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# SESSIONAL PAPERS

VOLUME 11

# SECOND SESSION OF THE ELEVENTH PARLIAMENT

OF THE

# DOMINION OF CANADA

SESSION 1910



VOLUME XLIV



See also Numerical List, Page 5.

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Arranged in Numerical Order, with their titles at full length; the dates when Ordered and when Presented to the Houses of Parliament; the Names of the Senator or Member who moved for each Sessional Paper, and whether it is ordered to be Printed or Not Printed.

# CONTENTS OF VOLUME 1.

(This volume is bound in two parts.)

Report of the Auditor General for the year ended 31st March, 1909. Volume I, Parts
 A, C to J (inclusive) L, M, N; Volume III, Parts V, W, X, Y. Presented 12th November, 1909, by Hon. W. S. Fielding. Volume II, Ports B, K and O to U, (inclusive),
 presented 12th January, 1910, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 2.

 Public Accounts of Canada, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

- 3. Estimates of the sums required for the services of Canada for the year ending on the 31st March, 1911. Presented 18th November, 1909, by Hon. W. S. Fielding.
  - Printed for both distribution and sessional papers.
- 4. Supplementary Estimates of sums required for the service of Canada, for the fiscal year ending 31st March, 1910. Presented 24th November, 1909, by Hon. W. S. Fielding.

  Printed for both distribution and sessional papers.
- 5. Further Supplementary Estimates of sums required for the service of Canada, for the fiscal year ending 31st March, 1910. Presented 14th March, 1910, by Hon W. S. Fielding.

Printed for both distribution and sessional papers.

- 5a. Supplementary Estimates of sums required for the service of Canada for the fiscal year ending 31st March, 1911. Presented 3rd February, 1910, by Hon. W. S. Fielding.
  - Printed for both distribution and sessional papers.
- 5b. Further Supplementary Estimates of the sums required for the service of Canada, for the fiscal year ending 31st March, 1911. Presented 30th April, 1910, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

5c. Further Supplementary Estimates of the sums required for the service of Canada, for the fiscal year ending 31st March, 1910. Presented 20th April, 1910, by Hon. W. S. Fielding.

Printed for both distribution and sessional papers.

List of Shareholders in the Chartered Banks of Canada, as on the 31st December, 1909.
 Presented 21st March, 1910, by Sir Wilfrid Laurier.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 3.

Report of dividends remaining unpaid, unclaimed balances and unpaid drafts and bills
of exchange in Chartered Banks of Canada, for five years and upwards, prior to 31st
December, 1909.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 4.

- 8. Report of the Superintendent of Insurance for the year ended 31st December, 1909.

  Printed for both distribution and ressional papers.
- Abstract of Statements of Insurance Companies in Canada, for the year ended 31st December, 1909.

Printed for both distribution and sessional papers.

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# CONTENTS OF VOLUME 6.

- 10e. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1909. Part VI.—Subsidized Steumship Services, with statistics showing steamship traffic to 31st December, 1909, and estimates for fiscal year 1910-1911. Presented 3rd May, 1910, by Sir Wilfrid Laurier. Printed for both distribution and sessional papers.
- 10f. Report of the Department of Trade and Commerce for the fiscal year ended 31st March, 1909. Part VII.—Trade of Foreign Countries and Treaties and Conventions. Presented 25th April, 1910, by Sir Wilfrid Laurier.

Printed for both distribution and sessional papers.

10g. Certified copy of a Report of the Committee of the Privy Council, approved by His Excellency the Governor General on the 14th February, 1910, in respect to trade relations with Germany. Presented 15th February, 1910, by Hon. W. S. Fielding.

Printed for sessional papers.

- 10i. Correspondence respecting negotiations between the United States and the Dominion of Canada relative to trade relations. Presented 27th April, 1910, by Hon. W. S. Fielding.

Printed for sessional papers.

10j. Tariff relations between the United States and the Dominion of Canada. Presented 3rd May, 1910, by Sir Richard Cartwright.

Printed for sessional papers.

# CONTENTS OF VOLUME 7.

11. Report of the Department of Customs, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. Wm. Paterson.

Printed for both distribution and sessional papers.

12. Inland Revenues of Canada. Excise, &c., for the fiscal year ended 31st March, 1909. Presented 12th November, 1909; by Hon. W. Templeman.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 8.

13. Inspection of Weights, Measures, Gas and Electric Light, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. W. Templeman.

Printed for both distribution and sessional papers.

14. Report on Adulteration of Food, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. W. Templeman.

Printed for both distribution and sessional papers.

15. Report of the Minister of Agriculture, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. S. A. Fisher.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 9.

16. Report of the Directors and Officers of the Experimental Farms, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. S. A. Fisher.

Printed for both distribution and sessional papers.

17. Criminal Statistics for the year ended 30th September, 1909.

Printed for both distribution and sessional papers.

18. Return of By-Elections (Tenth Parliament) of the House of Commons of Canada, held during the year 1908. Presented 4th February, 1910, by Hon. C. Murphy.

Printed for both distribution and sessional papers.

18a. Return of By-Elections (Tenth Parliament) of the House of Commons of Canada, held during the year 1909. Presented 2nd March, 1910, by Hon. C. Murphy.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 10.

19. Report of the Minister of Public Works, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. W. Pugsley.

Printed for both distribution and sessional papers.

- 19a. (No issue.)
- 19b. (No issue.)
- 19c. Supplementary Report of the International Waterways Commission, 1909. Presented 19th November, 1909, by Hon. W. Pugsley.

Printed for both distribution and sessional papers.

- 19e. Additional correspondence, International Waterways Treaty, and Report on division of Waters of St. Mary and Milk River. Presented 4th April, 1910, by Sir Wilfrid Laurier. Printed for both distribution and sessional papers.
- 20. Report of the Department of Railways and Canals, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. G. P. Graham.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 11.

- 20b. Railway Statistics of Canada, for the year ended 30th June, 1909. Presented 12th January, 1010, by Hon. G. P. Graham.

Printed for both distribution and sessional papers.

- Report of the Department of Marine and Fisheries (Marine) for 1908. Presented 15th November, 1909, by Hon. L. P. Brodeur.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 12.

21a. Eighth Report of the Geographic Board of Canada, containing all decisions to June 30, 1909. Presented 25th November, 1909, by Hon. L. P. Brodeur.

Printed for both distribution and sessional papers.

21b. List of Shipping issued by the Department of Marine and Fisheries, being a list of vessels on the registry books of Canada on the 31st December, 1909.

Printed for both distribution and sessional papers.

22. Report of the Department of Marine and Fisheries (Fisheries) for 1939. Presented 12th November, 1909, by Hon. S. A. Fisher.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 13.

22a. Lobster Fishery. Evidence taken before Commander William Wakeham, M.D., (Officer in charge of the Gulf Fisheries Division) in Quebec and the Maritime Provinces. Two volumes. Presented 11th March, 1910, by Hon. W. Templeman. Also copy of the Report of Commander Wakeham in relation thereto.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 14.

- 23. Report of the Harbour Commissioners, &c., to 31st December, 1908. Presented 13th January, 1910, by Hon. R. Lemieux.. Printed for both distribution and sessional papers.
- 23a. Report of the Chairman of the Board of Steamboat Inspection, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. S. A. Fisher.

Printed for both distribution and sessional papers.

24. Report of the Postmaster General, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Sir Wilfrid Laurier.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 15.

25. Report of the Department of the Interior, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. F. Oliver.

Printed for both distribution and sessional papers.

25a. Report of the Chief Astronomer.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 16.

25b. Annual Report of the Topographical Surveys Branch.

