.....	.....	.....	.....	.....	.....	.....	55
2	3	5	.....	2	2	2	4	6	56
1	17	18	22	56	78	58	51	109	57
35	37	72	1,407	98	1,505	1,268	222	1,490	58
14,754	2,938	17,692	7,462	839	8,301	7,462	1,492	8,954	59
.....	.....	.....	.....	.....	.....	.....	13	13	60
7	.....	7	.....	.....	.....	6	.....	13	61
.....	1,823	1,823	3,418	1,367	4,785	2,848	5,468	8,316	62
.....	232	232	97	198	295	223	110	333	63
10	1	11	1,832	3	1,835	164	66	230	64
69	99	168	56	172	228	197	129	326	65
.....	.....	.....	120	.....	120	.....	.....	.....	66
.....	.....	.....	.....	.....	.....	.....	109	109	67
.....	.....	.....	.....	111	111	.....	11	11	68
.....	.....	.....	.....	641	641	23	193	216	69
.....	.....	.....	.....	.....	.....	.....	.....	.....	70
.....	1,950	1,950	5	1,340	1,345	1,088	56	1,744	71
.....	.....	.....	.....	.....	.....	.....	10	10	72
.....	.....	.....	.....	.....	.....	140	160	300	73
.....	.....	.....	11	.....	11	.....	12	12	74
87	238	325	217	605	822	196	150	346	75
373	2,151	2,524	312	921	1,233	882	1,505	2,387	76
.....	28	28	.....	.....	.....	32	.....	32	77
2,350	333	2,683	313	813	1,126	455	586	1,041	78
865	.....	865	663	.....	663	3,512	.....	3,512	79
.....	169	169	.....	504	504	59	255	314	80
79	90	169	271	251	522	83	295	288	81
4,733	.....	4,733	12,426	.....	12,426	8,170	.....	8,170	82
.....	.....	.....	.....	.....	.....	.....	.....	.....	83
.....	.....	.....	.....	.....	.....	.....	.....	.....	84
.....	.....	.....	.....	.....	.....	.....	.....	.....	85
.....	.....	.....	.....	.....	.....	.....	.....	.....	86
104,154	68,683	173,137	143,309	102,317	245,626	264,326	124,305	388,631	



1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic

113		114	115	116	117	118	119
MANUFACTURES— <i>Con.</i>				MERCHANDISE.			
OTHER MANUFACTURES.							
Number.	Name of Railway.	Tonnage	Tonnage received	Total	Tonnage	Tonnage received	Total
		Originat- ing on Road.	from connecting Roads and other Carriers.	Freight Tonnage.	Originat- ing on Road.	from connecting Roads and other Carriers.	Freight Tonnage.
1	Alberta Railway and Irrigation Co.				4,796	2,351	7,147
2	Algoma Central and Hudson Bay				1,821	170	1,991
3	Atlantic and Lake Superior	86	76	162			
4	Atlantic, Quebec and Western				249	392	641
5	Bay of Quinté	792	872	1,664			
6	Bedlington and Nelson				62		62
7	Bessemer and Barry's Bay						
8	Brandon, Sask. and Hudson Bay	420	179	599	1,591	104	1,695
9	British Yukon				7,793		7,793
10	Brockville, Westport and North- western	1,010	2,528	3,538	570	934	1,504
11	Canada Southern	100,234	929,126	1,029,360			
12	Canadian Govt.—Intercolonial						
13	" " P. E. Island						
14	Canadian Northern	26,240	52,692	78,932	12,812	67,531	80,243
15	Canadian Northern, Ontario	1,697	540	2,237	3,425	286	3,711
16	Canadian Northern, Quebec	6,201	6,945	13,146			
17	Canadian Pacific				194,506	319,766	514,272
18	Cape Breton				19	236	255
19	Caraguet				520	2,460	2,980
20	Carillon and Grenville				4	8	12
21	Central Ontario	7,532	8,300	15,832	12,083	9,085	21,168
22	Crowsnest Southern	558		558	1,293	42	1,335
23	Cumberland Railway and Coal Co.						
24	Dominion Atlantic				4,564	4,566	9,130
25	Elgin and Havelock	494	333	827		560	560
26	Eastern British Columbia				25	315	340
27	Grand Trunk	119,482	140,048	259,530	557,309	455,419	1,012,728
28	Grand Trunk, Canada Atlantic	26,064	8,800	33,864	62,033	53,186	115,239
29	Halifax and Southwestern	18,745	201	18,946			
30	Heteford	564	50	614	1,637	1,380	3,017
31	Inverness Railway and Coal Co.				120	60	180
32	Irondale, Bancroft and Ottawa				15	770	785
33	Kaslo and Slovan		14	14	963	197	1,160
34	Kent Northern					2,360	2,360
35	Kettle River Valley	100		100	230		230
36	Kingston and Pembroke				13,815	3,410	17,225
37	Klondike Mines				1,275		1,275
38	Liverpool and Milton	1,208		1,208			
39	London and Port Stanley	6,827	5,342	12,169	61,318	2,528	63,846
40	Lorbinière and Megantic	12	71	83	148	764	912
41	M. Nitoulin and North Shore				720		720
42	Maritime Coal Ry. and Power Co.						
43	Massawippi Valley	10,352	1,086	17,438	1,148	4,550	5,698
44	Manitoba Great Northern	2,472		2,472	675	57	732
45	Moncton and Buctouche	288	3,821	4,109			
46	Montreal and Atlantic				713	19,478	20,191
47	Montreal and Province Line				3,798	12,694	16,492
48	Montreal and Vermont Junction				464	5,963	6,427
49	Morrissey, Fernie and Michel				6,318		6,318

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Movement for the Year ending June 30, 1910—Continued.

120	121	122	123	124	125	A	B	C	
MISCELLANEOUS.			RECAPITULATION.						
OTHER COMMODITIES.			GRAND TOTAL.						
Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
2,730	28,180	30,910	72,170	105,920	178,090				1
621	279	900	268,520	9,366	277,946				2
3,110	6,958	10,068	15,858	15,311	31,169				3
	561	561	4,069	10,905	14,974				4
14,859	21,451	36,310	73,145	80,952	159,097				5
			6,542	58	6,600				6
			24,975		24,975				7
1,148	60	1,208	66,263	360	66,623				8
410		410	23,744		23,744				9
									10
98	118	216	8,959	13,497	22,456				11
50,733	456,595	507,328	692,134	6,060,113	6,752,247				12
293,246	120,028	413,274	2,838,061	1,145,993	3,984,054				13
33,376		33,376	103,100		103,100				14
165,323	77,146	242,469	2,987,236	822,620	3,809,856				15
4,364	12,789	17,153	389,194	42,067	431,261				16
47,970	18,290	66,260	292,213	348,839	641,052				17
1,859,963	921,832	2,781,795	14,456,851	6,094,517	20,551,368				18
764	327	1,091	1,543	1,326	2,869				19
	910	910	16,384	9,834	26,218				20
			13	32	45				21
1,013	1,014	2,027	190,995	82,148	273,143				22
642	51	693	78,291	145,875	224,166				23
727	5,685	6,412	79,346	13,418	92,764				24
27,225	10,325	37,550	282,205	60,052	342,257				25
	217	217	10,394	3,137	13,531				26
	197	197	111,162	1,326	112,488				27
780,335	1,006,233	1,786,568	6,088,300	10,663,043	16,751,343				28
46,413	53,934	100,347	1,117,820	417,164	1,534,984				29
14,215	4,481	18,696	189,876	23,974	213,850				30
141		141	162,202	3,026	165,228				31
559	3,473	4,032	280,365	10,293	290,658				32
79		79	26,479	2,428	29,107				33
			14,834	247	15,081				34
			2,701	4,260	6,961				35
			2,104		2,104				36
4,192	1,390	5,582	79,134	27,849	106,983				37
			14,961		14,961				38
650		650	40,503		40,503				39
20,388	13,383	33,771	296,202	190,100	486,302				40
57	71	128	53,275	2,599	55,874				41
450		450	412,456	30	412,486				42
146	825	971	190,566	8,734	199,300				43
7,824	21,090	28,914	125,039	368,680	493,719				44
2,507	5	2,512	61,205	41,231	102,436				45
			21,031	8,224	29,255				46
13,771	299,858	313,629	143,048	967,516	1,110,564				47
389	4,634	5,023	15,187	58,618	73,805				48
935	10,873	11,808	2,293	92,622	94,915				49
			54,515	18,634	573,149				

1 GEORGE V., A. 1911

TABLE 11.—SUMMARY of Freight Traffic

Number.	113	114	115	116	117	118	119
	MANUFACTURES— <i>Con.</i>				MERCHANDISE.		
	OTHER MANUFACTURES.				—		
	Name of Railway.	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage	Tonnage Originating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
50	Napierville Junction.....		462	462	163	745	908
51	Nelson and Fort Sheppard....	466		466	2,082	52	2,134
52	New Brunswick Coal and Ry. Co....	3,560	9,330	12,890			
53	New Brunswick and P. E. Island....		10	10		1,640	1,640
54	New Brunswick Southern.....				73		73
55	New Westminster Southern.....	113		113	3,612		3,612
56	North Shore.....						
57	Nova Scotia Steel and Coal Co.....		85	85	10	85	95
58	Orford Mountain.....	71		71	45	281	326
59	Ottawa and New York.....	16,576	8,387	24,963			
60	Père Marquette (in Canada).....	37,649	13,104	50,753	338,161	6,203	344,364
61	Phillipsburg Ry. and Quarry Co.....					60	60
62	Princeton Br'ch of Washington Co. Ry.....	49,884		49,884	4,789		4,789
63	Quebec Central.....	24,232	7,491	31,723	13,670	43,780	57,450
64	Quebec and Lake St. John.....	1,767	8,837	10,604	2,613	2,887	5,500
65	Quebec Ry., Light and Power Co....	7,033	370	7,403			
66	Quebec, Montreal and Southern....	259	12,188	12,447	7,054	8,996	16,050
67	Red Mountain.....	67		67	632		632
68	Rutland and Noyan.....		1,835	1,835		7	7
69	Salisbury and Albert.....	156	1,200	1,356			
70	Schomberg and Aurora.....		105	106	69	216	285
71	Stanstead, Shefford and Chambly....				253	9,304	9,647
72	St. Clair Tunnel.....						
73	St. Lawrence and Adirondack.....	767	46,415	47,182			
74	St. Martins.....				145	1,700	1,845
75	Sydney & Louisburg (Dom. Coal Co.)	20	300	320			
76	Spokane and British Columbia.....	50	20	70	41	37	78
77	Temiscouata.....				573	939	1,512
78	Temiskaming and Northern Ontario.	9,552	19,058	28,610	8,680	12,493	21,173
79	Thousand Islands.....						
80	Toronto, Hamilton and Buffalo.....	35,192	82,981	108,173			
81	Vancouver, Victoria and Eastern....	10,963		10,963	17,064	372	17,436
82	Victoria and Sidney, B.C.....	86	1,121	1,207	60	177	237
83	Victoria Terminal and Ferry Co.....	258	1,129	1,387	183	677	860
84	Wabash Railway Co. (in Canada)....	93,832		93,832	96,952		96,952
85	Wellington Colliery Co.....		2,157	2,157			
86	York and Carleton.....				26	25	51
	Final total.....	619,931	1,377,610	1,997,541	1,455,802	1,062,388	2,518,190



TABLE 12.—SUMMARY of Equipment for the Year ending June 30, 1910.

Number.	Name of Railway.	LOCOMOTIVES.						CARS IN PASSENGER SERVICE.										Total.	Number.
		Passenger.	Freight.	Switching.	Total.	Leased.	First-class.	Second-class.	Combr-nation.	Emigrant.	Dining.	Parlour.	Sleeping.	Baggage, ex-press and postal.	Other cars in passenger service.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
1	Alberta Railway and Irrigation Co.	3	3	2	8	6							2		8				
2	Algoma Central and Hudson Bay.	3	6	9	18	4		3							7				
3	Atlantic and Lake Superior.	2	3	5	5			3							2				
4	Atlantic, Quebec and Western.	2	3	3	5			1					1	3	3				
5	Bay of Quinte.	3	4	7	7	6		2					3		5				
6	Bedford and Nelson.		1	1	1	1									1				
7	Bessmer and Barry's Bay.		2	2	2										2				
8	Brandon, Saskatchewan and Hudson Bay.		2	2	2	3									3				
9	British Yukon.		11	11	11	12							3		15				
10	Brookville, Westport and Northwestern.	2	4	4	4	5								4	10				
11	Canada Southern.	55	92	30	177	10	48	7		2			23		94				
12	Canadian Government Railways—																		
13	Intercolonial.	115	263	26	404	122	41	85	47	9	9	39	73	5	430				
14	P. E. Island.		29	2	31	22	12	7					14		55				
15	Canadian Northern, Ontario.	56	261	12	329	58	72	4	6	9		23	65		237				
16	Canadian Northern, Quebec.	10	12	1	23	10	11	4		2	2				33				
17	Canadian Northern, Quebec.	12	24	1	37	15	18	4	5	4	4		8		54				
18	Cape Breton.	443	985	156	1,584	575	167	94	254	78	18	216	420	5	1,827				
19	Caraquet.		3		3	2							2		4				
20	Carillon and Grenville.	2	2	2	2	2	1	2					1		3				
21	Crowsnest Southern.		3	3	3	2									5				
22	Cumberland Railway and Coal Co.	3	3	1	6	4		3							21				
23	Central Ontario.	15	14	1	16	7	1						4		23				
24	Dominion Atlantic.	11	11	25	25	22		11		1	2		15		51				
25	Elgin and Havelock.		1	1	2	1		1							2				
26	Eastern British Columbia.		2	2	2	2							1		3				
27	Grand Trunk.	134	602	105	901	428	59	97	6	18	14		261	2	885				
28	Grand Trunk (Canada Atlantic).	15	41	5	61	15	7	7		3	3		7		39				
29	Halifax and Southwestern.	9	6	1	16	17	5	2		2			7		33				
30	Hereford.	2	2		4	1		2							3				
31	Inverness Railway and Coal Co.	2	4	1	7	2		1					1		4				









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TABLE 12.—SUMMARY of Equipment for the Year ending June 30, 1910.—Continued.

Name of Railway.	CARS IN FREIGHT SERVICE.										CARS IN COMPANY'S SERVICE.										Total cars in Service.	Number Cars leased.
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33					
Number.	Box.	Flat.	Stock.	Coal.	Tank.	Refri-ger-ation.	Other cars in freight service.	Total.	Officers and pay.	Travel.	Detrick.	Caboose.	Other Road.	Total.								
1 Alberta Railway and Irrigation Co	4	11		47				62	3	3	5	3	4	15	85	1						
2 Algonia Central and Hudson Bay	32	376		27			235	670	1	82	2	11	18	114	791	2						
3 Atlantic and Lake Superior	4	10						14						5	9	3						
4 Atlantic, Quebec and Western								143		22			25	47	52	4						
5 Bay of Quinte	17	126					1	143		20		2	3	25	179	5						
6 Bedlington and Nelson							1	3						2	2	6						
7 Bessemer and Barry's Bay				2				3						3	3	7						
8 Brandon, Saskatchewan and Hudson Bay	9	74	33	12		4	177	177	1		1	8	3	13	180	8						
9 British Yulon	2	6	1	2				220	1					1	248	9						
10 Brockville, Westport and Northwestern	1	176	19	36	32			17			3	75	109	187	28	10						
11 Canada Southern	1,412							1,675						1	1,956	11						
Canadian Government Railways—																						
12 Intercolonial	6,784	2,992	144	1,543	40	143	52	11,698	7	200		114	23	344	12,472	12						
13 P. E. Island	313	147	21	22		8	4	519	2				19	21	586	13						
14 Canadian Northern	8,086	1,251	410	515		98		10,360	11	4	14	1665	409	604	11,291	14						
15 Canadian North-nr. Ontario	192	433	15	60		2	70	772		3	3	14	22	42	847	15						
16 Canadian Northern, Quebec	463	144	16	34		9		666	1	49	1	14	63	128	848	16						
17 Canadian Pacific	34,572	6,883	2,748	2,701	4	1,097	845	48,830	40	1,509	56	867	1,875	4,347	55,024	17						
18 Cape Breton		10						10						14	14	18						
19 Caraquet	5	25						30							33	19						
20 Carillon and Grenville		2					1	3							5	20						
21 Crowneet Southern							312	312							311	21						
22 Cumberland Railway and Coal Co.	2	33		485				520				1	1	2	329	23						
23 Central Ontario	53	182	11	10				256	1			3	4	272	4	23						
24 Dominion Atlantic	212	214	12	25				463				4	7	11	525	24						
25 Elgin and Havelock		6	1					7							9	25						
26 Eastern British Columbia	9	10						19						1	23	26						
27 Grand Trunk	16,054	4,427	1,661	4,344	116	947		27,519	13	687	31	438	800	2,029	30,463	27						
28 Grand Trunk, Canada Atlantic	1,689	326	55	80		25		2,175	1	3		12	89	105	2,319	28						
29 Halifax and Southwestern	94	211	2	7	1			317			1	4	18	23	373	29						
30 Hereford	60	10						70				2		2	75	30						
31 Inverness Railway and Coal Co.	8	29		148				185				3	5	5	197	31						

TABLE 12.—SUMMARY of Equipment for the Year ending June 30, 1910—Continued.