Printed for both distribution and sessional papers.

25c. Report of the High Commissioner for Canada, for the year ended 31st March, 1909. Presented 12th November, 1909, by. Hon. F. Oliver.

Printed for both distribution and sessional papers.

26. Summary Report of the Geological Survey Branch of the Department of Mines, for the calendar year 1909.

Printed for both distribution and sessional papers.

26a. Summary Report of the Mines Branch of the Department of Mines.

Printed for both distribution and sessional papers.

#### CONTENTS OF VOLUME 17.

27. Report of the Department of Indian Affairs, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. F. Oliver.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 18.

29. Report of the Secretary of State of Canada for the year ended March 31, 1909. Presented 25th November, 1909, by Hon. C. Murphy.

Printed for both distribution and sessional papers.

29a. Report of the Imperial Conference with representatives of the self-governing Dominions on the Naval and Military Defence of the Empire, 1909. Presented 17th November, 1909, by Sir Frederick Borden. Also with additional papers relating to Australia and New Zealand, presented 10th December, 1909, by Hon. L. P. Brodeur.

Printed for both distribution and sessional papers.

29b. Report of the Department of External Affairs, 1909.

Printed for both distribution and sessional papers.

- 30. Civil Service List of Canada, 1909. Presented 12th January, 1910, by Hon. C. Murphy.

  Printed for both distribution and sessional papers.
- 31. First Annual Report of the Civil Service Commission of Canada, for the period from September 1st, 1908, to August 31, 1909. Presented 10th December, 1909, by Hon. C. 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, 1909. Presented 18th April, 1910, by Hon. C. Murphy.

Printed for both distribution and sessional papers.

# CONTENTS OF VOLUME 19.

- 34. Report of the Minister of Justice as to Penitentiaries of Canada, for the fiscal year ended 31st March, 1909. Presented 12th November, 1909, by Hon. A. B. Aylesworth.

  Printed for both distribution and sessional papers.
- 35. Report of the Militia Council, for the fiscal year ended 31st March, 1909. Presented 1st December, 1909, by Sir Frederick Borden.

Printed for both distribution and sessional papers.

- 36. Report of the Department of Labour, for the fiscal year ended 31st March, 1909. Presented 12th March, 1909, by Hon. L. M. King.

Printed for both distribution and sessional papers.

36a. Report of the Deputy Minister of Labour on industrial conditions in the Coal Fields of Nova Scotia. Presented 25th November, 1909, by Hon. L. M. King.

Printed for both distribution and sessional papers.

37. Fifth Report of the Commissioners of the Transcontinental Railway, for the year ended 31st March, 1909. Presented 12th November, 1909, by Hon. G. P. Graham.

Printed for both distribution and sessional papers.

- 39. Statement in pursuance of section 17 of the Civil Service Insurance Act, for the year ended 31st March, 1909. Presented 16th November, 1909, by Hon. W. S. Fielding.

  Not printed.
- 40. Statement of expenditure on account of miscellaneous unforeseen expenses, from the 1st April, 1909, to the 10th November, 1909, in accordance with the Appropriation Act

- 42a. Return to an order of the House of Commons, dated 16th November, 1909, for a copy of all reports, letters, communications and documents touching or relating to the resignation of Hugh D. Lumsden from his position as Chief Engineer of the National Transcontinental Railway, including a copy of all letters, communications or reports of the said Hugh D. Lumsden to the Prime Minister, touching or relating to his resignation, or to the affairs of the National Transcontinental Railway. Presented 23rd November, 1909.—Mr. Borden...... Printed for both distribution and sessional papers.
- 42b. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all correspondence had between the Minister of Railways and the Transcontinental Railway Commission relating to the sub-letting of contracts for the construction of the Transcontinental Railway in New Brunswick; and the failure of sub-constructors to make payment for supplies and material furnished by farmers, merchants and others for use in said work. Presented 13th December, 1909.—Mr. Crocket...Not printed.
- 42c. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all correspondence connected with and relating to the letter of the Auditor General to the Secretary of the National Transcontinental Railway Commission of the 18th of August, 1909, in which the Auditor General points out that 64,192 cubic yards of excavation, classified at an average price of 83.06 cents, were subsequently reclassified at \$1.10\frac{1}{4}\$ per cubic yard, thereby increasing the cost by the sum of \$17,453.80, and asking for an explanation. Presented 13th December, 1909.—Mr. Lennox. . . . . Not printed.
- **42**e. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all correspondence between the following legal firms: Rothwell & Johnson, Rothwell. Johnson & Bergeman, and Rothwell, Johnson & Stubbs, on the one side, and the Government or the Transcontinental Railway Commissioners, on the other side, as to the instructions to the solicitors for legal services rendered in passing titles of property

- 42f. Return to an order of the House of Commons, dated 17th December, 1969: 1. Showing the names and addresses of the engineers who surveyed and located the line of the Eastern Division of the Transcontinental Railway, and the part of the railway covered by the work of each engineer. 2. The name and address of the engineer who prepared the estimates of quantities and prices of the section or portion of the line covered by each contract. 3. The names of the engineers acting upon behalf of the Railway Department, or Railway Commission, and the Grand Trunk Pacific Railway Company, in determining upon the form and wording of the specifications, as provided for by the seventh section of the agreement between the government and the company. 4. The names of such of the engineers acting in any of the capacities aforesaid, as subsequently acted in connection with construction, when and for how long, in what capacity, where their services have been dispensed with, and for what cause. 5. The names and addresses of all the engineers in the service of the Railway Commission, or Railway Department, on Districts B and F of the said Eastern Division, since the commencement of the construction of the railway, the capacity in which each was employed, the salary in each case, the promotions, increases of salary, retirements and dismissals which have taken place, the cause for promotion, dismissal or retirement in each case, and a copy of all complaints lodged with the commissioners or their chief engineer or the department, against any of these engineers. 6. The names of the engineers now in charge of or engaged upon District B and F, and the official position and salary of each. Presented 3rd February, 1910 .- Mr. Lennox.. .. . . Not printed.

- 42i. Return to an order of the House of Commons, dated 24th January, 1910, showing:

  (a) The names of the contractors for the construction of the National Transcontinental Railway and the number, mileage and location of the contract; (b) the estimated expenditure under each contract at the time the contract was let, based upon the engineer's estimate of quantities, at dates of the accepted tender; (c) the estimated increase or decrease in expenditure in each case occasioned by change in location, specification, construction, material, grade or other change subsequent to the letting of the contract; (d) the amount returned and claimed on progress estimates under each contract to date, the amount actually paid under each contract, and the estimated amount yet required to complete the work in each case; (e) the engineer's estimated quantity of solid rock, loose rock and common excavation in the section of line covered by each contract, the estimated cost under these headings, based upon the rates of the accepted tender, the actual expenditure under these headings to date, as shown by progress estimates, the amounts actually paid to date under these headings, and the

estimated quantities of work yet to be done, and the estimated sums yet to be paid under these headings in respect of each contract. Also as to all contracts other than the twenty-one covered by the Return brought down on the 26th of April, 1909, No. 46h: a copy of (a) engineer's itemized estimate of quantities as to each contract of each class of work and material, as set out in the schedules and itemized, and total estimated expenditure based upon rates of accepted tender, and (d) a copy of all tenders received; (c) itemized quantities of work and material under the various headings actually done or furnished to date, and itemized, and total expenditure therefor; itemized statement of estimated quantities of work yet to be done and material, &c., yet to be furnished and itemized, and total estimated cost of the same based on contract prices. Presented 17th February, 1910.—Mr. Lennox.

Not printed.