Number.	Name of Railway.	CARS IN FREIGHT SERVICE.						CARS IN COMPANY'S SERVICE.						Total cars in service.	Cars leased.	Number.	
		Box.	Flat.	Stock.	Coal.	Tank.	Refrigerator.	Other cars in freight service.	Total.	Officers and pay.	Travel.	Derrick.	Caboose.				Other road.
		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
32	Irondale, Bancroft and Ottawa	2	2						30					1	1	33	1
33	Kaslo and Slocan	26	2					14	42					5	6	51	3
34	Kent Northern	1							28							30	35
35	Kettle River Valley	5	13					10	28							30	35
36	Kingston and Pembroke	7	43					2	52	1		1		3	3	67	36
37	Klondike Mines	6	17						23							25	37
38	Liverpool and Milton	1	14						15							16	38
39	London and Port Stanley	30	5	3	45				81					1	3	87	39
40	Lothbinière and Mégantic	2	24						26						1	29	40
41	Manitoulin and North Shore	1	99						100	10		1		2	13	115	41
42	Maritime Coal Railway and Power Co.			2				6	8					2	2	13	42
43	Massachusetts Valley	350	150						500			3		3	6	519	43
44	Manitoba Great Northern																44
45	Moncton and Buctouche	5	38						43					1	1	47	45
46	Montreal and Atlantic	239	210	38			1		488				12	132	144	655	46
47	Montreal and Province Line	43	22	4					69				1	2	4	76	47
48	Montreal and Vermont Junction	264	131	4	23		4	1	430		2		7	17	26	474	48
49	Morrissey, Fernie and Michel	7			50				57				1	1	2	64	49
50	Napierville Junction	20			5				25							26	50
51	Nelson and Fort Sheppard								21							24	51
52	New Brunswick Coal and Railway Co.	6	53	10				21	69				1	1	2	74	52
53	New Brunswick and Prince Edward Island		41						45							48	53
54	New Brunswick Southern	6	33					6	45				1		1	50	54
55	New Westminster Southern							37	37							57	55
56	North Shore	1	1	3					5					1	1	7	56
57	Nova Scotia Steel and Coal Co.	2	15	26					43							44	57
58	Orford Mountain	1	11						12					1	1	16	58
59	Ottawa and New York	2	14						16	5			2	2	9	29	59
60	Pere Marquette (in Canada)	1,322	132	34	610		11		2,109			1	22	16	39	2,476	60
61	Phillipsburg Railway and Quarry Co.								35							37	61
62	Prince George Railway and Quarry Co.	25	10						35							37	62
63	Quebec Central	308	325	74	25	2	6		740	2	36	1	7		46	824	63

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64 Quebec and Lake St. John.	476	186	20	81	4	767	1	15	1	9	32	56	859	564	
65 Quebec Railway, Light and Power Co.	17	76	1	14	10	108	1	1	1	1	1	2	132	165	
66 Quebec, Montreal and Southern.	1,395	45	90	7	10	1,540	1	45	1	4	14	19	1,572	66	
67 Red Mountain.	7	7	1	1	1	14	1	1	1	1	1	1	16	67	
68 Rutland and Noyan.	50	5	2	2	1	59	1	1	1	1	1	1	64	64	
69 Salisbury and Albert.	4	23	1	1	1	34	1	1	1	1	1	1	37	69	
70 Selkirk and Aurora.	102	13	1	1	1	13	1	1	1	1	1	1	15	70	
71 Stanstead, Shefford and Chambly.	102	52	1	8	1	164	1	1	1	3	6	9	180	71	
72 St. Clair Tunnel.	75	30	1	1	1	105	1	1	1	3	4	8	120	72	
73 St. Lawrence and Adirondack.	16	64	1	1,413	1	1,493	1	1	1	8	2	11	1,510	105	
74 Sydney and Lunenburg (Dominion Coal Co.)	5	13	1	1	1	28	1	1	1	1	1	1	30	74	
75 Spokane and British Columbia.	5	6	1	1	1	7	1	1	1	1	1	1	9	75	
76 St. Martins.	78	61	1	1	1	139	1	1	1	2	5	8	155	77	
77 Temiscamata.	150	486	10	1	1	646	2	1	1	20	61	83	777	78	
78 Temiskaming and Northern Ontario.	1	1	1	1	1	1	1	1	1	1	1	1	2	79	
79 Thousand Islands.	185	89	10	1	1	284	1	1	1	9	5	15	316	80	
80 Toronto, Hamilton and Buffalo.	2	15	1	1	1	206	1	1	1	1	1	1	219	81	
81 Vancouver, Victoria and Eastern.	2	2	1	1	1	17	1	1	1	1	1	1	21	82	
82 Victoria and Sidney, B. C.	559	22	86	94	172	933	1	1	1	31	11	43	1,014	83	
83 Victoria Terminal Railway and Ferry Co.	5	14	1	172	9	200	1	1	1	1	1	1	201	85	
84 Wabash (in Canada)	4	4	1	1	1	4	1	1	1	1	1	1	6	86	
85 Wellington Colliery Co.															
86 Yukon and Carleton.															
Totals	75,983	20,769	5,528	12,680	195	2,539	2,019	119,713	89	2,645	127	1,895	3,892	8,648	132,681
															1,729

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TABLE 13.—SUMMARY of Cars in Freight Service for the Year

Number.	Name of Railway.	108	109	110	111	112	113	114
		BOX CARS.		FLAT CARS.		STOCK CARS.		
		Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	
			Tons.		Tons.		Tons.	
1	Alberta Railway and Irrigation Co.	4	80	11	220			
2	Algoma Central and Hudson Bay	32	1,130	376	13,305			
3	Atlantic and Lake Superior	4	60	10	150			
4	Atlantic, Quebec and Western							
5	Bay of Quinte	17	350	126	2,820			
6	Bedlington and Nelson							
7	Bessemer and Barry's Bay			1	15			
8	Brandon, Saskatchewan and Hudson Bay							
9	British Yankon	97	1,868	74	1,408	33	660	
10	Brockville, Westport and Northwestern	8	200	6	120	1	20	
11	Canada Southern	1,412	47,690	176	4,080	19	380	
12	Canadian Govt. Ry.—Intercolonial	6,784	196,205	2,992	75,480	144	3,365	
13	" " Prince Edward Island	313	3,130	147	1,470	21	210	
14	Canadian Northern	8,086	242,580	1,251	36,475	410	12,120	
15	Canadian Northern, Ontario	192	5,760	433	12,990	15	450	
16	Canadian Northern, Quebec	463	13,820	144	4,085	16	390	
17	Canadian Pacific	34,572	1,025,640	6,883	214,300	2,748	77,635	
18	Cape Breton			10	300			
19	Caraquet	5	75	25	375			
20	Carillon and Grenville			2	20			
21	Crowsnest Southern							
22	Cumberland Railway and Coal Co.	2	50	33	430			
23	Central Ontario	53	1,276	182	4,640	11	320	
24	Dominion Atlantic	212	4,655	214	5,150	12	240	
25	Elgin and Havelock			6	60	1	10	
26	Eastern British Columbia	9	360	10	400			
27	Grand Trunk	16,034	445,320	4,427	114,290	1,661	43,630	
28	Grand Trunk, Canada Atlantic	1,689	46,990	326	8,650	55	1,440	
29	Halifax and Southwestern	94	2,630	211	5,630	2	40	
30	Hereford	60	1,800	10	200			
31	Inverness Railway and Coal Co.	8	160	29	870			
32	Irondale, Bancroft and Ottawa	2	40	28	560			
33	Kaslo and Slocan	26	520	2	40			
34	Kent Northern	1	10	1	10			
35	Kettle River Valley	5	125	13	325			
36	Kingston and Pembroke	7	140	43	860			
37	Klondike Mines	6	90	17	255			
38	Liverpool and Milton	1	10	14	140			
39	London and Port Stanley	30	810	3	75	3	90	
40	Lotbinière and Megantic	2	45	24	720			
41	Manitoulin and North Shore	1	40	99	3,940			
42	Maritime Coal, Railway and Power Co.			2	40			
43	Massawippi Valley	350	6,950	150	2,750			
44	Manitoba Great Northern							
45	Moncton and Buctouche	5	100	38	760			
46	Montreal and Atlantic	230	5,635	210	6,075	38	975	
47	Montreal and Province Line	43	745	22	380			
48	Montreal and Vermont Junction	264	7,790	134	3,920	4	80	
49	Morrissey, Fernie and Michel	7	280					
50	Napierville Junction	20	600			5	150	
51	Nelson and Fort Sheppard							
52	New Brunswick Coal and Railway Co.	6	160	53	1,330			
53	New Brunswick and Prince Edward Island	4	70	41	615			
54	New Brunswick Southern	6	120	33	660			
55	New Westminster Southern							
56	North Shore	1	30	1	50			

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ending June 30, 1910, showing Number and Aggregate Capacity.

115	116	117	118	119	120	121	122	123	124	
COAL CARS.		TANK CARS.		REFRIGERATOR CARS.		OTHER CARS.		TOTAL.		
Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.
	Tons.		Tons.		Tons.		Tons.		Tons.	
47	940							62	1,240	1
27	830					235	11,020	670	26,285	2
								14	210	3
										4
								143	3,170	5
						1	20	1	20	6
2	40							3	55	7
						177	3,549	177	3,540	8
12	240			4	80			220	4,256	9
2	40							17	380	10
36	850	32	650					1,675	53,650	11
1,543	26,338	40	1,000	143	3,950	52	1,560	11,698	307,898	12
22	330			3	30	4	40	510	5,210	13
515	21,000			98	2,940			10,360	315,115	14
60	3,000			2	60	70	2,800	772	25,060	15
34	875			9	230			666	19,400	16
2,701	120,390	4	80	1,097	30,885	845	27,045	48,850	1,495,975	17
								10	300	18
								30	450	19
						1	10	3	30	20
						312	6,246	312	6,240	21
485	6,225							520	6,705	22
10	400							256	6,630	23
25	510							463	10,555	24
								7	70	25
								19	760	26
4,344	186,010	116	2,162	947	28,310			27,549	819,722	27
80	2,900			25	750			2,175	60,730	28
7	70	1	30	2	60			317	8,460	29
								70	2,000	30
148	4,440							185	5,470	31
								30	600	32
								42	840	33
						14	280	2	20	34
								28	700	35
						10	250	52	1,040	36
						2	40	23	345	37
								15	150	38
								81	2,265	39
45	1,290							26	765	40
								100	3,980	41
								8	160	42
						6	120	500	9,700	43
										44
								43	860	45
				1	30			488	12,715	46
4	60							69	1,185	47
23	460			4	120	1	15	430	12,385	48
50	1,500							57	1,780	49
								25	750	50
						21	420	21	420	51
								69	1,740	52
10	250							45	685	53
						6	120	45	900	54
						37	740	37	740	55
3	75							5	135	56



TABLE 13.—SUMMARY of Cars in Freight Service for the Year ending

108		109	110	111	112	113	114
Number.	Name of Railway.	BOX CARS.		FLAT CARS.		STOCK CARS.	
		Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.
			Tons.		Tons.		Tons.
57	Nova Scotia Steel and Coal Co.....	2	40	15	300		
58	Orford Mountain .....	1	20	11	220		
59	Ottawa and New York.....	2	40	14	280		
60	Père Marquette, in Canada.....	1,322	43,300	132	3,625	34	1,000
61	Phillipsburg Railway and Quarry Co.....			1	25		
62	Princeton Branch of Washington County Ry.....	25	750	10	300		
63	Quebec Central .....	308	7,915	323	7,260	74	1,965
64	Quebec and Lake St. John.....	476	14,490	186	4,365	20	480
65	Quebec Railway, Light and Power Co.....	17	340	76	1,520	1	20
66	Quebec, Montreal and Southern .....	1,395	41,850	45	1,125	90	2,700
67	Red Mountain.....	7	140	7	140		
68	Rutland and Noyan.....	50	1,500	5	150	2	40
69	Salisbury and Albert .....	4	40	29	435	1	15
70	Schomberg and Aurora.....			13	195		
71	Stanstead, Shefford and Chambly.....	102	1,940	52	845	1	20
72	St. Clair Tunnel.....						
73	St. Lawrence and Adirondack.....	75	2,250	30	900		
74	Sidney and Lonisburg (Dominion Coal Co.).....	16	320	64	1,000		
75	Spokane and British Columbia.....	5	125	13	325		
76	St. Martins.....	1	20	6	120		
77	Temiscouata.....	78	1,950	61	1,320		
78	Temiskaming and Northern Ontario.....	150	5,500	486	16,540	10	300
79	Thousand Islands.....			1	20		
80	Toronto, Hamilton and Buffalo.....	185	5,550	89	2,470	10	300
81	Vancouver, Victoria and Eastern.....						
82	Victoria and Sidney, B.C.....	2	40	15	300		
83	Victoria Terminal Railway and Ferry Co.....						
84	Wabash (in Canada).....	559	17,640	22	750	86	2,520
85	Wellington Colliery Co.....	5	70	14	190		
86	York and Carleton.....			4	60		
	Final total.....	75,983	2,211,963	20,769	576,198	5,528	151,565

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June 30, 1910, showing Number and Aggregate Capacity—Continued.

115	116	117	118	119	120	121	122	123	124
COAL CARS.		TANK CARS.		REFRIGERATOR CARS.		OTHER CARS.		TOTAL.	
Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.
	Tons.		Tons.		Tons.		Tons.		Tons.
26	520							43	860 57
								12	240 58
								16	320 59
610	21,360			11	325			2,109	69,610 60
								1	25 61
								35	1,050 62
25	750	2	40	6	180			740	18,110 63
81	2,110			4	90			767	21,535 64
14	280							108	2,160 65
				10	300			1,540	45,975 66
								14	280 67
2	80							59	1,770 68
								34	490 69
								13	195 70
8	160			1	20			164	2,985 71
									72
								105	3,150 73
1,413	25,725							1,413	27,045 74
						10	250	28	700 75
								7	140 76
								139	3,270 77
								646	22,340 78
								1	20 79
								284	8,320 80
						206	4,120	206	4,120 81
								17	340 82
									83
94	3,720			172	5,160			933	29,790 84
172	4,410					9	90	200	4,760 85
								4	60 86
12,680	438,178	195	3,962	2,539	73,520	2,019	58,720	119,713	3,514,106



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28	Grand Trunk	86	4,630 0	16 6	300 0	871	96,745 0	8 0	6,594 0	418	16,329 0	10 0	560 0
29	Grand Trunk (Canada Atlantic)					74	10,457 8	12 0	2,180 0	50	2,950 2	12 0	373 0
30	Grand Trunk Pacific												
31	Halifax and Southwestern	1	450 0	50 0	50 0	61	5,516 3	17 0	408 0	77	1,288 0	12 0	56 0
32	Hampton and St. Martins												
33	Hereford					6	292 0	23 0	71 0	4	637 0	40 0	318 0
34	Inverness Railway and Coal Co.					9	525 0	20 0	120 0	5	52 0	8 0	14 0
35	Irondale, Bancroft and Ottawa					1	90 0	90 0	90 0	16	575 0		
36	Kaslo and Sloean									14	2,330 0	6 0	330 0
37	Kent Northern	1	30 0	30 0	30 0								
38	Kingston and Pembroke					10	448 0	24 0	105 0	74	699 0	4 0	47 0
39	Klonkhe Mines					1	182 11	182 11	182 11	3	1,050 0	100 0	450 0
40	Kettle River Valley					6	1,572 0	16 0	1,215 0				
41	Lake Erie & Detroit River (Pere Marquette)												
42	Liverpool and Milton					6	1,751 0	55 0	506 0	1	200 0		
43	London and Port Stanley					1	34 0	34 0	34 0				
44	Loebniere and Megantic												
45	Maganetawan River					1	166 2	166 2	166 2				
46	Manitoulin and North Shore												
47	Maritime Railway and Coal Co.	1	12 0	12 0	12 0								
48	Massawippi Valley												
49	Midland of Manitoba												
50	Montreal and Atlantic					*20	2,698 6	23 8	314 10	10	310 0	110 0	210 0
51	Montreal and Province Line					1	94 0			1	382 0	10 0	41 0
52	Montreal and Vermont Junction					1	289 0			2	357 7	125 7	232 0
53	Morrissey, Fernie and Michel					1				14	999 0	8 0	721 0
54	Moncton and Buctouche									1	900 0	900 0	900 0
55	Napierville Junction					8	255 6	13 0	55 0	5	899 0		
56	Nelson and Fort Sheppard					1	500 0			1	80 0		
57	New Brunswick Coal and Railway Co.					2	320 0	100 0	220 0	6	793 0	17 0	150 0
58	New Brunswick and P. E. Island									7	1,035 0	52 0	350 0
59	New Brunswick Southern					16	1,929 0	29 11	298 0	46	969 0	7 0	246 0
60	New Westminister Southern									1	70 0		
61	North Shores												
62	Non-bonsting and Nipissing												
63	Nova Scotia Steel and Coal Co.	2	400 0	150 0	250 0								
64	Orford Mountain												
65	Ottawa and New York	5	2,606 0	40 0	2,236 0								
66	Phillipsburg Railway and Quarry Co.												
67	Princeton Branch of Wash'n Co. Ry.	2				2	721 0	253 0	468 0	1			
68	Quebec Central	47	3,420 2	15 0	646 5								
69	Quebec Railway, Light and Power Co.	14	1,250 0	13 0	300 0								
70	Quebec and Lake St. John	28	3,727 0	24 0	220 0								
71	Quebec, Montreal and Southern	17	4,745 0	24 0	365 0								
72	Red Mountain												
73	Rutland and Noyan												
74	Salisbury and Albert	2	185 0							12			
75	Schomberg and Aurora												
76	Stanstead, Shefford and Chambly	1	112 0	112 0	112 0					6	561 0	12 0	334 0

\*Steel.