- 43. Report of Robert M. Coulter, Deputy Postmaster General, on his mission to Australia and New Zealand to discuss with the governments of those countries the possibility of taking steps that would lead to the inauguration of a steamship service between England, Australia and New Zealand, via Canada, on the Atlantic and Pacific oceans. Presented 22nd November, 1909, by Sir Wilfrid Laurier....Printed for sessional papers.

- 50. Return of orders in council passed between the 1st December, 1908, and the 31st October, 1909, in accordance with the provisions of the Forest Reserve Act, sections 7 and 13 of chapter 56, Revised Statutes of Canada. Presented 29th November, 1909, by Hon. F.
- 51. Return of orders in council passed between the 1st December, 1908, and the 31st October, 1909, in accordance with the provisions of the Rocky Mountain Park Act, section 5 of chapter 60, Revised Statutes of Canada. Presented 29th November, 1909, by Hon. F.
- 52. Return of orders in Council which have been published in the Canada Gazette, between 1st December, 1908, and 31st October, 1909, in accordance with the provisions of section 77 of the Dominion Lands Act, chapter 20 of the Statutes of Canada, 1998. Presented
- 53. Return to an order of the House of Commons, dated 18th November, 1909, for a copy of all correspondence and papers respecting the application by the United States immigration service to the Minister of the Interior, for the deportation of one Mrs. Goby, an alleged immigrant, to the United States of America from Canada, entering at the port of Sault Ste. Marie, Michigan, together with a copy of all orders, decisions, reports and returns regarding any action taken thereupon by the Department of the
- 54. General orders issued to the Militia between the 1st February, 1909, and the 1st November, 1909, inclusive. Presented 1st December, 1909, by Sir Frederick Borden.

55. Report of the Ottawa Improvement Commission for the fiscal year ended 31st March, 1969. Presented 3rd December, 1909, by Hon. W. S. Fielding.

Printed for sessional papers.

- 56. Certified copy of a Report of the Committee of the Privy Council, approved by His Excellency the Governor General on the 12th May, 1909, on the subject of a despatch from the Right Monourable the Principal Secretary for the Colonies, transmitting an invitation from the Honorary Secretary of the 12th International Congress on Alcoholism to the Government of Canada, to appoint delegates to attend the congress in ques-
- 57. Return to an order of the House of Commons, dated 22nd November, 1909, 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.
- 58. 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 7th December, 1909, by Hon.
- 58c. Return of lands sold by the Canadian Pacific Railway during the year ended on the 31st October, 1909. Presented 18th January, 1910, by Hon. F. Oliver..... Not printed.
- 59. Return to an address of the House of Commons, dated 16th November, 1909, for a copy of all orders in council at present in force with reference to immigration; also a copy of all regulations in force at the present time in connection with immigration in Canada. Presented 9th December, 1909.-Mr. Wilson (Lennox).......Not printed.

60. Return to an order of the House of Commons, dated 22nd November, 1999, showing:-1. The application made to the Railway Board for protection of railway crossings under the provisions of chapter 32 of the Statutes of 1909, an Act to amend the Railway Act, and (a) the cases in which these applications have been granted, (b) in which they have been refused, when refused, and the reason for refusal. 2. The names of the persons in each case making the application. 3. The cases in which the board of its own motion made an order for the protection of crossing under said act. 4. The appropriation made by the board out of the Railway Grade Crossing Fund under said act, and the crossing in respect of which such appropriations were made. 5. The character or description of the crossing in question, and the character, description and cost in each case of the construction work of protection ordered or directed by the board. 6. The amount in each case ordered or directed by the board to be paid out of the said fund and by the railway company and municipality or other party to the proceedings. 7. The cases in which the work ordered to be done (a) has been completed, (b) in which it is under construction, (c) the cases in which the municipality has submitted to or complied with the order of the board, and (d) cases in which the municipality has refused to comply. Presented 14th December, 1909.—Mr. Lennox.

Not printed.

- 61. Return to an order of the House of Commons, dated 24th November, 1909, showing what Indian lands within the territories now covered by each of the provinces of Manitoba, Saskatchewan and Alberta, have been sold yearly since 30th June, 1900; such information to be detailed as follows: the name of each reserve, the area sold therein yearly, the average prices realized, and the cash paid to the Indians concerned at the time of sale, under the terms of surrender. Presented 15th December, 1909.—Mr. McGrath.

  Not printed.
- 63. Return to an order of the House of Commons, dated 16th November, 1909, showing: Copy of the contract for the dredging of the Napanee river during the summer of 1909; name of the contractor who had the contract; names of the engineers in charge of the work and the inspector; the depth and width of the channel after dredging; the length of time taken to complete the work; the total amount of money expended on the work; whether the work was done by day work or by the yard; and the prices paid by day or by yard. Presented 15th December, 1909.—Mr. Wilson (Lennox).

Not printed.

- 67. Return to an order of the House of Commons, dated 29th November, 1909, for a copy of all reports and correspondence in connection with section 29, township 9, range 22, west of the 4th meridian, as well as applications for railway right of way and station grounds within such land. Presented 12th January, 1910.—Mr. McGrath..Not printed.

- 71. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all letters, telegrams, applications, contracts and correspondence with regard to the taking of spawn for the fish hatchery at Snake Island, Winnipegosis, for the years 1907, 1908 and 1909. Presented 13th January, 1910.—Mr. Campbell......Not printed.
- 72. Return to an order of the House of Commons, dated 15th December, 1909, showing a list of all exports, technical advisers, and special officers generally, engaged by the government in connection with the naval defence programme and its execution, giving names, special qualifications, duration of engagement and rate of remuneration, as well as the total amount expended to date under the above; also amounts expended to date for articles, books, instruments and objects of all kinds in connection with said naval defence programme. Presented 13th January, 1910.—Mr. Monk.

Printed for sessional papers.

- 78. Return to an order of the House of Commons, dated 24th November, 1909, for a copy of all letters, correspondence and complaints, or other papers, from Indians or others regarding the manner in which the St. Peter's Indians have been treated relating to lands allotted to them by the government in consideration of the surrender of St. Peter's Reserve. Presented 13th January, 1910.—Mr. Bradbury. . . . . . . Not printed.

- 78c. Return to an order of the House of Commons, dated 29th November, 1969, for a copy of all instructions sent to the Indian Agent at Selkirk, in connection with St. Peter's Indians pledging or disposing of their holdings, secured through the surrender of their reserve; a statement showing all those entitled to receive patents for lands in connection with the surrender of the reserve, the applications made by those so entitled for their patents, and receipts signed for the patents by those so entitled on delivery of the patent. Presented 13th January, 1910.—Mr. Bradbury........Not printed.

- 78f. Return to an order of the House of Commons, dated 14th February, 1910, for a copy of all papers and instructions given to A. S. Williams, Law Clerk of the Department of Indian Affairs, and to S. Swinford, Inspector of Indians, Winnipeg, in connection with their work among the St. Peter's Indians in Manitoba; also a copy of the report of these gentlemen in connection with the work they have been engaged in during the last few weeks among the St. Peter's Indians. Presented 4th April, 1910.—Mr. Bradbury. Not printed.
- 79. Return to an order of the Senate, dated 26th November, 1909, for a copy of the several complaints which in 1908 and 1909 have been made by different parties to the Minister of the Interior or to the Superintendent of Immigration of the manner in which immigrants are treated at Quebec. Presented 13th January, 1910—Hon. Mr. Landry.

Not printed.