†Concrete.

TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1910—Continued.

Number.	Name of Railway.	STONE.						IRON.						WOODEN.			
		Aggregate Length.		Minimum Length.		Maximum Length.		Aggregate Length.		Minimum Length.		Maximum Length.		No.	Aggregate Length.	Minimum Length.	Maximum Length.
		Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1		2	3	4	5	6	7	8	9	10	11	12	13				
		No.	Aggregate Length.	Minimum Length.	Maximum Length.	No.	Aggregate Length.	Minimum Length.	Maximum Length.	No.	Aggregate Length.	Minimum Length.	Maximum Length.				
			Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.		Ft. In.	Ft. In.	Ft. In.				
77	St. Clair Tunnel.....						1,322 0	18 0	598 0								
78	St. Lawrence and Adirondack.....					*10											
79	Spokane and British Columbia.....					11	567 0	12 0	330 0	1	13 0	13 0	13 0				
80	Sidney and Louisburg (Dom. Coal Co.).....					2	504 6	212 6	292 0								
81	Temiscouata.....					15	3,300 0	30 0	800 0	30	8,101 0	54 0	756 0				
82	Temiskaming and Northern Ontario.....					5	735 0	103 0	250 0								
83	Thousand Islands.....																
84	Toronto, Hamilton and Buffalo.....																
85	Vancouver Copper Co.....									13	3,196 0	60 0	418 0				
86	Vancouver, Victoria and Eastern.....																
87	Victoria and Sidney.....																
88	Victoria Terminal Railway and Ferry Co.....									2	144 0						
89	Wellington Colliery Co.....																
90	York and Carleton.....																
	Final total.....	180				2,852								1,826			

\* Steel.







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56	Naperville Junction.....	8	255 6	13 0	55 0	43	5,291 0	14 0	512 0
57	Nelson and Fort Sheppard.....	2	580 0	17 0	220 0	21	4,507 0	40 0	500 0
58	New Brunswick Coal and Railway Co.....	7	1,113 0						
59	New Brunswick and P. E. Island.....	8	1,035 0						
60	New Brunswick Southern.....	62	1,998 0						
61	New Westminster Southern.....	1	70 0						
62	North Shore.....								
63	Nosbonsing and Nipissing.....								
64	Nova Scotia Steel and Coal Co.....	2	400 6	150 0	250 0				
65	Orford Mountain.....								
66	Ottawa and New York.....	5	2,696 0			9	626 0	15 0	107 0
67	Phillipsburg Railway and Quarry Co.....								
68	Prince-ton Branch.....	2	721 0	253 0	468 0	1	48 0	48 0	48 0
69	Quebec Central.....	47	3,420 0						
70	Quebec Railway, Light and Power Co.....	14	1,230 0	13 0	300 0	1	50 0	50 0	50 0
71	Quebec and Lake St. John.....	28	3,727 0	24 0	220 0	17	1,139 0	20 0	260 0
72	Quebec, Montreal and Southern.....	17	4,745 0	24 0	965 0	23	3,890 0	22 0	1,001 0
73	Red Mountain.....					8	1,521 0	14 0	432 0
74	Rutland and Noyan.....								
75	Salisbury and Albert.....	14	185 0						
76	Schouberg and Aurora.....								
77	Stanstead, Shefford and Chambly.....	7	673 0	12 0	331 0	21	2,165 0	11 0	1,526 0
78	St. Clair Tunnel.....								
79	St. Lawrence and Adirondack.....	10	1,322 0	18 0	598 0				
80	Spokane and British Columbia.....								
81	Sydney and Louisburg.....	12	580 0			13	2,187 0	24 0	580 0
82	Teniscouata.....	13	2,545 0			35	4,556 0	28 0	562 0
83	Teniskaming and Northern Ontario.....	45	11,401 0	30 0	800 0				
84	Thousand Islands.....	5	795 0	103 0	250 0				
85	Toronto, Hamilton and Buffalo.....								
86	Vancouver Copper Co.....								
87	Vancouver, Victoria and Eastern.....	13	3,196 0	69 0	418 0	139	5,203 5	8 0	4,255 0
88	Victoria and Sidney.....					6	935 0	22 0	520 0
89	Victoria Terminal Railway and Ferry Co.....								
90	Wellington Colliery Co.....	1	56 0						
91	York and Carleton.....	3	200 0						
	Totals.....	5,014				4,744			

TABLE 14.—Summary of Bridges, Trestles, and Tunnels for the Year ending June 30, 1910.—Continued.

Name of Railway.	LEVEL CROSSINGS.										OVERHEAD HIGHWAY CROSSINGS.									
	No.		Guarded.		Un-guarded.		Bridges.		Conduits.		Trestles.		Total.							
	No.	Guarded.	Un-guarded.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.	No.	Height of lowest above rail.					
1 Alberta Railway and Irrigation Co.	63					63														
2 Algoma Central and Hudson Bay	12	2	10			10														
3 Atlantic and Lake Superior.	61		61			61														
4 Atlantic, Quebec and Western.	32		32			32														
5 Bay of Quinte.	73	2	71	3		71	3							3						
6 Bedlington and Nelson	5		5			5														
7 Bessmer and Barry's Bay	2		2			2														
8 Brandon, Saskatchewan and Hudson Bay	80		80			80														
9 British Yukon.																				
10 Brockville, Westport and Northwestern.	35		35			35														
11 Bruce Mines and Algoma.																				
12 Canada-Southern	483	74	409	1	22 0	409	1	22 0		16	21 2	17	21 2	2						
Canadian Government Railways:—																				
13 Intercolonial.	874	110	764	33	18 9	764	33	18 9						33	18 9					
14 Prince Edward Island.	1,018		1,018	2	16 6	1,018	2	16 6						2	16 6					
15 Canadian Northern.	2,549	9	2,540			2,540														
16 Canadian Northern, Ontario.	148	14	134	1	22 5	134	1	22 5						1	22 5					
17 Canadian Northern, Quebec	214	15	199			199														
18 Canadian Pacific.	7,698	326	7,372	57	15 8	7,372	57	15 8		14	19 8	71	19 8	14	15 8					
19 Cape Breton.	16		16			16														
20 Casquet	64		64			64														
21 Carrillon and Guelville.	12	2	10	1	16 0	10	1	16 0						1	16 0					
22 Central Ontario	116		116			116														
23 Crownsnest Southern.	18	1	17			17														
24 Cumberland Railway and Coal Co.	14		14			14														
25 Dominion Atlantic.	181	9	172	5	22 0	172	5	22 0						5	22					

Number.



TABLE 14.—SUMMARY of Bridges and Trestles and Tunnels for the Year ending June 30, 1910—Continued.

Number.	Name of Railway.	LEVEL CROSSINGS.							OVERHEAD HIGHWAY CROSSINGS.						
		Guarded.		Un-guarded.	Bridges.		Conduits.		Trestles.		Total.				
		No.	Feet.		No.	Feet In.	No.	Feet In.	No.	Feet In.	No.	Feet In.			
27		28	29	30	31	32	33	34	35	36	37	38			
76	Stanstead, Shefford and Chambly.	53		2	51				1	18 0	1	18 0			
77	St. Clair Tunnel.														
78	St. Lawrence and Adirondack.	36		3	33				1	20 9	1	20 0			
79	Spokane and British Columbia.	4			8										
80	Sydney and Louisburg.	56		8	48	2	17 4				2	17 4			
81	Teniscouata.	44		2	42										
82	Teniskaming and Northern Ontario	64		3	61	1	26 0				1	26 0			
83	Thousand Islands.	20			20										
84	Toronto, Hamilton and Buffalo.	122		29	93										
85	Vancouver Copper Co.														
86	Vancouver, Victoria and Eastern.	133		3	130										
87	Victoria and Sidney.	17			17										
88	Victoria Terminal Ry. and Ferry Co.	14			14										
89	Wallington Colliery Co.	5			5										
90	York and Carleton.	11			11										
	Final total.	20,024	1,199	18,825	253	1			219		473				









TABLE 15A.—Summary of Accidents to Persons for the

A.—ACCIDENTS RESULTING FROM THE MOVEMENT

PASSENGERS

Number.	172	173	174	175	176	177	178	179	180	181	182
	Name of Railway.	KIND OF									
		COLLISIONS.		DERAILMENTS.		PARTING OF TRAINS.		LOCOMOTIVES OR CARS BREAKING DOWN.		FALLING FROM TRAINS, LOCOMOTIVES OR CARS.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1	Canada Southern.....									1	
	Canadian Government Railways—										
2	Intercolonial.....		7		3					1	1
3	Canadian Northern.....		1		10						1
4	Canadian Northern, Ontario.....				1						
5	Canadian Pacific.....	2	10	44	88		2				19
6	Central Ontario.....										
7	Dominion Atlantic.....										
8	Grand Trunk, in Canada.....		10		2						1
9	Halifax and Southwestern.....				1						1
10	Hereford.....										
11	Ottawa and New York.....										
12	Père Marquette, in Canada.....										2
13	Quebec Central.....		1								
14	Stanstead, Shefford and Chambly.....				9						
15	Temiskaming and Northern Ontario.....		2		3					1	2
16	Vancouver, Victoria and Eastern.....				9						
17	Victoria and Sidney.....										
18	Wabash, in Canada.....										1
	Final total.....	2	31	44	126		2			3	28

Postal Clerks, Pullman Employees, &c.—Killed 1. Injured 20.



TABLE 15 B.—SUMMARY of Accidents to Persons for

A. ACCIDENTS RESULTING FROM THE EMPLOYEES—

Number.	1	2	3	4	5	6	7	8	9	10	11	KIND OF											
												Name of Railway.		Coupling or Uucoupling.		Collisions.		Derailments.		Parting of Trains.		Locomotives or Cars breaking down.	
												Killed	In-jured.	Killed	In-jured.	Killed	In-jured.	Killed	In-jured.	Killed	In-jured.		
1	Alberta Ry. and Irrigation Co....		1																				
2	Algoma Central and Hudson Bay....		1																				
3	Bay of Quinté.....		1																				
4	Brandou, Saskn. & Hudson Bay....																						
5	Canada Southern.....	1	6	1	2																		
6	Can. Gov't. Ry.—Intercolonial....	1	10	3	4	3	1		1														
7	Prince Edward Island.....				1																		
8	Cauadian Northern.....	2	12	3	15	1	3		2														
9	Canadian Northern, Ontario.....						2																
10	Canadian Northern, Quebec.....		2																				
11	Canadian Pacific.....	8	52	3	16	11	11		2			8											
12	Central Ontario.....	1																					
13	Crownstet Southern.....																						
14	Grand Trunk (in Canada).....	2	17	2	5		2		1			5											
15	" (Cau. Atlantic Divn).....	1	1			1																	
16	Halifax and Southwestern.....		2																				
17	Lake Erie and Detroit River.....				1																		
18	Manitoulin and North Shore.....																						
19	Manitoba Great Northern.....																						
20	Montreal and Atlantic.....																						
21	Montreal and Vermont Junction....																						
22	Morrissey, Fernie and Michel.....																						
23	Napierville Junction.....																						
24	New Westminster Southern.....																						
25	Ottawa and New York.....											1											
26	Père Marquette (in Cauada).....		2		8							1											
27	Quebec Central.....																						
28	Quebec and Lake St. John.....		3																				
29	Quebec, Montreal and Southern....		1																				
30	Red Moutain.....		1																				
31	Rutland and Noyau.....																						
32	Stanstead, Shefford and Chambly....						6																
33	St. Lawrence and Adirondack.....																						
34	Sydney and Louisburg.....																						
35	Temisconata.....		3																				
36	Teniskaming & Northern Ontario....		2																				
37	Toronto, Hamilton and Buffalo....		2			1	1																
38	Vancouver, Victoria and Eastern....		5			2	5																
39	Wabash (in Canada).....																						
	Final total.....	16	124	12	52	19	31		6			15											

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the Year ending June 30, 1910, showing kind of Accident.

MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

TRAINMEN.

ACCIDENT.												Total Accidents to Trainmen.	Number.	
Falling from Trains, Locomotives or Cars.		Jumping on or off Trains, Locomotives or Cars.		Struck by Trains, Locomotives or Cars.		Overhead Obstructions.		Other Causes.						
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.			
													1	1
	3								2				6	2
									1				2	3
									2				2	4
2	8		9		3				18		4		46	5
	2		3		1				9		7		31	6
													1	7
1	14		11	5	2		1		19		12		79	8
													2	9
	2				1				2				7	10
8	27	10	18	7	15	1	9	4	34		52	192	11	11
											1			12
	1		3						2				6	13
4	36	2	6	5	6		5	1	20		16	103	14	14
	4		1	1			1		3		3	10	15	15
	1								1			4	16	16
		1									1	1	17	17
									1				1	18
	1										1		2	19
	1		1										2	20
	1												1	21
													3	22
1											1		3	23
											1		1	24
	1	1	1								1		3	25
	2		1								3		17	26
	1												2	27
											2		5	28
													1	29
													1	30
	1												1	31
			1										7	32
	1												1	33
	1												4	34
	2										3		9	35
	5	1									4		11	36
	2		1					2			1		8	37
	1		4								17	2	32	38
	2				1						3		6	39
16	120	15	60	18	29	1	18	6	155		103		610	



TABLE 15 C.—SUMMARY of Accidents for the Year

A. ACCIDENTS RESULTING FROM THE MOVEMENT

EMPLOYEES—

Number.	Name of Railway.	97	98	99	100	101	102	103	104	105	106	107
		KIND OF										
		Coupling or Uncoupling.		Collisions.		Derailments.		Parting of Trains.		Locomotives or Cars breaking down.		
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
1	Canadian Southern.....											
2	Can. Govt. Ry.—Intercolonial.....											
3	Canadian Northern.....											
4	Canadian Northern, Ontario.....											
5	Canadian Pacific.....		1	4	2	4	2					
6	Grand Trunk.....			1			2					
7	Morrissey, Fernie & Michel.....											
8	Quebec Central.....											
9	Quebec & Lake St. John.....											
10	Temiskaming & Northern Ontario.....											
11	Vancouver, Victoria & Eastern.....						22	15				
12	Victoria & Sidney.....											
	Final total.....		1	5	2	26	19					

TABLE 15, D—EMPLOYEES—

1	Can. Govt. Ry.—Intercolonial.....											
2	Canadian Pacific.....		1									
3	Grand Trunk.....											
4	Massawippi Valley.....		1									
5	Père Marquette.....											
	Final total.....		2									

TABLE 15, E—EMPLOYEES—SWITCH TENDERS,—

1	Canadian Northern.....											
2	Canadian Pacific.....	1	6	1			1					
3	Grand Trunk.....											
4	Manitoulin & North Shore.....											
5	Sydney & Louisburg.....											
6	Toronto, Hamilton & Buffalo.....											
7	Vancouver, Victoria & Eastern.....											
	Final total.....	1	6	1			1					

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ending June 30, 1910, showing kind of Accident.

OF TRAINS, LOCOMOTIVES, OR CARS.

TRACKMEN.

108	109	110	111	112	113	114	115	116	117	118	119	
ACCIDENT.										Total Accidents to Trackmen and Stationmen.		
Falling from Trains, Locomotives, or Cars.		Jumping on or off Trains, Locomotives, or Cars.		Struck by Trains, Locomotives, or Cars.		Overhead Obstructions.		Other Causes.				
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
			1	4	3				1	4	5	1
	1			1	3					1	4	2
	4		2		1				4		11	3
									2		2	4
2	10	4	8	13	11			6	41	33	75	5
				6	3				1	7	6	6
									1		1	7
	1										1	8
									4		4	9
1	3				1				2	1	6	10
				2					5	24	20	11
									1		1	12
3	19	4	11	26	22			6	62	70	136	

STATION MEN.

				1						1		1
	1								1			3
				1						1		4
			1						1			5
	1		1	2					2	2		6

CROSSING TENDERS AND WATCHMEN.