- 80a. Return to an order of the Senate, dated 3rd December, 1909, for a copy (1) of the medical certificate given by Doctors Pagé and Nadeau to justify the order for the sending back of the immigrant Otta Nittenen, in November, 1908; (2) of the correspondence on this subject exchanged between the agent of the Canadian Pacific Railway, Mr. Jules Hone, and Messrs. Lavoie and Stein of the Immigration Office at Quebec, and the Superintendent General of Immigration at Ottawa, Mr. W. D. Scott, in November and December, 1908. Presented 13th January, 1910.—Hon. Mr. Landry.

Not printed.

- 80b. Return to an order of the Senate, dated 3rd December, 1909, for a copy of the attendance and pay-lists of the employees in the Immigration Office at Quebec, for the first four months of the present year. Presented 13th January, 1910.—Hon. Mr. Landry.

  Not printed.

- **80**f. Return to an order of the House of Commons, dated 13th December, 1909, for a copy of the correspondence exchanged since the 1st of January, 1908, between the medical examiners of immigrants and the Superintendent of Immigration, respecting the inspection of immigrants. Presented 23rd March, 1910—Mr. Paquet...Not printed.

- 80k. Return to an order of the Senate, dated 7th April, 1910, for the production of the requests or of the complaints made by the navigation companies for the past five years, on the subject of the insufficiency of the means of accommodation put at the disposal of the authorities of Grosse Isle for the benefit of the immigrants, obliged by the regulations to remain there. Presented 2nd May, 1910.—Hon. Mr. Landry....Not printed.
- 801. Return to an order of the Senate, dated 26th April, 1910, calling for the production of a copy of the attendance list of the employees of the Immigration Office at Quebec for the month of October, 1908. Presented 4th May, 1910.—Hon. Mr. Landry..Not printed.
- 80m. Return to an order of the Senate, dated 7th April, 1910, calling for the production of a copy of the attendance lists of the employees of the Immigration Office at Quebec, from the 1st April, 1909, to this day, and also for a copy of the pay-lists of the same employees during the same period. Presented 4th May, 1910.—Hon. Mr. Landry.

  Not printed.
- 81. Return to an order of the House of Commons, dated 16th November, 1909, showing in relation to each dog-fish reduction plant or establishment for the reduction of dog-fish erected by or for the government or maintained in whole or in part by the government, (a) the cost of construction, (b) the cost of maintainance for each year, (c) the location, (d) the quantity of dog-fish treated thereat in each year, and (e) the amount realized from the sale of or the disposal in each year. Presented 17th January, 1910.—Mr. Borden. Not printed.

- 83. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all reports, correspondence and other papers relating to the condition and maintenance of the buoy on the Old Proprietor Ledge in the Bay of Fundy since January 1st, 1908; also of all reports, correspondence and other papers relating to the establishment, equipment, maintenance and operation of the life boat and life saving station at Seal Cove, in the Bay of Fundy; also copy of all instructions issued to Captain Lugar in connection with the inquiry into the wreck of the ss. Hestia, and of the findings and report on said inquiry. Presented 17th January, 1910.—Mr. Daniel.....Not printed.
- 83a. Supplementary Return to No. 83. Presented 14th February, 1910.......Not printed.
- 84. Return to an order of the House of Commons, dated 15th December, 1909, showing: 1. The present indebtedness to the Dominion government of the Montreal Turnpike Trust (a) on capital account, (b) for arrears of interest. 2. The amount collected at each toll gate belonging to the said turnpike trust during the year ending 31st December, 1908, and for the first six months of the year 1909. 3. The names of all parties who have commuted their tolls during each of the two above mentioned periods and the amount of the commutation money paid to the trust in each case. 4. The amount expended on each section or road division under the control of said trust, during the year ending 31st December 1908, and the contracts given out during the said year, with the name of the contractor and the date and amount of money involved in each case; and a statement in each case also as to whether the contract was awarded after tender called through newspapers. 5. The amount paid out during the said two first abovementioned periods at each toll gate for salaries of day and night guardians and any other expenditures at each of the toll gates maintained. 6. The names of all parties holding passes for free use of the roads under control of said trust during the period above mentioned, with a statement, in each case, of the reason why the pass was so granted. 7. The expenses of the said trust during each of the two periods above mentioned for rent, salaries of the office, inside or outside service, giving name and remuneration of each official and amounts paid to any civil engineer employed by the trust. 8. The actual present indebtedness in detail of said trust outside of its bonds due to the government of Canada. 9. The amounts collected by said trust during the above-mentioned periods from municipalities under special agreements made as to their share pro rata of the bonded indebtedness of the turnpike trust. 10. The names of all members of the trust elected to represent the bondholders, with date of election in each case, during said two periods. 11. The amounts paid by the trust to any of its members or officials during said two periods, whether as travelling or personal expenses, or indemnity for attendance or for any other reason whatever. 12. The name of any auditor who has acted during said two periods, and the amount paid such auditor. 13. An exact statement of any amounts paid by the trust for purchase or lease of any property outside of the city of Montreal and in defraying the travelling or displacement or maintenance expenses of the trustees or their officials generally. Presented 17th January, 1910 .-

- 87. Return to an order of the House of Commons, dated 1st December, 1909, showing all casualties and accidents attended with danger or loss of human life, that have occurred in the Marine and Fisheries Department owing to the operation of pintsch and acetylene gas as an illuminant, for each year since 1880, together with a copy of all papers and reports in connection therewith. Presented 20th January, 1910.—Mr. Foster.
- 88. Return to an order of the House of Commons, dated 6th December, 1909, for a copy of all correspondence, petitions, and other papers between any person or persons and the government, or any member thereof, or any official thereof, with reference to the dredging of the Napanee river. Presented 20th January, 1910.—Mr. Wilson (Lennox).

  Not printed.
- 89a. Supplementary Return to No. 89. Presented 18th February, 1910. . . . . . . Not printed.

- 90b. Return to an order of the House of Commons, dated 22nd November, 1909, for a copy of all letters, telegrams, applications, contracts, lease or leases and correspondence with regard to Lac du Bonnet fishing. Presented 27th January, 1910.—Mr. Campbell.

  Not printed.
- 90c. Return to an address of the House of Commons, dated 4th February, 1909, for a copy of all correspondence, orders in council, papers and documents relating to the question of fisheries in the Pembina river, in the province of Manitoba, and of regulations or agreements with the United States government in reference to the rivers running from one country into the other. Presented 14th February, 1910.—Mr. Sharpe (Lisgar).

  Not printed.
- 92. Return to an order of the House of Commons, dated 24th January, 1910, for a copy of all instructions given during his term of office by the Honourable Speaker Blanchet, to the then sergeant-at-arms, or to other officials in connection with the appointment of sessional messengers. Presented 26th January, 1910.—Mr. Monk......Not printed.

- 96. Return to an order of the House of Commons, dated 17th January, 1910, showing:

  1. What amount has been annually expended by the government since the year 1900 in connection with the Atlantic Fisheries of Canada, apart from sums spent in the fishery protection service and for bounty, in the respective provinces of Nova Scotia, New-Brunswick, Prince Edward Island and Quebec. 2. The amount expended in each of the said provinces annually for fishery breeding purposes, dog-fish reduction plants, bait freezers, cold storage and salaries of officials, respectively. 3. What other general purposes in connection with the fisheries expenditures were made in such provinces within said period. Presented 27th January, 1910.—Mr. Jameson......Not printed.

- 99. Return to an order of the House of Commons, dated 6th December, 1909, for a copy of all letters, communications, petitions and correspondence with and by the government, or any minister, with regard to the appointment of some one to fill the vacancy on the Board of Railway Commissioners, caused by the demise of the late Honourable Thos. Greenway. Presented 1st February, 1910.—Mr. Campbell. . . . . . . . . Not printed.
- 101. Return to an order of the House of Commons, dated 19th January, 1910, for a copy of all declarations, affidavits and solemn declarations made and sent to the Post Office Department, or to the Honourable the Postmaster General, since the first day of September, 1907, up to the fifteenth day of January, 1910, respecting the franking privilege asked for the Arthabaska Gazette, with copies of the lists of pretended subscribers to that newspaper with the said declarations, affidavits and solemn declarations; also a copy of the report of Mr. A. Bolduc, Post Office Inspector, respecting the said Arthabaska Gazette. Presented 2nd February, 1910.—Mr. Lavergne.

Not printed.

- 104a. (1909). 1. International Boundary Waters Treaty, signed at Washington, 11th January, 1909. 2. Rider attached by the United States Senate.

Printed for both distribution and sessional papers.

- 107. Return to an address of the House of Commons, dated 16th November, 1909, for a copy of all petitions addressed to His Excellency the Governor General of Canada, or to the government, or any department thereof; also of all letters, correspondence of all kinds, and all reports had by the government in reference to the navigation, cleaning and deepening of the river known as River des Prairies, following along the northern boundary of the island of Montreal. Presented 7th February, 1910.—Mr. Monk.

Not printed.

- 107a. Report of Mr. G. de G. Languedoc, assistant engineer, in respect of work required to be done along Rivière des Prairies, to give a five-foot channel at low water for navigation. Presented 15th February, 1910, by Hon. W. Pugsley. . . . . Not printed.
- 108. Return to an order of the House of Commons, dated 24th January, 1910, showing what interest or control the Canadian Northern Railway Company has in any of the following railway companies: The Ontario and Rainy River Railway Company, the Port Arthur, Duluth & Western Railway Company, the Manitoba & Southeastern Railway Company, the Minnesota & Manitoba Railway Company, the Minnesota & Ontario Bridge Company, the Saskatchewan Northwestern Railway Company, the Qu'Appelle, Long Lake & Saskatchewan Railway Company, the Alberta Midland Railway Company, the Edmonton, Yukon and Pacific Railway Company. 2. What subsidies either in land, money or by way of guarantee of securities have been granted to any of the railway companies mentioned on account of the main or branch lines or both, of the said companies, either by the Dominion government, or the provincial governments of Ontario, Manitoba, Saskatchewan and Alberta, or any muncipality through which their lines run. 3. What portion of these subsidies have been earned to date. 4. How many miles west of Edmonton a line of railway is constructed and in operation

by the Canadian Northern Railway Company. 5. What work other than location survey work has been done west of this point up to date, how much and of what nature. 6. What portion, if any, will eventually form part of the proposed line to Vancouver. 7. When the location plan of the route of the C.N.R. between Edmonton and Vancouver, by way of the Yellow Head Pass was approved by the Minister of Railways and the Board of Railway Commissioners. 8. What applications, if any, have been made since to change or in any way alter this location plan. 9. To what extent, if any, the government of Manitoba has exercised its right of control of freight rates under section 8 of schedule B of the Act 1 Edward VII, chapter 53. 10. What effect, if any, this section of said act has had in reducing freight rates in the prevince of Manitoba. 

- 109. Return for the year ended 31st December, 1909, of permits to take intoxicants into the Northwest Territories, in accordance with the requirements of chapter 62, section 88, of the Revised Statutes of Canada. Presented 8th February, 1910, by Hon. F. Oliver.
- 110. Return to an order of the House of Commons, dated 6th December, 1909, showing how many officials of the government, or of the Senate or House of Commons, have residences or living rooms in Ottawa supplied by the Crown, with the estimated yearly value and the rent charged in each case. Presented 14th February, 1910.-Mr. Blain.
- 110a. Supplementary Return to No. 110. Presented 24th February, 1910.....Not printed.
- 111. Return to an order of the Senate, dated 26th January, 1910, showing the total amount of lands set apart for school purposes in Rupert's Land, or what now comprises the provinces of Manitoba, Saskatchewan and Alberta. The amount of said lands sold for school purposes yearly before the formation of the provinces of Saskatchewan and Alberta, and the average price realized per acre for same. The amount sold yearly in all the said provinces up to the year 1910, and the average price realized for same. The total amount of acres of school lands yet remaining unsold in the said provinces.
- 112. Return to an order of the House of Commons, dated 6th December, 1903, showing the amount received by the Minister of Finance under the Land Titles Act, section 159, cap. 110, R.S.C., 57 and 58 Vic., cap. 28, sec. 116; how such fund is invested under sec. 160 of the same Act; the amount of interest which has accrued from said fund; and the amount paid for losses arising from bad titles guaranteed by said fund. Presented
- 113. Return to an order of the House of Commons, dated 17th January, 1910, showing: 1. The name, cost, date of construction, place of construction, and gross tonnage of each of the steam vessels now owned by the Dominion government. 2. The names of those built in Canada. 3. What ones thrown open to Canadian competition. 4. In each case that was open to Canadian competition, the difference between the lowest Canadian tender and the price paid. 5. In each case where a contract was made with a builder for the construction of any of said steam vessels, the month and day when each of said contracts were signed, and when each of said contracts called for delivery of vessels. 6. The price each of the said steam vessels would have cost if the government in each case paid the current Canadian customs duty chargeable on vessels constructed outside of Canada. Presented 24th February, 1910 .- Mr. Sinclair.

Printed for sessional papers.

- 121a. Supplementary Return to No. 121. Presented 10th March, 1910.......Not printed.

### CONTENTS OF VOLUME 19-Continued.

- 129. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all memorials, reports, correspondence and documents not already brought down, including report of the survey made during the past summer and autumn of the harbour at 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 and recommending a change or changes in the said route, and an increase in the number of trips daily of such winter steamers; and also a copy of all memorials, reports, correspondence and documents relating to the route of the summer mail steamers between Charlottetown and the mainland of Canada, and suggesting a change or changes in that route, and an increase in the number of trips daily of such summer mail steamers; and also with regard to connecting such suggested new summer route or routes with a point or points on the Intercolonial Railway; and also for a copy of all memorials, and correspondence, asking for additional and improved aids to navigation of the harbour of Charlottetown and in Tatamagouche Bay and harbour. Presented 4th March, 1910.-Mr. War-
- 130. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all reports of surveys of any projected railway lines or routes in the province of Prince Edward Island during the years 1908 and 1909, and particularly reports of the surveys of any such line from Royal Junction, or thereabouts, to Kensington or thereabouts; also of all correspondence, recommendations, documents and papers of every kind, nature and description relating to or concerning the said projected railway lines or routes or the surveys therefor. Presented 6th March, 1910.—Mr. Borden. Not printed.
- 130a. Return to an order of the House of Commons, dated 14th March, 1910, for a copy of all memorials, reports of surveys, engineers' reports, estimates, correspondence and documents in the possession of the Department of Railways and Canals, and of the Intercolonial Railway Commission, relating to the survey and construction of a proposed branch of the Prince Edward Island Railway through New London and along the north shore of Queens County, in that island. Presented 8th April, 1910.—Mr. Warburton.

- 132. Return to an order of the House of Commons, dated 28th February, 1910, for a copy of reports of the following Quarantine Frontier Inspectors:—Dr. Bradford, Dr. Carter, Dr. Duncan, Dr. Thornton, Dr. Wallace, Dr. May, Dr. McKenty, Dr. Little, Dr. Henderson and Dr. Scott. Presented 9th March, 1910.—Mr. Sharpe (Lisgar)..Not printed.
- 133. Report of the Hydrographic Survey, in connection with Irrigation, for the season of 1909. Pesented 10th March, 1910, by Hon. F. Oliver.