					1						1	1
1	2	1	3	2	3			1	3	7	18	2
			3						1		4	3
			1								1	4
		1								1		5
					1						1	6
				1						1		7
1	2	2	7	3	5			1	4	9	25	

TABLE 15 F—SUMMARY of Accidents to Persons for the Year

A. ACCIDENTS RESULTING FROM THE MOVEMENT

TABLE 15, F—EMPLOYEES

Number.	Name of Railway.	25	26	27	28	29	30	31	32	33	34	35
		KIND OF										
		Coupling or Uncoupling.		Collisions.		Derailments.		Parting of Trains.		Locomotives or Cars breaking down.		
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	d.	Injured.	
1	Canada Southern .....											
2	Canadian Northern .....											
3	Canadian Northern, Quebec.....											
4	Canadian Pacific.....		1									2
5	Grand Trunk.....											
6	Morrissey, Fernie & Michel.....											
7	Père Marquette.....											
8	Temiskaming & North'n Ontario.....											
	Total .....		1									2

TABLE 15, G—EMPLOYEES

1	Canadian Northern.....											
2	Canadian Pacific.....											
	Total .....											

TABLE 15, H—EMPLOYEES

1	Canada Southern .....				1							
2	Can. Govt. Ry.: Intercolonial.....		2									
3	Canadian Northern.....		1				2					
4	Canadian Northern, Quebec.....											
5	Canadian Pacific.....		1			2	4					2
6	Grand Trunk.....		1				1					
7	" (Can. Atlantic).....											
8	Halifax & Southwestern.....											
9	Hereford.....											
10	Lake Erie & Detroit River.....				1							
11	Montreal & Atlantic.....			1								
12	Père Marquette.....											
13	Quebec & Lake St. John.....											
14	Sydney & Louisburg .....											
15	Temiskaming & North'n Ontario.....											
16	Vancouver, Victoria & Eastern.....											
17	Wabash, in Canada.....											
	Total.....		5	1	2	2	7					2

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ending June 30, 1910, showing kind of Accident.

OF TRAINS, LOCOMOTIVES, OR CARS.

—SHOPMEN.

36		37		38		39		40		41		42		43		44		45		46		47	
ACCIDENT.																							
Falling from Trains, Locomotives or Cars.		Jumping on or off Trains, Locomotives, or Cars.		Struck by Trains, Locomotives, or Cars.		Overhead Obstructions		Other Causes.		Total Accidents to Shopmen, Telegraph and other Employees.													
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.	
	2				1																	3	
	1				1																	1	
	6		3	1	3			2	2	11	3											28	
	1				1				1													2	
										4												4	
					1																	1	
										1												7	
	10		3	1	7			2	3	16	4											41	

—TELEGRAPH EMPLOYEES.

										1												1
	2																					2
	2									1												3

—OTHER EMPLOYEES.

	1	1	4	1	2					3	2	11	1
		1			1				1		2	3	2
			1	4	1						4	5	3
	1									2		3	4
	5	1	3	5	4		5		3	25	12	49	5
	4		5	2	5				1	1	3	17	6
			1		1							2	7
			1									1	8
										1		1	9
												1	10
										1	1	1	11
			1									1	12
	1				1								1
													1
	1									2			14
	1									6	1		6
										1			1
3	11	3	16	12	15		5	5	42	26	105		

1 GEORGE V., A. 1911

TABLE 15 I.—SUMMARY of Accidents to Persons for the

A.—ACCIDENTS RESULTING FROM THE MOVEMENT

OTHER PERSONS—

Number.	195	196	197	198	199	200	201	202	203	204	205
	Name of Railway.	KIND OF									
		Col- lisions.		Derail- ments.		Parting of Trains.		Locomotives or Cars Breaking Down.		Falling from Trains, Locomo- tives or Cars.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1	Canada Southern .....										
2	Canadian Govt. Ry.—Intercolonial .....				4						
3	Canadian Northern .....									1	
4	Canadian Northern, Ontario .....										
5	Canadian Northern, Quebec .....										
6	Canadian Pacific .....	1								11	1
7	Dominion Atlantic .....										
8	Grand Trunk .....		1								1
9	Grand Trunk (Canada Atlantic) .....										
10	Halifax and Southwestern .....									1	
11	Hereford .....										
12	Lake Erie and Detroit River .....										
13	Maritime Railway and Coal Co. ....										
14	Montreal and Atlantic .....										
15	Morrissey, Fernie and Michel .....										1
16	New Westminster Southern .....										
17	Père Marquette .....										
18	Quebec Central .....				1						
19	Quebec and Lake St. John .....										
20	St. Lawrence and Adirondack .....										
21	Sydney and Louisburg .....										
22	Temiskaming and Northern Ontario .....										
23	Vancouver, Victoria and Eastern ..			1							
24	Wabash .....										1
	Final total .....		2	1	5					13	4





1 GEORGE V., A. 1911

TABLE 15 J.—SUMMARY of Accidents to Persons for the

A.—ACCIDENTS RESULTING FROM THE MOVEMENT

OTHER PERSONS

Number.	218	219	220	221	222	223	224	225	226	227	228
	Name of Railway.	KIND OF									
		Col- lisions.		Derail- ments.		Parting of Trains.		Locomotives or Cars Breaking Down.		Falling from Trains, Locomotives or Cars.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1	Canada Southern .....										
	Canadian Government Railways—										
2	Intercolonial .....				1						
3	Prince Edward Island .....										
4	Canadian Northern .....										
5	Canadian Northern, Ontario .....										
6	Canadian Northern, Quebec .....										
7	Canadian Pacific .....		1								2
8	Dominion Atlantic .....										
9	Grand Trunk (in Canada) .....	1	6								2
10	Grand Trunk (Canada Atlantic) .....										
11	Kingston and Pembroke .....										
12	Lake Erie and Detroit River .....										
13	Montreal and Atlantic .....										
14	Père Marquette .....										
15	Quebec and Lake St. John .....										
16	Thousand Islands .....										
17	Toronto, Hamilton and Buffalo .....										
18	Vancouver, Victoria and Eastern .....										
19	Wabash (in Canada) .....										
	Final total .....	1	7		1						4

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Year ending June 30, 1910, showing kind of Accident.

OF TRAINS, LOCOMOTIVES OR CARS.

NOT TRESPASSING.

229		230		231		232		233		234		235		236		237		238		239		240	
ACCIDENT.																							
Jumping on or off Trains, Locomotives or Cars.		STRUCK BY TRAINS, LOCOMOTIVES OR CARS.										Other Causes.		Total Accidents to other Persons—not Trespassing.		Number.							
		At Highway Crossings.		At Stations.		At other Points along Track.		Killed.	Injured.	Killed.	Injured.												
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.					Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
		4	3			1	1													5	4	1	
		2	1																	2	3	2	
			1			1														1	1	3	
		1	1																	1	1	4	
2	2	19	11	6	2	3	2	1	3											1	5	6	
			1																	31	23	7	
	4	18	18	1		3		1	3											24	1	8	
			3																		33	9	
			1																		2	10	
		1	1																	1	3	11	
		1																		1	1	12	
		1	1																	1	1	13	
			1																	1	2	14	
			1																		1	15	
		1																		1	1	16	
		1																		1	1	17	
			1																		1	18	
		4			1		1		1											4	2	19	
2	6	54	44	7	3	8	4	2	8											74	77		

1 GEORGE V., A. 1911

TABLE 15 K.—SUMMARY of Accidents to Persons for the

B.—ACCIDENTS ARISING FROM CAUSES OTHER THAN THOSE RESCITING  
EMPLOYEES—STATION

243		244	245	246	247	248	249	250	251	252	253
Name of Railway.		STATION MEN.									
		KIND OF ACCIDENT.									
		Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.	
Number.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
1	Algoma Central and Hudson Bay										
2	Canada Southern										
	Canadian Government Ry's—										
3	Intercolonial										
4	Prince Edward Island										
5	Canadian Northern		8								
6	Canadian Northern, Quebec										
7	Canadian Pacific		47		1		2			1	2
8	Grand Trunk										
9	" (Canada Atlantic)										
10	Lake Erie and Detroit River		4								
11	Massawippi Valley										1
12	Montreal and Atlantic		1								
13	Ottawa and New York										
14	Père Marquette										
15	Quebec Central										
16	Quebec and Lake St. John										
17	Temiscouata										
18	Temiskaming and Northern Ontario										
19	Toronto, Hamilton and Buffalo		1								
20	Vancouver, Victoria and Eastern		1								
	Totals		62		1		2			1	3

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Year ending June, 30, 1910, showing kind of Accident.

FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS.

MEN AND SHOPMEN.

254	255	256	257	258	259	260	261	262	263	264	265	266	267														
SHOPMEN.																											
KIND OF ACCIDENT.																											
Total Accidents to Station Men.														Total Accidents to Shopmen.													
		Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.																	
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.													
					1		2				1		4	1													
					45		2				2		50	2													
					4						1		1	3													
	8				32		8		2		12		6	4													
1	52		2		25		3	1	1		8	1	2	6													
									1		4		4	8													
	4										1		1	9													
	1										1		1	10													
	1													11													
					6								6	13													
					6		1				3		10	14													
					1								1	15													
											21		21	16													
					6								6	17													
					2								2	18													
	1				2						1		3	19													
	1				3				2		2		7	20													
1	68		2		134		16	1	6		60	1	218														

1 GEORGE V., A. 1911

TABLE 15 L.—SUMMARY of Accidents to Persons for the

B.—ACCIDENTS ARISING FROM CAUSES OTHER THAN THOSE RESULTING  
EMPLOYEES—TRACKMEN

268		269	270	271	272	273	274	275	276	277	278
TRACKMEN.											
KIND OF ACCIDENT.											
Number.	Name of Railway.	Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
		1	Algoma Central and Hudson Bay						2		
2	Bay of Quinte		1								3
3	Brandon, Saskatchewan and Hudson Bay										1
4	Canada Southern				5		7		1	1	3
	Canadian Government Rys—										
5	Intercolonial										
6	Prince Edward Island						2				6
7	Canadian Northern				4		18				4
8	" " Ontario				1						
9	" " Quebec										2
10	Canadian Pacific				9	1	30		1	53	24
11	Crowsnest Southern						1		1		1
12	Grand Trunk						2				2
13	" " (Canada Atlantic)						2				
14	Hereford										
15	Manitoulin and North Shore				1						
16	Manitoba Great Northern										1
17	Montreal and Atlantic						1				
18	Nelson and Fort Sheppard						1				2
19	Père Marquette						1				1
20	Quebec and Lake St. John										
21	Quebec, Montreal and Southern									1	
22	Stanstead, Shefford and Chambly						1				
23	St. Lawrence and Adirondack						2				
24	Temiscouata				4						
25	Temiskaming and Northern Ontario				4		3				2
26	Thousand Islands										
27	Vancouver, Victoria and Eastern				2		3				5
28	Victoria and Sidney				1						
	Totals		1		31	1	76		3	55	58

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Year ending June 30, 1910, showing kind of Accident.

FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS.

AND OTHER EMPLOYEES.

279	280	281	282	283	284	285	286	287	288	289	290	291	292	
OTHER EMPLOYEES.														
KIND OF ACCIDENT.														
Total Accidents to Trackmen.		OTHER EMPLOYEES.										Total Accidents to other Employees.		
		Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.				
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
	3						1				3		4	1
	4													2
	1		1		3		4			2	8	2	16	3
			3		2		2				1			5
	8								3		8		11	6
	26		3		1				11		9		29	7
	1										3		3	8
	2		2				1		1	1	7	1	11	9
54	64		11		24	1	15		6	17	45	18	101	10
	3													11
	4		2				2			1	8	1	12	12
	2									1	1	1	1	13
	1										1		1	14
	1										1		1	15
	1													16
	1				2		1						3	17
	3													18
	2										1		1	19
			1						1				2	20
1							1							21
	1						1						1	22
	2				1		1				1		3	23
	4										1		1	24
	9													25
	10		1		1		3				9		14	26
	1				1									27
														28
56	169		29		35	1	31		22	22	107	23	224	



TABLE 15 M.—SUMMARY of Accidents to Persons for the  
 B.—ACCIDENTS ARISING FROM CAUSES OTHER THAN THOSE RESULTING  
 PASSENGERS AND

		295	296	297	298	299	300	301	302	303	304	305
		PASSENGERS.										
		KIND OF ACCIDENT.										
Number.	Name of Railway.	Handling Traffic.		Handling Tools, Machinery, &c.		Handling Supplies, &c.		Getting on or off Locomotives or Cars at rest.		Other Causes.		
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	
		1	Canada Southern.....									
	Canadian Government Ry.—											
2	Intercolonial.....											
3	Canadian Pacific.....										2	3
4	Crowsnest Southern.....											
5	Grand Trunk.....									2		2
6	Massawippi Valley.....											1
7	Manitoba Great Northern.....											
8	Quebec Central.....											
9	Thousand Islands.....											1
	Totals.....									2	2	7



1 GEORGE V., A. 1911

ELECTRIC

TABLE 1.—SUMMARY Statement of Description of Road, Mileage,

Number.	Name of Railway.	2	3	4	5	6
		TRACKS.				
		Length of Road, First Main Track.	Length of Second Main Track.	Total Length of Main Track.	Length of Siding and Turnouts.	Total Computed as Single Track
1	Berlin and Waterloo	3.12	.50	3.62	.38	4.00
2	Berlin and Bridgeport	2.40		2.40	.10	2.50
3	Brantford and Hamilton	23.00		23.00		23.00
4	British Columbia	100.79	30.81	131.60	10.05	141.65
5	Calgary Municipal	12.00	4.00	16.00	.50	16.50
6	Cape Breton	11.58		11.58	.29	11.87
7	Chatham, Wallaceburg and Lake Erie	32.85		32.85	2.00	34.85
8	Cornwall	4.00		4.00	2.50	6.50
9	Galt, Preston and Hespeler	17.81	1.36	19.17	7.25	26.42
	Leased Line—Preston to Berlin					
10	Grand Valley <sup>1</sup>	38.29	1.95	40.24	.19	40.43
11	Guelpb Radial	6.00		6.00	.33	6.33
12	Halifax	9.908	3.034	13.002	.387	13.389
13	Hamilton and Dundas	7.00		7.00		7.00
14	Hamilton, Grimsby and Beamsville	22.00		22.00		22.00
15	Hamilton Radial	25.00		25.00		25.00
16	Hamilton Street	22.00		22.00		22.00
17	Hull	12.86	10.60	23.46	1.72	25.18
18	International Transit Co.	3.68		3.68	.22	3.90
19	Kingston, Portsmouth and Catarauqui	8.00		8.00		8.00
20	Levis County	10.25		10.25		10.25
21	London	25.73	6.79	32.52	.73	33.25
22	London and Lake Erie Railway and Transportation Co.	27.50		27.50	1.50	29.00
23	Montreal Park and Island	29.18	16.01	45.19	4.45	49.64
24	Montreal Street	76.29	59.17	135.46	16.77	152.23
25	Montreal Terminal	18.22	4.66	22.88	7.39	30.27
26	Montreal and Southern Counties	7.20		7.20		7.20
27	Niagara Falls Park and River	11.91	11.20	23.11	1.37	24.48
28	Niagara, St. Catharines and Toronto	40.06		40.06	5.56	45.62
29	Nipissing Central	5.10		5.10	.42	5.52
30	Oshawa	7.81		7.81	3.55	11.36
31	Ottawa	23.40	20.64	44.04	.50	44.54
32	Peterborough Radial	5.10		5.10	1.12	6.22
33	Picton County	7.90		7.90	.20	8.10
34	Port Arthur	10.00	9.00	19.00	.25	19.25
35	Quebec Railway, Light and Power Co. (Citadel)	17.22		17.22		17.22
36	Quebec Railway, Light and Power Co. (Mountmorency)	25.10	6.30	31.40	3.00	34.40
37	Sandwich, Windsor and Amherstburg	36.06		36.06		36.06
38	Sarnia	8.35		8.25	1.00	9.25
39	Sherbrooke Street <sup>2</sup>	7.00		7.00		7.00
40	St. John	12.50	6.50	19.00		19.00
41	St. Stephen	7.00		7.00		7.00
42	St. Thomas	7.50		7.50	.20	7.70
43	Sydney and Glace Bay	20.98		20.98	.33	21.31
44	Toronto Street	52.587	49.865	102.392	5.323	107.715
45	Toronto Suburban	9.84		9.84	.42	10.26
46	Toronto and York Radial	72.43		72.43	8.42	80.85
47	Windsor, Essex and Lake Shore Rapid	36.167		36.167	3.840	40.007
48	Winnipeg	65.50		65.50		65.50
49	Yarmouth	3.00		3.00	.11	3.11
	Total	1,049.072	242.389	1,291.461	91.392	1,382.853

<sup>1</sup> Includes Grand Valley, Brantford Street and Woodstock and Thames Valley and Ingersoll Rail-

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## RAILWAYS.

Passengers and Freight carried for the Year ending June 30, 1910.

7	8	9	10	11	12	13	14	
MILEAGE.			PASSENGERS CARRIED.				FREIGHT CARRIED.	
Track Leased.	Passenger Car Mileage.	Freight, Mail and Express Car Mileage.	Total Car Mileage.	Fare Passengers Carried.	Transfer Passengers Carried.	Total Passengers Carried.	Tons Freight Carried.	Number.
	90,000	7	90,007	673,514	18,823	692,337	280	1
70	34,400		34,400	150,648		150,648		2
	233,733	32,978	266,711	372,905		372,905	3,412	3
37-78	5,623,439	146,883	5,770,322	33,417,659		33,417,659	41,142	4
	500,622		500,622	3,329,697	320,000	3,649,697		5
	324,821		324,821	1,698,723	390,549	2,089,272		6
	238,761	32,075	270,836	269,469		269,469	50,398	7
	192,445	13,731	206,176	357,116		357,116		8
	219,977	35,266	255,243	823,167		823,167	132,418	9
	358,593		358,593	1,026,354	68,135	1,094,489	1,464	10
	187,000	5,500	192,500	605,476	57,574	663,050	15,000	11
	888,024		888,024	4,465,308	307,674	4,772,982		12
	110,381	795	111,176	511,344		511,344	312	13
	291,212	50,692	341,904	508,091		508,091	28,110	14
	472,236	21,390	493,626	1,135,291		1,135,291	8,161	15
	1,647,524		1,647,524	9,123,669	2,282,998	11,406,667		16
1-82	736,660	35,175	771,835	1,391,677	110,000	1,501,677	9,960	17
	305,170		305,170	1,159,787	977	1,160,764		18
	199,680		199,680	721,212	133,490	854,702		19
	320,220		320,220	1,368,258	359,429	1,727,687		20
	1,421,735		1,421,735	6,718,167	1,066,253	7,784,420	1,713	21
	310,195	35,458	345,653	553,133	20,415	573,548	5,182	22
	1,165,812	9,920	1,175,732	4,056,245	566,206	4,572,451	27,120	23
8-64	15,134,852	162,691	15,297,543	102,377,923	34,991,186	137,369,109		24
	626,072	53,486	679,558	1,787,654	123,002	1,910,656	111,477	25
	70,935		70,935	319,778		319,778		26
	350,512		350,512	1,295,485	157,047	1,452,532		27
	701,016	36,318	727,334	2,565,262	64,922	2,630,184	186,123	28
	23,500		23,500	149,980		149,980		29
	34,578	22,983	57,561	138,686		138,686	124,351	30
2-22	3,924,542	25,727	3,950,269	15,987,849	5,329,283	21,317,132		31
	257,063		257,063	710,853		710,853		32
	138,634	4,893	143,527	839,369		839,369		33
	491,766		491,766	2,832,426	20,000	2,852,426	58,677	34
	1,602,453		1,602,453	7,169,245	1,783,514	8,952,759		35
	330,562		330,562	1,269,348		1,269,348		36
	854,794		854,794	3,031,244	363,326	3,394,570		37
	143,990		143,990	723,566		723,566		38
	288,020		288,020	731,319	108,951	840,270		39
	978,134		978,134	3,878,521	1,323,535	5,202,056		40
3-00	183,960		183,960	587,538	26,300	613,838		41
	236,328		236,328	409,685	136,561	546,246		42
2-28	246,761	20,741	267,502	2,083,754	30,352	2,114,106		43
	15,391,301		15,391,301	103,480,724	40,436,390	143,917,114		44
	227,113		227,113	1,047,191	55,263	1,102,454		45
	1,018,299	87,916	1,106,215	3,794,219		3,794,219	35,626	46
	240,779	54,936	295,715	296,280	1,464	297,744	11,368	47
	4,892,661		4,892,661	28,814,161	8,574,205	37,415,366		48
	98,340		98,340	225,906		225,906		49
56-44	64,359,605	889,561	65,249,166	360,964,876	99,227,824	460,192,700	852,294	

way. <sup>2</sup> Figures for 1909 used.

1 GEORGE V., A. 1911

## ELECTRIC

TABLE 2.—SUMMARY Statement of Capital

Number.	Name of Railway.	STOCKS.			FUNDED
		Amount Outstanding	Amount per Mile of Line.	Proportion to total Railway Capital. 100 x Col. 2 Col. 12.	Amount Outstanding
					Cols.
					8+9+10+11
\$	\$	Per cent.	\$		
1	Berlin and Waterloo.....				112,459
2	Leased Line—Berlin and Bridgeport .....	17,000	7,083	87.50	2,200
3	Brantford and Hamilton .....	300,000	13,043	31.25	660,000
4	British Columbia .....	8,760,000		51.50	8,609,133
5	Calgary Municipal.....				516,000
6	Cape Breton.....	1,359,000	117,337	59.42	928,000
7	Chatham, Wallaceburg and Lake Erie .....	618,600	17,675	45.06	754,500
8	Cornwall Street.....	200,000	30,769	100.00	
9	Galt, Preston and Hespeler.....	49,850	2,799	8.00	601,852
10	Leased Line—Preston to Berlin.....	1,000	102	100.00	
11	Grand Valley.....	1,100,000	26,004	61.50	688,800
12	Guelph Radial.....	108,000	18,000	100.00	
13	Halifax Truaway.....	1,400,000	140,210	69.60	607,000
14	Hamilton and Dundas.....	1,000,000	14,286	28.56	250,000
15	Hamilton, Grimsby and Beamsville.....	235,000	10,682	61.00	150,000
16	Hamilton Radial.....	111,150	4,446	8.74	1,160,000
17	Hamilton Street.....	205,000	9,318	29.08	500,000
18	*Hamilton, Waterloo and Guelph.....	500,000		100.00	
19	Hull.....	292,000	20,027	100.00	
20	International Transit Co.....	148,250	42,853	23.54	512,000
21	Kingston, Portsmouth and Cataract.....	83,100	10,388	45.60	99,250
22	Levis County.....	382,600	37,327	71.69	151,100
23	London Street.....	552,000	16,626	49.00	575,000
24	London and Lake Erie.....	2,000,000	72,727	74.00	700,000
25	Montreal Park and Island.....	1,035,900	22,984	50.27	1,025,000
26	Montreal Street.....	10,000,000	142,857	79.00	4,426,035
27	Montreal Terminal.....	1,000,000	33,091	62.00	613,000
28	Montreal and Southern Counties.....	500,000	69,444	100.00	
29	*Mount McKay and Kakabeka Falls.....	115,900		100.00	
30	Niagara Falls, Park and River.....				600,000
31	Niagara, St. Catharines and Toronto.....	925,000	23,125	47.20	1,034,000
32	Nipissing Central.....	280,000	56,000	100.00	
33	Oshawa.....	40,000	3,521	33.80	78,452
34	Ottawa.....	1,247,706	28,013	71.40	500,000
35	Peterborough Radial.....	100,000	19,608	56.63	76,592
36	Pictou County.....	300,000	37,500	50.00	300,000
37	Port Arthur and Fort William.....				646,087
38	Quebec Railway, Light and Power Co.....	3,250,000	75,581	56.35	2,517,299
39	Sandwich, Windsor and Amherstburgh.....	297,000	8,294	37.74	490,000
40	Sarnia Street.....	90,000	9,730	53.00	78,100
41	†Sherbrooke Street.....	200,000	28,571	57.14	150,000
42	St. John, N.E.....	800,000	64,000	44.41	1,000,000
43	St. Stephen, N.B.....	100,000	14,285	50.00	100,000
44	St. Thomas, Ont.....				59,812
45	Sydney and Glace Bay.....	500,000	26,738	54.50	419,000
46	Toronto Street.....	8,000,000	69,516	66.67	3,998,327
47	Toronto Suburban.....	80,000	8,130	35.85	143,155
48	Toronto and York Radial.....	2,000,000	24,737	55.30	1,620,000
49	Windsor, Essex and Lake Shore.....	750,000	18,750	50.00	750,000
50	*Windsor and Tecumseh.....	100,000		34.60	189,000
51	Winnipeg Street.....	8,284,776	126,485	62.40	5,000,000
52	Yarmouth Street.....	135,000			
	Final total.....	58,653,826			43,391,153

\* Under construction. † Figures from last year's report.



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## RAILWAYS.

for the Year ending June 30, 1910.

6	7	8	9	10	11	12	13
DEBT.		FUNDED DEBT.				SUMMARY.	
Amount per Mile of Line.	Proportion to total Railway Capital. 100 x Col. 5 Col. 12	Designation.				Total Railway Capital. Cols. 2 + 5.	Amount per Mile of Line. Number.
		Bonds.	Miscellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.		
	\$	Per cent.	\$	\$	\$	\$	\$
28,114	100.00	112,459				112,459	28,114 1
917	12.50	2,200				19,200	8,000 2
28,696	68.75	660,000				960,000	41,739 3
	48.50	8,609,133				17,369,133	4
32,250	100.00	516,000				516,000	32,250 5
80,138	40.58	928,000				2,287,000	197,495 6
21,537	54.94	754,500				1,373,100	39,232 7
						200,000	30,769 8
33,792	92.00	75,000	526,852			651,702	36,591 9
						1,000	102 10
16,288	38.50	688,800				1,788,800	42,292 11
						108,000	18,000 12
61,260	30.40	600,000	7,000			2,007,000	201,470 13
35,714	71.44	250,000				350,000	50,000 14
6,818	39.00	150,000				385,000	17,500 15
46,400	91.26	1,160,000				1,271,150	50,846 16
22,727	70.92	500,000				705,000	32,045 17
						500,000	18
						292,000	20,027 19
139,130	76.46	512,000				660,250	181,983 20
12,406	54.40	99,250				182,350	22,794 21
14,741	28.31	151,100				533,700	52,068 22
17,268	51.00	575,000				1,127,000	33,894 23
25,454	26.00	700,000				2,700,000	98,181 24
22,742	49.73	1,025,000				2,050,900	45,726 25
63,183	21.00	4,426,035				14,426,035	206,040 26
20,284	38.00	613,000				1,613,000	53,375 27
						500,000	69,444 28
						115,900	29
50,378	100.00	600,000				600,000	50,378 30
25,850	52.80	1,034,000				1,959,000	48,975 31
						280,000	56,000 32
6,906	66.20	78,452				118,452	10,427 33
11,226	28.60	500,000				1,747,700	39,239 34
15,018	43.37	50,000	26,592			176,592	34,626 35
37,500	50.00	300,000				600,000	75,000 36
33,563	100.00	646,087				646,087	33,563 37
58,542	43.65	2,500,000	10,000		7,299	5,767,299	134,123 38
13,683	62.26	490,000				787,000	21,977 39
8,443	47.00	78,100				165,100	18,173 40
21,429	42.86				150,000	350,000	50,000 41
80,000	55.59	1,000,000				1,800,000	144,000 42
14,285	50.00	100,000				200,000	28,570 43
7,914	100.00	59,812				59,812	7,914 44
22,406	45.50	419,000				919,000	49,144 45
34,870	33.33	3,998,327				11,998,327	104,641 46
14,548	64.15	140,000	3,155			223,155	22,678 47
20,037	44.70	1,620,000				3,620,000	44,744 48
18,750	50.00	750,000				1,500,000	37,500 49
	65.40	189,000				289,000	50
76,336	37.60	5,000,000				13,284,776	51
						135,000	52
		42,660,255	573,599		157,299	102,044,979	



1 GEORGE V., A. 1911

ELECTRIC

TABLE 3.—SUMMARY of Income Account

Number.	1 Name of Railway.	EARNINGS AND INCOME.			
		2 Gross Earnings from Operation.	3 Operating Expenses.	4 Net Earnings from Operation.	5 Miscellaneous Income.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Berlin and Waterloo.....	31,750 42	24,313 98	7,436 44	
2	Berlin and Bridgeport.....	6,307 99	5,273 97	1,034 02	
3	Brantford and Hamilton.....	98,748 55	67,913 41	30,835 14	
4	British Columbia.....	1,912,121 81	1,210,855 59	701,266 22	
5	Calgary Municipal.....	144,244 18	87,263 36	56,980 82	
6	Cape Breton.....	93,332 22	54,771 70	38,560 52	64,305 94
7	Chatham, Wallaceburg and Lake Erie.....	74,626 11	46,439 42	28,186 69	
8	Cornwall Street.....	25,759 35	20,700 62	5,568 73	
9	Galt, Preston and Hespeler.....	140,280 33	75,891 66	64,388 67	93 32
10	Grand Valley.....	75,589 24	70,012 26	5,576 98	
11	Guelpb Radial.....	29,149 16	22,626 81	6,522 35	
12	Halifax Tramway.....	198,459 51	116,275 59	82,183 92	125,822 82
13	Hamilton and Dundas.....	46,883 51	34,442 53	12,440 98	2,795 68
14	Hamilton, Grimsby and Belleville.....	105,301 89	82,422 68	22,879 21	
15	Hamilton Radial.....	132,484 11	101,756 92	33,727 19	
16	Hamilton Street.....	367,400 90	230,914 70	136,486 20	
17	Hull.....	94,957 04	84,870 27	10,086 77	37,196 77
18	International Transit.....	54,194 38	34,301 97	19,892 41	12,757 25
19	Kingston, Portsmouth and Cataraqui.....	30,807 07	31,508 17	- 701 10	1,201 93
20	Levis County.....	62,997 10	55,870 87	7,126 23	
21	London Street.....	248,556 97	168,540 12	80,016 85	275 72
22	London and Lake Erie.....	105,062 56	69,311 88	35,750 68	111 52
23	Montreal Park and Island.....	320,661 83	221,603 85	99,057 98	
24	Montreal Street.....	4,145,849 65	2,337,907 73	1,807,941 92	109,461 62
25	Montreal Terminal.....	132,313 36	104,931 83	27,381 53	
26	Montreal and Southern Counties.....	24,744 71	39,899 31	- 15,154 60	43 30
27	Niagara Falls, Park and River.....	153,339 75	82,842 63	70,497 12	6,696 53
28	Niagara, St. Catharines and Toronto.....	268,173 30	173,866 61	94,306 69	
29	Nipissing Central.....	13,845 95	3,971 87	9,873 18	
30	Oshawa.....	79,679 63	49,237 54	30,442 09	1,310 76
31	Ottawa.....	716,594 78	466,530 96	250,063 82	
32	Peterborough Radial.....	32,315 29	26,272 70	6,042 59	718 39
33	Pictou County.....	40,558 20	26,021 17	14,537 03	26,548 78
34	Port Arthur and Fort William.....	130,664 32	74,373 44	56,290 88	
35	Quebec Railway, Light and Power (Citadel).....	302,974 73	208,643 68	94,331 05	
36	" " (Montmorency).....	160,063 59	106,087 82	53,975 77	
37	Sandwich, Windsor and Amherstburg.....	191,400 78	104,917 25	86,483 53	28,660 66
38	Sarnia.....	43,184 06	31,276 59	11,907 47	
39	Sherbrooke Street.....	31,176 38	32,593 72	- 1,417 34	
40	St. John, N.B.....	172,222 18	154,099 78	18,122 40	90,211 02
41	St. Stephen, N.B.....	29,660 70	25,991 61	3,669 09	
42	St. Thomas.....	17,451 80	26,421 87	- 8,970 07	
43	Sydney and Glace Bay.....	111,291 05	65,508 33	45,782 72	375 00
44	Toronto Street.....	4,132,003 90	2,114,092 41	2,017,911 49	
45	Toronto Suburban.....	52,535 57	28,623 36	23,912 21	252 98
46	Toronto and York Radial.....	372,509 14	216,067 17	156,441 97	
47	Windsor, Essex and Lake Shore.....	106,235,67	72,827 79	33,397 88	
48	Winnipeg.....	1,212,669 80	630,891 17	581,778 63	873,852 16
49	Yarmouth.....				
	Final total.....	17,076,123 62	10,121,780 67	6,954,342 95	1,382,692 15

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## RAILWAYS.

for the Year ending June 30, 1910.

6	7	8	9	10	11	12	13	
DEDUCTIONS FROM INCOME.								
Gross Income less Operating Expenses.	Taxes.	Interest on Funded Debt.	Interest on Floating Debt.	Other Deduct- ions from Income.	Total Deductions from Income.	Net Income.	Net Loss.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
7,436 44	92 53	4,919 17	425 01		5,436 71	1,999 73		1
1,034 02	118 89	120 00	721 52		960 41	73 61		2
30,835 14	3,087 77	39,600 00	17,083 66		59,771 43		28,936 29	3
701,266 22						701,266 22		4
56,980 82	22,860 00				22,860 00	34,120 82		5
102,866 46	3,492 80	44,450 00			47,942 80	54,923 66		6
28,186 69	1,369 80	28,908 15			30,277 95		2,091 26	7
5,058 73						5,058 73		8
64,481 99	3,838 57	4,404 57	45 00		8,288 14	56,193 85		9
5,576 98	1,929 96		1,084 14		3,014 10	2,562 88		10
6,522 35						6,522 35		11
208,006 74	9,995 96	30,350 00	6,326 47		46,672 43	161,334 31		12
15,236 66	1,074 79	14,000 00			15,074 79	161 87		13
22,879 21	2,380 05	7,500 00	11 44		9,891 49	12,987 72		14
33,727 19	2,856 66	68,000 00	1,700 99		72,557 65		38,830 46	15
136,486 20	39,668 59	22,500 00	11,004 40		73,172 99	63,313 21		16
47,283 54	869 45				869 45	46,414 09		17
32,649 66	580 52	25,600 00	2,034 27		28,214 79	4,434 87		18
500 83	525 14	2,970 00			3,495 14		2,994 31	19
7,126 23	634 98	8,531 11	4,640 22		13,806 31		6,680 08	20
80,292 57	5,228 19	28,750 00	21 88	636 48	34,636 55	45,656 02		21
35,862 20	904 09				904 09	34,958 11		22
99,057 98	13,443 16	97,806 42	33,633 06		144,882 64		45,824 66	23
1,917,403 54	341,069 98	200,122 07		6,309 36	547,501 41	1,369,902 13		24
27,381 53	4,221 82	36,438 77			40,660 59		13,279 06	25
- 15,111 30							15,111 30	26
77,193 65	2,867 92	30,000 00			32,867 92	44,325 73		27
94,306 69	3,875 26	48,200 00	17,519 74	364 50	69,959 50	24,347 19		28
9,873 18	698 18				698 18	9,175 00		29
31,752 85	470 05	4,222 90	802 85		5,495 80	26,257 05		30
250,063 82	20,015 51	20,000 00	10,469 36		50,484 87	199,578 95		31
6,760 98	255 88	2,560 00	1,396 10		4,151 98	2,609 00		32
41,085 81	684 44	9,250 00		21,337 03	31,271 47	9,814 34		33
56,290 88						56,290 88		34
94,331 05						94,331 05		35
53,975 77						53,975 77		36
115,144 19	2,681 91	28,121 66			31,103 57	84,040 62		37
11,907 47	398 80	3,846 92			4,245 72	7,661 75		38
- 1,417 34		5,000 00	1,637 42		6,637 42		8,054 76	39
168,333 42	1,551 19	50,000 00			51,551 19	56,782 23		40
3,669 09	570 81	5,000 00			5,570 81		1,901 72	41
- 8,970 07							8,970 07	42
46,157 72	2,390 24	21,050 00			23,440 24	22,717 48		43
2,017,911 49	685,465 69	188,924 70		3,500 00	877,890 39	1,140,021 10		44
24,165 19	1,087 44		4,486 50	3,959 60	9,533 54	14,631 65		45
156,441 97	4,443 60	80,266 04	25,390 04		110,099 68	46,342 29		46
33,397 88	1,270 24	37,506 00	16,112 09		54,882 33		21,484 45	47
1,455,630 79	122,982 79	250,000 00			372,982 79	1,082,648 00		48
								49
8,337,035 10	1,311,953 65	1,449,152 48	156,516 16	36,106 97	2,953,739 26	5,577,434 26	194,158 42	