### CONTENTS OF VOLUME 19—Continued.

- 136. Return to an order of the House of Commons, dated 17th January, 1910, showing the foreign exhibitions in which Canada has taken part since July, 1896, the time and place where such was held, the expenditure thereon by the government of Canada, the persons, not common labourers, who had charge of the same or were employed thereat, the sums paid to such severally under the heads of (a) salary, (b) expenses, and the total cost to the country of each such exhibition; also the amounts received as revenue from the sale of articles or commodities, lumber, buildings and other materials, respectively. The whole statement to be made up in tabular form and the additions of money columns to be made. Presented 11th March, 1910.—Mr. Foster.

Printed for sessional papers.

- 138. Return to an order of the House of Commons, dated 19th January, 1910, for a copy of all correspondence between the government, or any member thereof, and the Imperial South African Service Association, or any of its officers, in reference to a proposed military reserve to be formed by the members of the Imperial South African Veterans' Association. Presented 17th March, 1910.—Mr. Macdonald....Not printed.

### CONTENTS OF VOLUME 19-Continued.

141a. Supplementary Return to No. 141. Presented 13th April, 1910... .. .. . . . . Not printed.

142. Return to an order of the House of Commons, dated 24th November, 1909, 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 for 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 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 23rd March, 1910.—Mr. Armstrong.

Not printed.

- 145. Rules of the Supreme Court of Saskatchewan, under the provisions of section 576 f the Criminal Code. Presented 30th March, 1910, by Hon. A. B. Aylesworth.

- 147. Return to an order of the House of Commons, dated 7th February, 1910, for a copy of all correspondence respecting the Central Park Post Office during the year 1909 and including particularly a copy of: 1. Representations made to the department that by changing the location of the office and establishing a post office at Collingwood East, the interest of the majority of the residents would be best served. 2. The evidence taken at the inquiry following such representations, and the official report upon such evidence. 3. Communications from residents of Central Park and others with respect to the closing of the post office there, and the answer made thereto in accordance with the facts. 4. The information upon which it was determined that the removal of the post office would be a greater convenience. 5. The largely signed petition from patrons

### CONTENTS OF VOLUME 19—Continued.

- 149. Return to an order of the House of Commons, dated 14th March, 1910, showing the names of the sessional and temporary employees of the House of Commons who were under pay on the 27th January last; and the number of the said employees stated in the estimates of 1909-10. Presented 31st March, 1910.—Mr. Best.

Printed for sessional papers.

150. Return to an order of the House of Commons, dated 24th January, 1910, for a copy of all correspondence between Celstin Pregent, of Melocheville, P.Q., either personally or through his attorney, and the Department of Railways and Canals, concerning certain bridges on the Beauharnois canal. Presented 31st March, 1910.—Mr. Monk.

- 155. Return to an order of the House of Commons, dated 14th February, 1910, for a copy of all pay-sheets, accounts, and vouchers for wages, material and expenditure in connection with work on Skinner's Cove, Boat Harbour, Pictou County, Nova Scotia, in the years 1907, 1908 and 1909. Presented 8th April, 1910.—Mr. Stanfield..Not printed.

### CONTENTS OF VOLUME 19—Continued.

155a. Return to an order of the House of Commons, dated 14th February, 1910, for a copy of all payments, accounts and vouchers for wages, materials and other expenditures in connection with work on the Toney river, Boat Harbour, Pictou County, Nova Scotia, in the years 1907, 1908 and 1909. Presented 5th April, 1910.—Mr. Rhodes.

- 156a. Suplementary Return to No. 156. Presented 14th April, 1910..........Not printed.
- 158. Return to an order of the House of Commons, dated 28th February, 1910, for a copy of the original field notes of the survey of Captain Jemmett, 1889, on Chu-Chu-Way-Ha Reserve, No. 2, Similkameen District, B.C. Presented 14th April, 1910.—Mr. Burrell.

  Not printed.

- 161. Return to an order of the House of Commons, dated 14th March, 1910, for a copy of all papers and correspondence relating to the sale and refund of the money paid on the sale of the n.e. \(\frac{1}{4}\) section of section 11, township 1, range 9, west of the 1st meridian in Manitoba. Presented 15th April, 1910.—Mr. Sharpe (Lisgar)..Not printed.

### CONTENTS OF VOLUME 19-Continued.

- 164. Return to an order of the House of Commons, dated 7th February, 1910, showing the number of persons appointed as temporary employees of the civil service in the several departments since the present Civil Service Act came into force, the date of the appointment of each, their names, their salaries while employed as such temporary employees, the department in which such employee was placed, the duration of their employment, whether in one department alone or in case of transfer to another or other department, with total length of time employed, the names of those who in consquence of having passed the Civil Service examination have been employed permanently, the names of those who while temporarily employed failed to pass the required examination and are still employed in the service; the names of those who are or have been employed over the statutory six months as temporary employees, and the reasons for such continued employment in each case. Presented 18th April, 1910.—Mr. Hughes.

Not printed.

- 168. Return to an order of the House of Commons, dated 24th November, 1909, for a copy of all correspondence and papers, and any information possessed by the government relating to the formation and work of the Secretariat decided upon by the Imperial Conference of 1907. Presented 20th April, 1910.—Mr. Foster.

Printed for both distribution and sessional papers.

### CONTENTS OF VOLUME 19-Continued.

- 173. Return to an order of the Senate, dated 21st January, 1910, for a copy of the contract entered into between Messrs. Koening & Company, and the government, for clearing away the ruins of the Quebec bridge. Presented 28th April, 1910.—Hon. Mr. Landry.

  Not printed.

  - 176a. Supplementary Return to No. 176. Presented 4th May, 1910............Not printed.

9-10 Edw. VII.

### CONTENTS OF VOLUME 19—Continued.

- 179. Return to an order of the House of Commons, dated 17th November, 1909, for a copy of all accounts, vouchers, correspondence, reports and other papers, not already brought down in connection with the survey of the St. John River channel between Fredericton and Woodstock, N.B. Presented 2nd May, 1910.—Mr. Crocket..Not printed.

- 184. Return to an order of the Senate, dated 2nd May. 1910, showing for each of the last ten years the date of the prorogation of parliament and the date on which the bound statutes of the session were distributed. Presented 4th May, 1910.—Hon. Mr. Power.

  Not printed.

### DEPARTMENT OF RAILWAYS AND CANALS

### CANAL STATISTICS

FOR THE

### SEASON OF NAVIGATION

1908

PRINTED BY ORDER OF PARLIAMENT



OTTAWA PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY 1909

[No. 20a—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, 1908.

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 Controller of Railway Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1908.

I have the honour to be, Sir,

Your obedient servant,

M. J. BUTLER,

Deputy Minister of Railways and Canals.



### Office of the Comptroller of Statistics, Ottawa, 20th March, 1909.

### M. J. BUTLER, Esq.,

Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit to you herewith Canal Statistics for the year ended 31st December, 1908.

It has been possible to prepare this report earlier than in preceding years, because of changes in the method of tabulation.