1 GEORGE V., A. 1911

ELECTRIC

TABLE 3.—SUMMARY of Income Account

Number.	Name of Railway.	DEDUCTIONS FROM NET INCOME.							
		14		15		16		17	
				Reserves and Special Charges.	Dividends.	Total Deductions from Net Income.			
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
1	Berlin and Waterloo.....								
2	Berlin and Bridgeport.....								
3	Brantford and Hamilton.....								
4	British Columbia.....								
5	Calgary Municipal.....			4,685	29			4,685	29
6	Cape Breton.....			9,300	00	14,040	00	23,340	00
7	Chatham, Wallaceburg and Lake Erie.....								
8	Cornwall Street.....								
9	Galt, Preston and Hespeler.....								
10	Grand Valley.....								
11	Guelph Radial.....								
12	Halifax Tramway.....					84,000	00	84,000	00
13	Hamilton and Dundas.....								
14	Hamilton, Grimsby and Beamsville.....								
15	Hamilton Radial.....								
16	Hamilton Street.....								
17	Hull.....								
18	International Transit.....								
19	Kingston, Portsmouth and Cataraqui.....								
20	Levis County.....								
21	London Street.....					33,120	00	33,120	00
22	London and Lake Erie.....								
23	Montreal Park and Island.....					18,900	00	18,900	00
24	Montreal Street.....			200,000	00	999,573	76	1,199,573	76
25	Montreal Terminal.....								
26	Montreal and Southern Counties.....								
27	Niagara Falls, Park and River.....								
28	Niagara, St. Catharines and Toronto.....								
29	Nipissing Central.....								
30	Oshawa.....								
31	Ottawa.....					149,724	00	149,724	00
32	Peterborough Radial.....								
33	Pictou County.....								
34	Port Arthur and Fort William.....								
35	Quebec Railway, Light and Power Co. (Citadel).....								
36	Quebec Railway, Light and Power Co. (Montmorency).....								
37	Sandwich, Windsor and Amherstburg.....								
38	Sarnia.....					5,375	96	5,375	96
39	Sherbrooke Street.....								
40	St. John, N.B.....					48,000	00	48,000	00
41	St. Stephen, N.B.....								
42	St. Thomas.....								
43	Sydney and Glace Bay.....			4,400	01			4,400	01
44	Toronto Street.....			150,000	00	560,000	00	710,000	00
45	Toronto Suburban.....								
46	Toronto and York Radial.....			25,000	00			25,000	00
47	Windsor, Essex and Lake Shore.....								
48	Winnipeg.....			126,000	00	674,076	15	800,076	15
49	Yarmouth.....								
	Final total.....			519,385	30	2,586,809	87	3,106,195	17

\* Figures for 1909 used.

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## RAILWAYS.

for the Year ending June 30, 1910.—*Concluded.*

18	19	20	21	22		23	24	25	Number.
				PROFIT OR LOSS, ADJUSTMENTS DURING YEAR.					
				Credits.	Debits.				
Surplus for Year.	Deficit for Year.	Surplus at Beginning of Year.	Deficit at Beginning of Year.	\$	cts.	Surplus at Close of Year.	Deficit at Close of Year.		
\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1,999 73							1,999 73		1
73 61							73 61		2
	28,936 29		49,294 06					69,230 35	3
701,266 22							701,266 22		4
29,435 53							29,435 53		5
31,583 66		109,931 53					141,515 19		6
	2,091 26		5,483 57			4,728 78		12,303 61	7
5,958 73							5,958 73		8
56,193 85							56,193 85		9
2,562 88							2,562 88		10
6,522 35							6,522 35		11
77,334 31		360,464 44					437,798 75		12
161 87			1,102 57			352 21		1,292 91	13
12,987 72		45,237 58				5,437 90	52,787 40		14
	38,830 46		112,754 61	11,181 49		4,443 17		144,846 75	15
63,313 21		69,827 76				53,097 73	80,933 24		16
46,414 09		43,790 31			149 12	8,822 53	81,530 99		17
4,434 87			26,001 06	1,915 69		242 20		19,892 70	18
	2,994 31							2,994 31	19
12,536 02	6,680 08		21,766 50					28,386 58	20
34,958 11		33,420 08				19,349 51	26,696 59		21
	64,724 66		976,815 12				34,958 11		22
170,328 37		2,333,136 79		146,927 37		59,027 07	2,591,365 46	1,041,539 78	23
	13,279 06		65,293 49			2,421 42		80,993 97	24
	15,111 30							15,111 30	25
44,325 73							44,325 73		26
24,347 19		182,117 00					206,464 19		27
9,175 00							9,175 00		28
26,257 05							26,257 05		29
49,854 95		73,165 77				30,119 81	92,900 91		30
2,609 00		2,188 89					4,797 89		31
9,814 34		10,539 30		357 48			20,711 12		32
56,290 88							56,290 88		33
94,331 05							94,331 05		34
53,975 77							53,975 77		35
84,040 62		18,096 56					102,137 18		36
2,285 79		23,186 55					25,472 34		37
	8,054 76							8,054 76	38
8,782 23		118,569 45					127,351 68		39
	1,901 72		22,027 82					23,929 54	40
	8,970 07							8,970 07	41
18,317 47		80,312 75					98,630 22		42
430,021 10		2,810,062 99					3,240,084 09		43
14,631 65							14,631 65		44
21,342 29		95,080 02					115,422 31		45
	21,484 45		65,861 57					87,346 02	46
282,571 85		706,965 77					988,637 62		47
									48
2,490,139 09	213,058 42	7,115,193 54	1,337,340 37	160,531 15	188,042 33	9,572,315 31	1,544,892 65		49

1 GEORGE V., A. 1911

## ELECTRIC

TABLE 4.—SUMMARY of Gross Earnings from

Number.	1	2	3	4	5				
						CAR EARNINGS.			
						Passengers.	Freight.	Mail Express.	Other Car Earnings.
	Name of Railway.	\$ cts.	\$ cts.	\$ cts.	\$ cts.				
1	Berlin and Waterloo.....	28,372 98	14 00	1,043 09	349 55				
2	Berlin and Bridgeport.....	6,025 94		100 00					
3	Brantford and Hamilton.....	78,323 20	8,945 68	1,240 37	1,151 20				
4	British Columbia.....	1,769,150 69	118,550 82	1,409 95	16,084 61				
5	Calgary Municipal.....	142,021 85							
6	Cape Breton.....	84,936 16		140 85	104 00				
7	Chatham, Wallaceburg and Lake Erie.....	43,202 40	26,152 23	1,060 46	271 10				
8	Cornwall.....	15,615 18	7,856 66	294 91					
9	Galt, Preston and Hespeler.....	64,018 76	68,229 61	6,961 22	2 60				
	Leased line—Preston to Berlin.....								
10	Grand Valley.....	70,604 11	2,928 83						
11	Guelp Radial.....	27,101 37	868 90						
12	Halifax.....	197,330 15							
13	Hamilton and Dundas.....	43,896 00	619 58	313 19	86 00				
14	Hamilton, Grimsby and Beamsville.....	68,228 67	23,840 67	7,396 25	733 45				
15	Hamilton Radial.....	118,380 38	7,835 41	1,356 35	267 00				
16	Hamilton Street.....	363,223 39			465 30				
17	Hull.....	78,306 93	12,421 27	1,000 01	1,528 30				
18	International Transit Co.....	49,126 35							
19	Kingston, Portsmouth and Cataragui.....	29,665 14							
20	Lewis County.....	59,312 51	2,544 59	690 00	450 00				
21	London.....	244,382 96	157 49	1,240 00	471 70				
22	London and Lake Erie Rly. and Transportation Company.....	90,080 50	10,508 81	3,396 80					
23	Montreal Park and Island.....	309,093 34	3,292 13						
24	Montreal Street.....	4,077,352 45	33,624 02						
25	Montreal Terminal.....	100,614 64	32,202 09	500 00					
26	Montreal and Southern Counties.....	24,744 71							
27	Niagara Falls Park and River.....	136,241 75		623 34	14,619 93				
28	Niagara, St. Catharines and Toronto.....	182,863 68	70,977 61	1,230 05	1,057 70				
29	Nipissing Central.....	13,061 00	21 50		65 00				
30	Oshawa.....	10,221 24	63,572 30	3,916 17					
31	Ottawa.....	691,321 75		8,091 00	372 60				
32	Peterborough Radial.....	32,315 29							
33	Pictou County.....	39,179 55	1,378 65						
34	Port Arthur.....	118,918 32	7,573 53		2,878 54				
35	Quebec Ry., Light and Power Co. (Citadel).....	298,996 60		1,092 68					
36	Quebec Ry., Light and Power Co. (Montmorency).....	128,880 17		3,534 08	6,090 00				
37	Sandwich, Windsor and Amherstburg.....	171,842 09	5,600 15	800 00	528 50				
38	Sarnia.....	32,275 93	3,544 46	1,513 50	2,559 20				
39	Sherbrooke Street.....	30,811 38			30 00				
40	St. John.....	171,454 71							
41	St. Stephen.....	29,300 70							
42	St. Thomas.....	15,713 45			10 06				
43	Sydney and Glace Bay.....	102,669 45		7,036 63	131 16				
44	Toronto Street.....	4,078,275 43		4,800 00					
45	Toronto Suburban.....	45,508 17							
46	Toronto, York and Radial.....	310,864 95	51,350 69	2,121 56					
47	Windsor, Essex and Lake Shore Rapid.....	86,316 54	10,925 16	3,083 54	221 28				
48	Winnipeg.....	1,205,635 26		2,368 11	428 43				
49	Yarmouth.....	10,276 55		250 00	283 92				
	Total.....	16,125,994 72	575,536 84	68,604 11	51,241 07				



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## RAILWAYS

Operation for the Year ending June 30, 1910.

6	7	8	9	10	11	12	13	14	
MISCELLANEOUS EARNINGS.									
Total Car Earnings.	Advertis- ing.	Rent of Land or Build- ings.	Rent of Tracks.	Rent of Equip- ment.	Sale of Power.	Other Miscellan- ous Earnings.	Total Miscellan- ous Earnings.	Total Earnings from Operation.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
29,779 62	551 80	88 00			2,331 60		2,970 80	32,750 42	1
6,125 94		182 05					182 05	6,307 99	2
89,660 45		5,952 00		3,136 10			9,088 10	98,748 55	3
1,905,196 07	5,319 96	840 80	391 09			373 90	6,925 74	1,912,121 81	4
142,021 85	2,222 33						2,222 33	144,244 18	5
85,181 01	315 00	655 20	7,061 96			119 05	8,151 21	93,332 22	6
70,686 19	225 00	503 92		31 00		3,180 00	3,939 92	74,626 11	7
23,766 75	360 00				465 70	1,166 90	1,992 60	23,759 35	8
139,212 19		8 00	630 84		413 20	16 10	1,068 14	140,280 33	9
73,532 94	825 00					1,231 30	2,056 30	75,589 24	10
27,970 27	217 50	462 04			387 44	111 91	1,178 89	29,149 16	11
197,330 15	1,129 36						1,129 36	198,459 51	12
44,914 77	100 04	54 63		1,814 07			1,968 74	46,883 51	13
100,199 04	350 00	942 29		3,810 56			3,102 85	105,301 89	14
127,839 14	300 00	390 00		6,954 97			7,644 97	135,484 11	15
363,688 69	720 00	1,968 00		1,024 21			3,712 21	367,400 90	16
93,256 51	360 00	106 08	1,200 00			34 45	1,700 53	94,957 04	17
49,126 35	658 84					4,409 19	5,068 03	54,194 38	18
29,605 14	300 00	891 23				10 70	1,201 93	30,807 07	19
62,997 10						279 98	279 98	63,277 08	20
246,252 15	1,348 18	145 16				811 48	2,304 82	248,556 97	21
103,986 11	573 55				325 00	177 90	1,076 45	105,062 56	22
312,385 47	500 00	1,467 00	6,309 36				8,276 36	320,661 83	23
4,100,976 47						44,873 18	44,873 18	4,145,849 65	24
133,316 73	510 00		374 04				884 04	134,200 77	25
24,744 71								24,744 71	26
151,485 02	620 00	99 96		138 67	836 62	144 48	1,854 73	153,339 75	27
256,129 04		313 42	135 00	87 50		11,508 34	12,044 26	268,173 30	28
13,147 50	200 00	498 55					698 55	13,846 05	29
77,709 71	139 59	784 24				179 52	1,969 92	79,679 63	30
699,785 35	2,518 75	1,236 20			2,640 00	10,414 48	16,809 43	716,594 78	31
32,315 29	230 00					488 39	718 39	33,033 68	32
40,558 20								40,558 20	33
129,370 39	499 83				794 10		1,293 93	130,664 32	34
300,089 28	2,885 45						2,885 45	302,974 73	35
148,504 25	341 47	358 15				10,859 72	11,559 34	160,063 59	36
178,770 74	575 00	25 00			10,950 00	1,080 04	12,630 04	191,400 78	37
39,893 09	312 50					2,978 47	3,290 97	43,184 06	38
30,841 38	335 00						335 00	31,176 38	39
171,454 71	767 47						767 47	172,222 18	40
29,300 70	150 00				210 00		360 00	29,660 70	41
15,723 45	251 45		1,206 00			276 90	1 728 35	17,451 80	42
109,837 24	300 00			48 13	1,105 68		1,453 81	111,291 05	43
4,083,075 43	12,630 09					36,298 47	48,928 47	4,132,003 90	44
45,508 17	598 62				6,151 55	277 23	7,927 40	52,535 57	45
364,337 20	661 46	400 30				7,110 18	8,171 94	372,509 14	46
100,546 52	475 00	93 00				5,111 15	5,679 15	106,225 67	47
1,208,431 80	4,238 00						4,238 00	1,212,669 80	48
10,810 47	43 00				2,427 74	7,497 87	9,968 61	20,779 08	49
16,821,376 74	45,659 15	18,465 22	17,302 28	17,045 21	29,217 55	151,723 33	279,412 74	17,100,789 48	



1 GEORGE V., A. 1911

ELECTRIC

TABLE 5.—SUMMARY of Operating Expenses

Number.	1	2	3	4	5					
						MAINTENANCE—WAY AND STRUCTURES.				
						Name of Railway.	Mainten- ance of Track and Roadway.	Mainten- ance of Electric Line.	Mainten- ance of Buildings and Fixtures.	Total Way and Structures.
	§ cts.	§ cts.	§ cts.	§ cts.						
1	Berlin and Waterloo		1,347 12		1,347 12					
2	Berlin and Bridgeport		160 09	12 89	172 89					
3	Brantford and Hamilton	9,516 02	626 56	55 78	10,198 36					
4	British Columbia	74,230 96	31,611 44	3,389 15	109,231 55					
5	Calgary Municipal	2,545 55	1,677 42	791 36	5,014 33					
6	Cape Breton	2,979 16	1,643 18	493 15	5,115 49					
7	Chatham, Wallaceburg and Lake Erie	4,889 09	575 23	539 50	6,003 82					
8	Cornwall	1,399 63	40 38		1,440 01					
9	Galt, Preston and Hespeler Leased Line—Preston to Berlin	10,953 65	723 03	51 85	11,728 53					
10	Grand Valley	505 99	2,538 29	305 94	3,350 22					
11	Guelpf Radial	1,025 74	244 02		1,269 76					
12	Halifax	8,692 58	3,117 85	2,117 87	13,928 30					
13	Hamilton and Dundas	3,431 97	1,108 29	28 21	4,568 47					
14	Hamilton, Grimsby and Beamsville	8,994 86	2,444 58	129 88	11,569 32					
15	Hamilton Radial	8,841 66	1,245 05	327 04	10,413 75					
16	Hamilton Street	9,501 22	1,874 71	128 01	11,503 94					
17	Hull	9,251 89	2,583 66	126 52	11,962 07					
18	International Transit Co	1,474 88	661 87	591 42	2,728 17					
19	Kingston, Portsmouth and Cataraqui	2,358 76	143 05		2,501 81					
20	Lévis County	3,161 76	844 82	73 98	4,080 56					
21	London	18,804 55	2,624 15	843 25	22,271 95					
22	London and Lake Erie Ry. and Transportation Co.	9,788 08	999 87	7 07	10,795 02					
23	Montreal Park and Island	37,137 09	4,713 48	907 65	42,758 22					
24	Montreal Street	111,677 15	27,004 68	14,783 95	153,465 78					
25	Montreal Terminal	7,798 27	1,922 80	1,834 93	11,556 00					
26	Montreal and Southern Counties	1,441 80			1,441 80					
27	Niagara Falls Park and River	14,935 79	1,620 23	1,022 61	17,578 63					
28	Niagara, St. Catharines and Toronto	17,309 35	2,474 45	1,880 02	21,663 82					
29	Nipissing Centre									
30	Oshawa	3,854 43	205 54	208 07	4,268 04					
31	Ottawa	19,017 48	7,998 05	2,568 59	29,584 12					
32	Peterborough	1,633 34	251 36	6 60	1,891 36					
33	Piton County	1,412 41	96 43		1,508 84					
34	Port Arthur	7,218 31	1,557 33	686 93	9,462 57					
35	Quebec Ry., Light and Power Co. (Citadel)	9,580 79	2,876 90	332 50	12,790 19					
36	Quebec Ry., Light and Power Co. (Montmorency)	12,136 41	2,272 83	1,050 23	15,459 47					
37	Sandwich, Windsor and Amherstburg	10,536 41	3,082 60	152 74	13,771 75					
38	Sarnia	2,536 10	11 22		2,547 32					
39	Sherbrooke Street	3,443 27	560 00	900 00	4,903 27					
40	St. John	13,637 33	2,261 59	568 87	16,467 79					
41	St. Stephen	3,415 88	164 50	951 63	4,532 01					
42	St. Thomas	2,179 14	427 90		2,607 04					
43	Sydney and Glace Bay	5,195 54	1,557 33	106 44	6,859 31					
44	Toronto Street	53,185 34	20,525 64	13,810 35	87,521 33					
45	Toronto Suburban	2,763 68	384 27	186 45	3,324 40					
46	Toronto, York and Radial	16,448 90	2,766 83	1,212 26	20,427 99					
47	Windsor, Essex and Lake Shore Rapid	7,413 01	2,084 26	335 02	9,832 32					
48	Winnipeg	31,444 43	7,219 68	1,138 57	39,802 68					
49	Yarmouth	693 60			693 60					
	Total	500,363 28	152,874 47	54,657 28	797,895 03					

SESSIONAL PAPER No. 20b

## RAILWAYS.

for the Year ending June 30, 1910.

MAINTENANCE—EQUIPMENT.							Number.
6	7	8	9	10	11	12	
Maintenance of Steam Plant.	Maintenance of Electric Plant.	Maintenance of Cars.	Maintenance of Electric Equipment of Cars.	Maintenance of Miscellaneous Equipment.	Miscellaneous Shop Expenses.	Total Equipment.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
745 44	182 11	2,899 82				3,827 37	1
							2
	906 88	2,276 99	1,877 66			5,061 53	3
1,322 83	9,733 02	89,664 99	38,466 59	75 79	4,187 30	143,450 52	4
		4,657 35	2,592 44	121 73	1,560 04	8,931 56	5
	646 81	2,738 22	1,451 01	232 78	126 70	5,195 52	6
	1,267 36	2,546 64	2,619 88	339 65		6,773 53	7
171 49	26 74	1,868 97	774 75			2,841 95	8
666 23	31 27	4,095 00				4,792 50	9
		4,453 42		843 59		5,297 02	10
	30 48	4,275 80				4,306 28	11
2,059 27	577 66	8,191 45	6,391 26	654 49	185 26	18,059 39	12
		740 96	488 53			1,229 49	13
	326 22	5,582 45	3,307 86			9,216 53	14
		6,507 36	4,506 67			11,014 03	15
		14,601 28	14,293 70			28,894 98	16
						14,103 42	17
		3,020 29	1,003 18	66 67	399 37	4,489 51	18
	278 10	1,313 56				1,591 72	19
	248 87	2,615 52	2,790 56	691 06	666 55	7,012 56	20
1,812 42	404 33	9,082 15	8,631 61	430 26	2,699 79	23,060 56	21
507 01	255 42	4,032 76	1,316 37	38 77	13 06	6,163 39	22
		14,568 95	10,341 77	931 78		25,842 50	23
9,326 62	6,943 74	186,835 24	129,508 71	9,421 73	11,335 09	353,371 13	24
741 36		7,387 75	6,160 47	293 55	10,000 00	21,583 13	25
		679 65	452 19			1,131 84	26
	1,010 86	5,670 95	2,810 15	605 21		10,097 17	27
415 77		8,853 79	9,975 21	1,032 27	1,074 25	21,351 29	28
							29
	3,286 29	1,888 52	2,104 27	242 21		7,521 29	30
	7,001 01	34,842 39	28,431 64		2,914 10	73,189 14	31
		1,820 90	1,310 24			3,131 14	32
374 97		359 70	903 12	97 86		1,735 65	33
		9,995 48	5,596 79		300 15	15,892 42	34
		12,003 51	5,861 97	391 45	1,195 78	19,452 71	35
	206 82	5,465 33	2,803 21	123 15	822 10	9,420 61	36
	1,988 52	4,352 70	5,066 15	3 25		11,410 62	37
			2,400 62		1,490 44	3,891 06	38
310 00	521 00	4,158 42		650 00	430 67	6,070 09	39
917 42	26 06	9,330 34	14,064 56	801 02	1,071 16	26,210 56	40
189 88	270 19	859 73	975 90	61 32	224 60	2,581 62	41
			2,816 28			2,973 91	42
	141 83	7,801 71	1,891 93	127 86	106 99	10,070 32	43
18,745 22	4,195 06	132,953 76	101,089 08	28,323 82	157,838 44	443,145 38	44
		840 26	689 15	332 69	275 07	2,137 17	45
	1,593 71	13,796 55	13,537 50	2,588 61	342 30	31,858 67	46
	1,977 53	3,259 68	8,131 45	1,009 14		14,377 80	47
		49,799 64	32,553 84	8,283 92	3,332 37	93,969 77	48
	912 52	900 00				1,812 52	49
38,305 93	45,148 10	692,276 38	481,301 83	58,815 63	202,591 58	1,532,542 87	

1 GEORGE V., A. 1911

## ELECTRIC

TABLE 5.—SUMMARY of Operating Expenses

Number.	13	14	15	16	17
	TRANSPORTATION—OPERATION OF				
	Name of Railway.	Power Plant Wages.	Fuel for Power.	Water for Power.	Lubricants and Waste for Power Plant.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Berlin and Waterloo.....				
2	Berlin and Bridgeport.....				
3	Brantford and Hamilton.....	3,227 91			
4	British Columbia.....	14,439 10	6,181 74	11,624 82	192 32
5	Calgary Municipal.....				
6	Cape Breton.....				
7	Chatham, Wallaceburg and Lake Erie.....	2,376 39	9,535 34		
8	Cornwall.....	1,087 82	603 12	120 00	
9	Galt, Preston and Hespeler.....	3,307 63	12,634 51		930 95
	Leased Line—Preston to Berlin.....				
10	Grand Valley.....	4,269 96	10,527 14		372 02
11	Guelph Radial.....	1,653 57	3,270 98		274 31
12	Halifax.....	3,123 40	12,050 40	614 79	489 19
13	Hamilton and Dundas.....				
14	Hamilton, Grimsby and Beamsville.....	2,835 79			
15	Hamilton Radial.....				
16	Hamilton Street.....				
17	Huil.....				
18	International Transit Co.....				
19	Kingston, Portsmouth and Cataraqui.....				
20	Levis County.....	775 43			
21	London.....	7,959 71	20,180 27	128 00	562 09
22	London & Lake Erie Ry. and Transportation Co.....	6,269 99	13,453 05		339 59
23	Montreal Park and Island.....				
24	Montreal Street.....	51,113 39	77,534 78	1,083 11	2,042 84
25	Montreal Terminal.....	5,041 73	5,205 62		365 34
26	Montreal and Southern Counties.....	2,204 28	9,222 73		
27	Niagara Falls, Park and River.....	4,831 84			40 31
28	Niagara, St. Catharines and Toronto.....	3,999 66			
29	Nipissing Central.....	280 00			
30	Oshawa.....	2,182 83	6,311 00		82 38
31	Ottawa.....	8,135 40		3,693 97	
32	Peterborough Radial.....			1,500 00	
33	Pictou County.....	2,924 58	4,332 69	80 00	237 03
34	Port Arthur.....				
35	Quebec Ry., Light and Power Co. (Citadel).....				
36	Quebec Ry., Light and Power Co. (Montmorency).....	1,097 54			
37	Sandwich, Windsor and Amherstburg.....	6,078 33	10,806 23	780 00	502 99
38	Sarnia.....				
39	Shebrooke Street *.....	1,314 00			55 00
40	St. John.....	3,885 00	14,594 82	830 00	
41	St. Stephen.....	952 50	4,591 80	442 95	217 84
42	St. Thomas.....				
43	Sydney and Glace Bay.....	2,845 11	7,372 48	242 70	442 85
44	Toronto Street.....	15,950 50	5,370 10	257 99	538 16
45	Toronto Suburban.....				
46	Toronto and York Radial.....	10,966 88	25,416 84		2,696 18
47	Windsor, Essex and Lake Shore Rapid.....	3,255 45	7,417 53		
48	Winnipeg.....				
49	Yarmouth.....		4,767 19		167 54
	Total.....	178,389 69	271,410 36	21,398 33	10,538 93

\* Figures of 1.00 used.

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## RAILWAYS.

for the Year ending June 30, 1910—Continued.

18	19	20	21	22	23	24	25		
POWER PLANT.			TRANSPORTATION—OPERATION OF CARS.						
Miscellaneous Supplies and Expenses of Power Plant.	Hired Power.	Total Operation of Power Plant.	Superintendence of Transportation.	Wages of Conductors.	Wages of Motormen.	Wages of Miscellaneous Car Service Employees.	Wages of Car House Employees.	Number.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
	6,955 19	6,955 19	1,100 00	2,551 19	2,551 19		710 00	1	
				934 72	934 72			2	
	13,219 91	16,447 82	1,898 69	2,917 68	2,917 69	2,142 76	1,780 89	3	
1,618 17	178,073 16	212,129 31	15,160 50	215,008 72	215,008 72	33,365 55	27,213 53	4	
	31,881 20	31,881 20	564 00	15,402 58	15,367 60	367 85		5	
	12,552 87	12,552 87	1,062 50	7,859 30	7,859 31		1,331 42	6	
743 36		12,655 09	582 80	4,429 73	4,429 74			7	
		1,810 94		4,689 24	4,689 24			8	
		16,873 09	1,500 00	6,595 77	6,525 73	2,222 24	3,216 73	9	
	9,123 19	24,292 31	1,780 00	9,644 19	9,644 19		5,530 01	10	
		5,198 86		3,808 83	3,808 84			11	
1,092 97		17,370 75	1,400 00	21,258 69	21,258 69	3,007 87	1,817 75	12	
	4,470 03	4,470 03	810 63	3,022 27	3,022 26	352 40	259 63	13	
	11,067 05	13,902 84	1,639 64	4,675 04	4,675 03	6,117 30	921 22	14	
	16,824 70	16,824 70	2,809 16	9,026 71	9,026 70	2,211 09	1,701 52	15	
	41,527 37	41,527 37	6,462 31	37,964 27	37,964 27		3,844 55	16	
	9,057 24	9,057 24		14,621 22	14,621 21			17	
	7,000 01	7,000 01	300 00	5,874 36	5,925 66	1,536 97	1,096 61	18	
	4,167 05	4,167 05		3,702 75	3,772 68		2,655 17	19	
	9,000 00	9,775 43		7,573 34	7,685 11	968 25	1,280 02	20	
912 35		29,742 42	2,428 65	29,257 88	29,771 81	1,145 20	1,777 44	21	
595 34		20,657 97	612 07	5,456 35	5,456 65	3,739 53	1,672 75	22	
	51,818 90	51,818 90	3,783 93	21,288 71	29,537 10	6,587 46	3,186 08	23	
2,985 16	233,400 41	368,159 62	37,339 23	417,211 50	411,051 68	21,798 99	45,944 45	24	
73 47	1,500 00	12,190 06	1,970 00	14,069 59	14,173 75	3,192 75	3,027 55	25	
759 91		12,186 92	719 56	1,793 96	1,793 97	534 30		26	
690 02		5,562 17	1,748 07	8,882 74	8,751 88	824 58	2,230 35	27	
220 87	12,858 80	17,079 33	6,599 20	21,127 85	21,127 86	13,206 07	2,440 54	28	
	1,250 00	1,530 00		479 69	548 03		673 66	29	
	250 00	2,405 34	1,650 05	2,019 00	2,767 00	1,033 41	300 00	30	
	1,603 31	15,000 00	11,412 86	92,958 18	92,958 17	21,174 52	8,607 06	31	
		1,500 00	780 00	5,558 98	5,558 98	354 25	354 25	32	
	55 00	7,629 30		3,730 52	2,652 37	820 90	1,999 79	33	
	13,493 26	13,493 26	1,991 30	12,839 11	12,639 24	915 38		34	
	20,343 30	20,343 30	10,272 74	42,330 10	42,330 10	1,847 50	6,828 87	35	
	25 10	4,401 25	5,213 89	10,728 95	7,826 80	16,984 15	1,009 87	36	
	215,49	8,232 85	26,615 89	912 35	17,995 43	17,995 43	408 33	37	
		5,577 81		3,998 22	3,998 21			38	
	40 00	1,409 00	500 00	3,800 00	3,800 00	200 00	1,880 00	39	
	292 76	19,602 58	3,120 00	27,218 08	27,218 08		5,602 62	40	
		6,20 09	355 00	2,763 90	2,759 70		1,941 95	41	
		4,448 23		5,794 52	5,794 53		2,484 55	42	
	519 56	3,329 80	998 50	5,287 76	5,287 76		990 98	43	
	4,239 54	29,331 06	319,677 35	40,036 78	407,934 77	376,257 92	208,012 17	44	
		4,560 00		4,92 62	5,094 09		2,513 17	45	
	335 63	11,909 90	51,325 43	4,147 50	16,873 53	16,873 53	9,596 18	46	
	648 40		11,351 38	1,325 17	3,916 56	3,946 57		47	
		44,803 84	44,803 81	21,069 10	175,318 45	163,669 65	5,800 75	24,680 66	48
		4,934 73		2,917 24	2,917 24			49	
17,916 34	1,087,273 72	1,5 6,927 37	192,567 60	1,749,916 70	1,697,096 68	152,950 35	393,998 76		



1 GEORGE V., A. 1911

ELECTRIC

TABLE 5.—SUMMARY of Operating Expenses

Number.	Name of Railway.	26	27	28	29
		TRANSPORTATION—			
		Car Service Supplies.	Miscellaneous Car Service Expenses.	Hired Equipment.	
		\$ cts.	\$ cts.	\$ cts.	
1	Berlin and Waterloo.....				
2	Berlin and Bridgeport.....				
3	Brantford and Hamilton.....	1,238 21	1,406 90		923 69
4	British Columbia.....	9,184 88	45,105 14		5,860 91
5	Calgary Municipal.....	803 22	275 29		
6	Cape Breton.....	899 98			48 13
7	Chatham, Wallaceburg and Lake Erie.....		2,447 95		3,100 00
8	Cornwall.....		716 91		
9	Galt, Preston and Hespeler—Leased line, Preston to Berlin.....		4,013 82		
10	Grand Valley.....				
11	Guelph Radial.....				
12	Halifax.....	1,774 31	416 21		
13	Hamilton and Dundas.....	500 63	1,101 38		3,144 41
14	Hamilton, Grimsby and Beamsville.....	1,365 37	2,258 95		2,318 08
15	Hamilton Radial.....	1,675 08	2,971 11		6,342 35
16	Hamilton Street.....	2,791 32	5,734 72		1,247 79
17	Hull.....	1,166 80	501 89		
18	International Transit Co.....	140 06	216 46		
19	Kingston, Port-smouth and Cataract.....				
20	Levis County.....	350 08	443 28		3,199 90
21	London.....	1,426 69	2,477 74		
22	London and Lake Erie Railway and Transportation Co.....	1,943 38	1,289 15		
23	Montreal Park and Island.....				3,439 99
24	Montreal Street.....	35,605 78	49,992 50		
25	Montreal Terminal.....				
26	Montreal and Southern Counties.....		3,495 58		
27	Niagara Falls Park and River.....	30 67	3,177 30		
28	Niagara, St. Catharines and Toronto.....		4,993 23		9,549 40
29	Nipissing Central.....				
30	Oshawa.....		7,606 39		2,962 61
31	Ottawa.....				
32	Peterborough Radial.....	321 99	544 21		
33	Pictou County.....		94 09		
34	Port Arthur.....		822 15		
35	Quebec Railway, Light and Power Co. (Citadel).....		11,056 56		
36	Quebec Railway, Light and Power Co. (Montmorency).....	2,508 01	2,366 56		
37	Sandwich, Windsor and Amherstburg.....	1,522 87	116 72		
38	Sarnia.....				
39	Sherbrooke Street.....				
40	St. John.....		2,066 91		
41	St. Stephen.....	18 12			
42	St. Thomas.....				
43	Sydney and Glace Bay.....	1,853 93			
44	Toronto Street.....				
45	Toronto Suburban.....	383 51			
46	Toronto and York Radial.....	3,681 92	14,383 72		
47	Windsor, Essex and Lake Shore Rapid.....		11,332 07		
48	Winnipeg.....	27,299 35			
49	Yarmouth.....		102 05		
	Total.....	98,486 16	183,526 94		42,136 56

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## RAILWAYS.

for the Year ending June 30, 1910—Continued.