Freight carried through the canals of the Dominiou during the year 1908 aggregated 17,502,820 tons—a reduction of 3,040,819 as compared with 1907. Nevertheless, the volume of traffic was largely in excess of the record for all years anterior to 1907. The facts relating to the last ten years are as follows:—

1899	6.225,924 tons.
1900	5,013,693 11
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 "

The decline for the year 1908 was made up of 2,568,658 tons in east-bound and 472,161 in west-bound traffic. This falling off, however, related almost wholly to United States business passing through the canals of Canada, as the following statements show:—

						1907.	1908.
Canadian to	Cana	dian ports			up	1,034,733	1,028,246
11	11	ti .			down	3,162,158	3,292,422
11	Unit	ed States p	ort	s	up	891,692	560,736
11		Ħ	11		down	226,138	278,721
United State	es to	#1	11		up	1,991,959	1,704,310
11		11	11		down	11,060,878	8,218,866
11	11	Canadian	11		up	819,369	972,300
11	11	11	11		down	1,356,712	1,447,219

Thus it will be seen that while there was a decrease of 3,129,661 tons in the traffic between United States ports, there was an actual increase of 88,842 tons in the business affecting Canadian ports.

The falling off in tonnage related very largely to iron ore, of which 10,105,016 tons passed through the canals—chiefly the Sault Ste. Marie—in 1907 and 7,402,672 in 1908. Of wheat, 3,199,031 tons were reported in 1908 as compared with 2,473,202 in 1907. Oats and barley showed increases, while there was a decline in the quantity of flour transported by water. An analysis of the traffic by commodities is given in a table on a succeeding page.

It is also gratifying to observe that the tonnage of Canadian vessels passing through the canals showed an increase for 1908 of 451,878 tons over the preceding year.

A distinct and valuable feature of novelty in the statistics for 1908 has reference to the country in which the cargo originated. Prior to last year no record had been kept of this important data. There was no discrimination between the products of Canada and those of the United States carried through the canals. In future, however, it will be possible to trace the movement of the commodities of both countries through Canadian channels at least.

For 1908 the origin of cargoes was as follows:-

Canal.	United States. Tons.	Canada. Tons.
Welland	927,208	776,245
St. Lawrence	747,451	1,261,651
Chambly	123,602	379,674
Ottawa		258,527
Rideau	12,121	77,519
St. Peters		72,015
Trent Valley		81,690
Murray	13,306	12,595
Sault Ste. Marie	10,666,985	2,092,231
Total	12,490,683	5,012,147

Changes have been made this year in the arrangement of the tables, which it is hoped will bring them under the eye in more convenient form than they have appeared hitherto.

The following summaries and digests of statistical data have been brought down to the close of 1908:—

STATEMENT of total Freight passed through the Canals for the following years:-

SESS	SESSIONAL PAPER No. 20a						
	Toral Tons.	Up and down.		2,720,516 3,113,896 2,913,047 2,902,526 2,902,526 3,564,989 7,911,073 6,618,475 6,618,475 6,618,475 6,618,475 6,618,475 6,618,475 6,618,475 6,618,475 6,618,475 6,618,475 6,618,475 6,618,638 7,618,638 7,618,638 7,618,638 8,266,238 10,523,186 10,523,186 11,502,828 11,502,828			
	zž	Down.		2,006,997 1,972,387 2,123,542 2,123,542 2,123,542 2,123,542 2,123,103,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,123,103 1,			
	Tons.	Up.		713,519 885,529 789,310 789,509 772,869 772,869 789,523 866,792 1,322,216 1,255,536 1,255,536 1,294,173 1,513,468 2,315,117 3,330,203 3,331,404 4,737,753 4,765,592			
wing years	ED STATES	Down.	Tons.	457, 483 608, 371 608, 371 608, 371 568, 269 568, 208 667, 040 867, 040 867			
or the follo	FROM UNITED STATES TO CANADIAN PORTS.	Up.	Tons.	86, 374 81, 611 81, 243 81, 611 60, 243 61, 245 61, 24			
he Canals i	ED STATES	Down.	Tons.	192, 538 223, 429 330, 331 330, 331 332, 938 333, 107 333, 107 333, 107 333, 107 33, 103 1, 339, 938 1, 339, 915 1, 339, 915 1			
through t	FROM UNITED STATES TO UNITED STATES PORTS	Up.	Tons.	151,805 214,407 207,224 216,323 211,034 231,3245 660,112 229,508 7732,030 560,122 560,122 560,122 560,122 560,122 560,122 560,234 660,238 660,238 660,238 866,337 660,238 861,339 660,238			
eight passe	NADIAN FRS PORTS.	Down.	Tons.	202,563 174,230 135,487 133,188 123,188 125,787 141,662 80,612 100,519 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133 115,133			
Statement of total Freight passed through the Canals for the following years:	From Canadian TO UNITED STATES PORTS	.dn	Tons.	138, 692 132, 295 144, 3368 144, 3368 173, 538 214, 076 286, 191 286, 363 270, 038 206, 364 206, 364 207, 365 619, 365 619, 365 660, 736			
TATEMENT	NADIAN Ports.	Down.	Tons.	1,154,424 1,146,260 1,156,306 1,156,306 1,155,247 1,334,822 1,10,606 1,070,046 1,713,274 1,813,827 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,915 1,638,9			
Program C	FROM CANADIAN TO CANADIAN PORTS.	Up.	Tons.	336,648 381,777 381,333 370,130 370,120 381,706 281,706 283,333 275,887 286,389 286,389 286,389 312,901 340,805 618,150 618,150 618,150 1,238,929 1,038,733 1,038,733 1,038,733 1,038,733			
	Years.			1887 1888 1889 1890 1891 1895 1895 1895 1896 1900 1901 1903 1903 1904 1905 1907			

\*Sault Ste. Marie canal opened in Auugst, 1895.

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years:—

### CANADIAN VESSELS.

Number	Vessels.	18, 991 11, 661 19, 861 19, 861 11, 902 11, 903 11, 90
Torat Tons.	Up & Down.	2,847,952 2,646,332 2,995,582 3,139,472 3,403,465 3,446,04 2,983,469,766 3,449,706 3,449,706 3,449,706 4,308,571 4,308,571 4,485,695 5,191,191 6,526,321 6,732,100 5,526,321 6,732,101
48,	Down.	1,452,020 1,345,018 1,500,630 1,560,530 1,560,530 1,691,455 1,691,455 1,691,455 1,691,455 1,502,906 1,467,385 1,879,227 1,879,227 1,879,627 2,156,896 2,226,463 2,226,463 2,231,510 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,100 2,545,
Tons	Up.	1, 295, 382 1, 295, 383 1, 558, 537 1, 558, 537 1, 710, 510 1, 736, 489 1, 736, 389 1, 736, 339 2, 737, 733 2, 737, 733 2, 737, 733 2, 737, 733 3, 737, 733 3, 737, 737 3, 737, 737
ED STATES  PORTS.	Down.	221, 013 229, 876-259, 876-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259, 976-259
From United States To Canadian Ports.	Up.	22, 778 20, 271 14, 003 11, 639 11, 639 11, 037 11, 03
ED STATES TES PORTS.	Down.	65 65 65 65 65 65 65 65 65 65
From United States TO United States Ports	Up.	1,071 1,252 926 929 1,550 1,172 1,172 1,177 1,57 1,57 1,57 1,57 1,57 1,57 1,5
NADIAN TES PORTS.	Down.	36, 377 34, 368 39, 371 39, 369 29, 642 29, 642 29, 642 19, 238 11, 328 14, 927 14, 927 14, 927 14, 927 155, 595 155, 595 129, 346 129, 346 227, 315
FROM CANADIAN TO UNITED STATES PORTS	Up.	162,554 158,299 178,131 170,186 177,136 177,136 221,635 225,635 225,635 225,738 226,926 273,007 273,007 273,007 273,007 273,007 273,007 273,007 273,007 273,007 273,007 273,007 273,007 273,007 273,007 274,007 274,007 275,007 275,007 276,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,007 277,00
NADIAN Y PORTS.	Down.	1,194,665 1,120,774 1,207,892 1,250,999 1,287,168 1,460,505 1,422,326 1,165,683 1,420,325 1,165,683 1,420,325 1,681,340 1,587,221 1,587,221 1,587,221 1,907,886 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,766 2,031,
FROM CANADIAN TO CANADIAN PORTS	Up.	1, 201, 529 1, 113, 230 1, 123, 574 1, 235, 574 1, 314, 127 1, 356, 518 1, 517, 329 1, 528, 643 1, 767, 283 1, 767, 283 2, 661, 258 2, 661, 258 2, 221, 776 2, 221, 776
Years.		1887 1888 1889 1890 1891 1891 1895 1895 1900 1900 1904 1906 1906 1906 1906 1906