30	31	32	33	34	35	36	37		
OPERATION OF CARS—Continued.			GENERAL.						
Cleaning and Sanding Track.	Removal of Snow and Ice.	Total Operation of Cars.	Salaries of General Officers.	Salaries of Clerks.	Printing and Stationery	Miscellaneous Office Expenses.	Store Expenses.	Number.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
	202 25	7,114 63		300 00		218 61	290 98	1	
	59 05	1,928 49	115 00	662 31	35 00			2	
	1,091 49	16,378 00	1,347 00	4,726 06	374 35			3	
5,113 18	1,030 99	572,052 12	24,133 10	42,308 69	5,875 73	5,000 83	5,639 31	4	
440 87	156 23	33,377 66	3,632 50	548 45	670 01	333 68		5	
136 41	537 55	19,754 60	3,961 94	2,107 39	472 05	144 93	187 99	6	
		14,990 22			477 40		49 10	7	
365 40		10,460 79	1,084 72		142 60	455 58		8	
	1,549 78	25,624 07	2,518 16	6,754 00	450 00	1,009 54		9	
	1,226 61	27,825 00	4,120 34		994 34			10	
		7,617 67	1,000 00	429 00	241 36	88 81		11	
412 61	2,713 11	54,059 24	2,400 00	1,218 00	533 00	416 10	371 20	12	
	652 47	12,866 11	796 50	2,523 12	126 20			13	
	803 63	24,834 26	1,593 00	5,074 71	500 30			14	
	1,349 45	37,113 17	2,052 00	5,882 08	544 95			15	
	3,242 86	99,252 09	5,777 53	12,453 40	1,070 85			16	
	2,660 47	33,571 59	1,220 00	1,898 07	276 71	686 06		17	
	127 61	15,217 73	1,196 19	1,265 98	179 59			18	
	361 28	10,491 88	1,861 00		354 78	584 96		19	
424 71	3,813 04	25,737 03	2,143 46	1,260 00	363 94	30 38		20	
421 28	2,725 70	71,432 39	4,599 84	1,355 23	185 15	393 10	665 00	21	
	550 88	20,720 76	3,360 00	1,296 75	622 68	491 07		22	
1,554 84	7,842 14	68,220 25	16,258 06	2,126 75	283 72			23	
28,034 80	141,175 11	1,188,154 04	43,149 98	31,423 98	5,971 74	2,907 15	12,041 30	24	
2,040 72	7,866 09	46,340 36	100 00	961 28	188 27			25	
		8,157 37	600 00	728 58	487 46			26	
499 00	538 59	26,708 18	1,038 59	1,095 03	129 68	233 96	218 62	27	
619 86	2,806 99	82,561 00	8,908 82	6,039 01	1,593 49	1,172 68	979 48	28	
		1,701 38	300 00	173 33	15 00	10 50		29	
		18,338 46	2,700 00	300 00	177 43			30	
	8,220 20	235,330 99	17,694 33		919 89	442 70	500 00	31	
	173 28	13,645 94	1,585 00	1,090 80		501 02		32	
	1,278 60	10,576 27	1,800 00	472 57		398 28		33	
	423 61	29,630 79		2,121 25	463 00	343 58		34	
2,663 80	16,223 06	133,552 73	3,668 39	3,163 33	598 37	7,284 55	645 00	35	
	2,896 21	45,985 86	2,945 68	4,297 04	1,781 82	873 45		36	
	545 67	42,361 54	2,700 00	1,246 00	152 57	81 15		37	
		7,996 43	2,232 00	505 00	399 10	240 29		38	
350 00	1,650 00	12,180 00	1,500 00	444 00	101 30	30 00	517 10	39	
	8,766 17	73,991 86	1,861 71	1,218 35	233 10		524 07	40	
	356 31	8,194 98	1,845 00	193 00		204 45		41	
		13,893 60	960 00	420 00	290 30	12 00		42	
116 12	362 72	14,897 77	2,205 34	1,316 00	181 14	306 21	183 86	43	
3,536 74	7,375 88	1,043,154 26	34,005 92	42,406 99	4,021 12	12,365 34	8,867 00	44	
626 46	131 56	13,673 41	1,500 00	1,355 50	552 75	417 62		45	
8,088 73	5,374 92	79,020 03	10,658 04		401 20	2,079 96	440 02	46	
		20,550 37	3,796 56	1,272 60	200 90	1,275 36	343 18	47	
		427,592 73	3,650 00	5,747 35		3,302 21	1,377 89	48	
		5,936 53		500 00				49	
65,200 30	238,881 58	4,814,761 63	236,575 70	202,712 98	33,634 34	44,336 11	33,841 10		



1 GEORGE V., A. 1911

## ELECTRIC

TABLE 5.—SUMMARY of Operating Expenses

Number.	38	39	40	41
	Name of Railway.	GENERAL—		
		Stable Expenses.	Advertising and Attractions.	Miscellaneous General Expenses.
	\$ cts.	\$ cts.	\$ cts.	
1	Berlin and Waterloo.....			1,668 32
2	Berlin and Bridgeport.....			438 71
3	Brantford and Hamilton.....	1,403 82	333 82	1,930 19
4	British Columbia.....	1,583 96	7,756 32	9,241 99
5	Calgary Municipal.....		69 75	437 93
6	Cape Breton.....	175 68	3 25	1,778 17
7	Chatham, Wallaceburg and Lake Erie.....			4,432 52
8	Corawall.....		1,157 65	
9	Galt, Preston and Hespeler—Leased Line, Preston to Berlin.....			1,312 07
10	Grand Valley.....			
11	Guelph Radial.....		1,233 60	415 97
12	Halifax.....	972 88	633 40	941 80
13	Hamilton and Dundas.....	14 04	265 92	842 81
14	Hamilton, Grimsby and Beamsville.....	509 55	248 91	1,536 48
15	Hamilton Radial.....	213 95	267 39	2,153 91
16	Hamilton Street.....	6 77	1,787 27	3,879 88
17	Hull.....	1,428 64	146 53	896 33
18	International Transit Co.....		6 90	1,081 28
19	Kingston, Portsmouth and Cataraqui.....		2,527 09	5,392 43
20	Levis County.....	614 96	94 95	246 73
21	London.....	322 10		1,919 79
22	London and Lake Erie Railway and Transportation Co.....		684 95	652 38
23	Montreal Park and Island.....		1,778 28	2,219 57
24	Montreal Street.....	7,690 21	611 46	38,396 93
25	Montreal Terminal.....		489 37	1,444 15
26	Montreal and Southern Counties.....			
27	Niagara Falls Park and River.....	127 51	3,231 62	824 87
28	Niagara, St. Catharines and Toronto.....		2,239 01	1,551 26
29	Nipissing Central.....			
30	Oshawa.....	586 57		1,264 46
31	Ottawa.....		12,699 60	4,839 33
32	Peterborough Radial.....		1,297 34	143 60
33	Pictou County.....	308 11		1,150 33
34	Port Arthur.....			660 64
35	Quebec Railway, Light and Power Co. (Citadel).....	784 29	306 52	
36	Quebec Railway, Light and Power Co. (Montmorency).....		1,402 55	14,704 14
37	Sandwich, Windsor and Amherstburg.....		832 72	2,701 08
38	Sarnia.....	1,349 97	172 18	5,351 19
39	Sherbrooke Street.....	91 12	210 00	3,547 84
40	St. John.....	452 17	916 34	1,647 61
41	St. Stephen.....			173 95
42	St. Thomas.....		19 05	
43	Sydney and Glace Bay.....		25 99	430 51
44	Toronto Street.....	5,996 77	105 20	
45	Toronto Suburban.....			371 13
46	Toronto, York and Radial.....	6,184 37	1,882 71	
47	Windsor, Essex and Lake Shore Rapid.....		1,651 21	
48	Winnipeg.....			10,644 70
49	Yarmouth.....		323 09	485 34
	Total.....	30,817 44	47,411 04	133,752 32

SESSIONAL PAPER No. 20b

## RAILWAYS.

for the Year ending June 30, 1910—Continued.

42	43	44	45	46	47	48	49	
<i>Continued.</i>								
Damages.	Legal Expenses in Connection with Damages.	Miscellaneous Legal Expenses.	Rent of Land and Buildings.	Rent of Track and Terminals.	Insurance.	Total General.	Total Operating Expenses.	Number.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
		210 00	467 14	321 63	1,592 99	5,069 67	24,313 98	1
			100 00	1,711 07	110 10	3,172 59	5,273 97	2
2,291 65		1,028 70	320 00	5,585 69	576 42	19,827 70	67,913 41	3
24,323 22		5,962 09		29,339 69	12,827 16	173,992 09	1,210,855 59	4
575 04			306 25		1,485 00	8,058 61	87,263 36	5
690 51		731 13	386 64		1,513 54	12,153 22	54,771 70	6
307 57				107 61	642 56	6,016 76	46 439 42	7
8 77		334 86			962 75	4 146 93	20,700 62	8
173 15		142 90	100 35	6 83 30	3,725 00	16,873 47	75,891 66	9
731 15		331 62	1,208 32	881 57	980 37	9,247 71	70,012 26	10
				372 94	452 56	4,234 24	22,626 81	11
2,078 30	424 50	464 10			2,404 63	12,857 91	116,275 59	12
2,452 68		565 93		3,603 23	118 00	11,308 43	34,442 53	13
4,159 67		1,968 92	280 00	6,361 96	666 23	22,899 73	82,422 68	14
3,076 32		2,133 31		8,945 49	1,121 87	26,391 27	101,756 92	15
13,665 88	5,372 81		3,451 26		2,270 67	49,736 32	230,914 70	16
3,078 33				4,938 60	1,606 68	16,175 95	84,870 27	17
		413 59	1 00		722 92	4,866 55	34,301 97	18
1,464 65					570 80	12,755 71	31,568 17	19
444 65	62 91		97 11	1,200 00	2,986 18	9,515 27	56,150 85	20
9,830 23		487 86	18 50		2,256 00	22,932 80	168,540 12	21
521 78				1,200 00	2,145 13	10,974 74	69,311 88	22
7,924 41		1,409 47			983 72	32,983 98	221,603 85	23
93,576 62		21,015 10	10,459 84		7,512 85	274,757 16	2,337,907 73	24
5,030 68		1,342 83	1,887 41		705 70	12,149 69	106,819 24	25
				14,497 15	668 19	16,981 38	39,899 31	26
1,955 63	704 09	299 38	167 50	10,000 00	2,875 00	22,901 48	82,842 63	27
3,757 67		895 77		1,022 84	3,051 14	31,211 17	173,866 61	28
		166 66			75 00	740 49	3,971 87	29
75 00				863 28	1,911 46	7,878 20	49,237 54	30
5,931 11		87 80			8,779 24	99,994 00	466,530 96	31
		305 66			1,180 90	6,104 32	26,272 70	32
					441 82	4,571 11	26,021 17	33
31 75		692 88	81 00		1,500 00	5,894 10	74,373 14	34
1,214 00		108 30			4,766 09	22,540 81	208,679 77	35
289 24		316 28	290 00		3,107 79	30,007 99	106,087 82	36
859 18		1,104 75	180 00		900 00	10,757 45	104,917 25	37
163 40	76 49				1,175 00	11,664 62	31,677 24	38
1,200 00	80 00	25 00	5 00		280 00	8,031 36	32,593 72	39
8,517 00					2,456 64	17,826 99	154,099 78	40
73 00	500 00	500 00			988 59	4,477 99	25,991 69	41
			1 00		796 74	2,499 09	26,421 87	42
2,984 39		591 98	792 31	7,112 65	2,768 01	18,928 39	65,508 33	43
81,361 49		9,362 96			23,101 30	220,594 09	2,114,092 41	44
21 00			336 11		374 27	4,928 38	28,623 36	45
8,341 04		890 23			2,557 48	33,435 05	216,067 17	46
930 10	1,563 52	446 58			5,235 91	16,715 92	72,827 79	47
						24,722 15	630,891 17	48
						1,308 43	14,685 81	49
342,120 26	8,784 32	54,336 64	20,936 74	98,753 70	118,930 80	1,406,943 49	10,139,070 39	

ELECTRIC RAILWAYS.

TABLE 6.—Summary Statement of Equipment for the Year ending June 30, 1910.

Number.	Name of Railway.	PASSENGER CARS.						OTHER CARS.						Total Cars of all Classes.	Number.
		Closed Passenger Cars.	Open Passenger Cars.	Combination, Closed and Open Passenger Cars.	Total Passenger Cars.	Freight Cars.	Mail, Express and Baggage Cars.	Combination Cars.	Work Cars.	Snow Ploughs.	Sweepers.	Miscellaneous Cars.			
1		2	3	4	5	6	7	8	9	10	11	12	13		
1	Berlin and Waterloo.....	8	4	.....	12	.....	.....	.....	1	1	1	.....	15	1	
2	Berlin and Bridgeport.....	6	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	6	2	
3	Brantford and Hamilton.....	182	2	.....	184	152	5	2	9	7	.....	68	427	3	
4	British Columbia.....	15	.....	.....	15	.....	.....	.....	.....	.....	.....	1	16	5	
5	Calgary Municipal.....	9	.....	.....	9	.....	.....	.....	.....	2	.....	.....	12	6	
6	Cape Breton.....	7	2	.....	9	17	.....	.....	.....	.....	1	2	28	7	
7	Chatham, Wallaceburg and Lake Erie.....	7	3	.....	10	.....	.....	.....	.....	.....	1	.....	13	8	
8	Cornwall.....	7	4	.....	11	7	.....	2	1	2	2	.....	23	9	
9	Galt, Preston and Hespeler.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
10	Leased line—Preston to Berlin.....	12	.....	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	10	
11	Grand Valley.....	6	5	2	13	1	.....	.....	1	1	1	.....	16	11	
12	Guelpb Radial.....	20	24	4	48	.....	.....	.....	.....	.....	4	.....	52	12	
13	Halifax.....	2	2	.....	4	.....	.....	.....	.....	.....	.....	.....	4	13	
14	Hamilton and Dundas.....	8	5	.....	11	4	.....	.....	3	.....	.....	.....	18	14	
15	Hamilton, Grimsby and Beamsville.....	9	.....	.....	9	2	.....	.....	2	1	.....	.....	14	15	
16	Hamilton Radial.....	47	33	.....	80	.....	.....	.....	.....	.....	2	.....	83	16	
17	Hamilton Street.....	20	13	3	36	2	1	.....	1	3	.....	.....	46	17	
18	Hull.....	8	.....	.....	8	.....	.....	.....	.....	.....	1	.....	9	18	
19	International Transit Co.....	10	12	.....	22	1	.....	.....	.....	2	.....	.....	25	19	
20	Kingston, Portsmouth and Cataract.....	13	8	.....	21	.....	.....	.....	2	1	3	.....	28	20	
21	Lewis County.....	39	14	.....	53	.....	.....	.....	.....	1	1	.....	58	21	
22	London and Lake Erie Railway and Transportation Co.....	12	16	.....	28	10	.....	.....	1	5	.....	.....	23	22	
23	Montreal Park and Island.....	7	.....	10	17	1	.....	.....	4	.....	.....	.....	46	23	

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21 Montreal Street	505	269	75	849	47				15	4	28		943
25 Montreal Terminal	17	18		35	1				3	3	1		24
26 Montreal and Southern Counties	8			8									25
27 Niagara Falls, Park and River	10	18		28		2							26
28 Niagara, St. Catharines and Toronto	11	16	5	32	14					1			27
29 Nipissing Central	4			4	2					3			28
30 Oshawa	4	2		7	1								29
31 Ottawa	85	66	1	151	1	3			3	4	10		30
32 Peterborough Radial	8	6		14						1			31
33 Peterborough	5			5	1				1	2	1		32
34 Port Arthur	15	3		18		1				1			33
35 Quebec Ry., Light and Power Co. (Citadel)	40	40		80						4	9		34
36 Quebec Ry., Light and Power Co. (Montmorency)	13			13									35
37 Sandwich, Windsor and Amherstburg	22	16		38	3				3	1			36
38 Sarnia	10	2		12		1							37
39 Sherbrooke Street													38
40 St. John	25	26		51						3	4		39
41 St. Stephen	3	4		7					1	1			40
42 St. Thomas	6	10		16					1	1			41
43 Sydney and Glace Bay	10			10	3								42
44 Toronto Street	300	294	237	831					11	1	16		43
45 Toronto Suburban	10	7		17	1						1		44
46 Toronto, York and Radial	37	4		41					1	3			45
47 Windsor, Essex and Lake Shore Rapid	9	33		9	13	2			8				46
48 Winnipeg	180	33		213					13	1	3		47
49 Yarmouth	4	3		7						1			48
	1,795	994	337	3,126	282	25	7	87	62	97	103	3,789	49









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