# STATEMENT of the Tonnage of Canadian and United States Vessels, for the following years:—

### UNITED STATES VESSELS.

SESSIONAL PAPER No. 20a

Number of	Vessels.	88.83 4.83 6.44 4.44 4.45 6.05 6.05 6.05 6.05 6.05 6.05 6.05 6.0
Toral, Tons.	Up & Down.	566,680 631,777 830,648 721,397 838,116 871,795 1,286,295 1,012,027 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,403 1,310,40
Tons.	Down.	315,035 347,556 442,998 442,998 442,998 454,199 658,508 513,811 444,752 661,028 681,028 1,438,889 1,438,889 1,438,889 1,316,169 2,004,786 2,259,483 2,259,483 2,259,483 2,259,483
To	Up.	251,646 284,221 386,458 336,645 336,645 395,118 441,595 644,345 644,345 644,345 1,425,471 1,425,471 1,425,471 1,425,471 1,425,471 1,425,471 1,846,633 2,121,810 2,081,653 2,121,810 2,844,863 3,244,863 3,685,819
TED STATES O N PORTS.	Down.	98,840 111,613 160,242 97,266 17,266 17,266 17,269 17,269 17,269 17,269 17,638 336,004 224,628 224,336 190,971 224,628 234,366 190,971 416,459 418,456 418,456 623,941 536,103
FROM UNITED STATES  JANADIAN PORTS.	Up.	52,738 56,249 39,697 31,083 31,083 31,083 31,083 32,406 32,295 40,416 32,331 51,902 51,902 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106,401 106
Juited States To States Pouris.	Down.	140,562 156,095 234,728 238,724 228,734 289,734 289,734 289,734 291,549 291,549 291,549 1,156,504 1,654,672 1,684,672 1,689,414 1,689,414 1,701,704 1,928,131 1,928,131
Prom United States United States Ports	Up.	143,730 173,730 173,730 173,730 173,730 173,730 173,730 173,730 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 1736,137 17
CANADIAN TO STATES PORTS.	Down.	26,708 26,732 27,733 28,337 27,733 28,347 21,953 21,953 20,002 20,443 20,443 20,443 20,641 21,243 21,244 22,443 23,443 23,443 24,247 24,120
FROM C. T. UNITED STA	Up.	38, 857 42, 425 55, 996 73, 156 73, 156 73, 156 73, 120 133, 172 133, 172 133, 172 133, 172 133, 172 134, 135 177, 169 177, 887 177, 887 177, 887 187, 886 187, 886 1
ANADIAN O Y PORTS.	Down.	17, 825 16, 845 16, 845 16, 845 16, 845 16, 845 19, 835 19, 935 11, 935 11, 85 11, 8
FROM CANADIAN TO CANADIAN PORTS	Up.	16, 265 14, 304 10, 330 10, 330 10, 330 10, 357 11, 496 11, 496 11, 496 11, 496 11, 531 11, 531 12, 531 13, 531 13, 531 14, 531 16, 531 17, 531 18, 53
YEARS.		1887 1888 1889 1889 1891 1891 1895 1895 1895

TONNAGE of Articles carried through Canadian Canals, from 1889 to 1908.

1898,	200 000 000 000 000 000 000 000 000 000
1897.	10,903 11,289 11,289 11,713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11,1713 11
1896.	20, 32, 32, 33, 33, 34, 35, 36, 36, 36, 36, 36, 36, 36, 36, 36, 36
1895.	2, 9, 122 2, 452 2, 452 2, 452 1, 243 3, 423 3, 423 2, 123 2, 123
1894.	10,725 10,725 1,555 1,565 1,565 1,565 1,565 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,426 1,42
1893.	14,727 10,754 30,197 1,253 3,920 20,130 20,130 10,530 10,530 10,530 10,530 10,530 10,530 10,530 10,530 10,530 10,530 10,530 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,030 11,0
1892.	12,001 14,886 17,986 16,504 16,504 16,504 16,504 16,504 16,807 16,807 16,807 16,807 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16,907 16
1891.	14,273 25,406 77,7067 17,7067 17,7067 17,706 17,846 10,846 10,871 10,871 11,689 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,1089 10,108
1890.	39, 164 39, 164 39, 164 39, 164 39, 168 30, 1738 30, 1738 3
1889.	10,239 6,452 10,056 11,036 3,615 3,615 3,615 3,615 11,416 11,416 11,804 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610 11,610
Articles.	1. Bricks 2. Cement 3. Iron (all kinds). 4. Steel 5. Stone for cutting 6. Apples 7. Barley. 8. Corn 9. Flour. 10. Hay pressed. 11. Meals (all kind). 12. Oats. 13. Poratoes 14. Seeds. 15. Agric. Products Vegetables. 16. Cattle. 17. Horses 18. Pork. 19. Sheep. 20. Marble 21. Sugar. 22. Whisky 23. Firewood. 24. Lumber of Sugar. 25. Railway ties. 26. Square timber. 27. Saw logs. 28. Coal. 29. Fron ore. 30. Timber and other woods free 31. "Wheat, Coal. 31. "Wheat, Coal. 32. Timber and other woods free

\* These articles were free, going westward, in the years when tolls were charged, and appear in this grouped form in the Statistics of the Department.

## Tonnage of Articles carried through Canadian Canals from 1889 to 1908.—Concluded.

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\* Wheat, corn, flour, iron, salt and coal form grouped item No. 31, although the same commodities appear separately in the list. This was because they were free in the years when tells were collected. Tells having been abolished this item hereafter will not appear in the statistical tables in the above form. Item 12 includes flaxseed.

The Statement following brings the capital expenditure on the Canals of the Dominion down to 31st March, 1908. 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 follows:—

Canal.	Construction.	Enlargement.	Total.
	\$ cts.	\$ cts.	\$ cts.
St. Peter's.  Lachine Beauharnois.  St. Lawrence River and Canals.  Lake St. Louis.  Lake St. Francis.  Cornwall.  Williamsburg  Farrans Point.  Galops.  Rapide Plat.  Williamsburg.  Welland.  Ste. Anne's.  Carillon and Grenville  Culbute  Rideau  St. Ours  Chambly  Murray  Trent  Fay.  Sault Ste. Marie  Soulanges.	1,945,624 73  1,320,655 54 7,693,824 03 134,456 51 63,053 64 382,776 46 4,085,889 21 121,537 663 7,214 66 1,248,820 26 5,773,664 71 489,599 23 4,779,613 84	9,211,525 18 3,346,874 72 298,176 11 75,906 71 5,288,557 87 877,090 57 6,106,939 73 2,158,242 00 10,696 26 20,388,805 83 1,035,759 12	648,547 14 11,801,058 00 1,636,690 26 3,365,317 57 298,176 11 75,966 71 7,234,182 60 10,473,624 10 28,082,629 86 1,170,215 63 4,182,092 96 382,776 46 4,085,889 21 121,537 65 637,214 66 1,248,820 26 5,773,664 71 489,599 23 4,779,613 84 6,955,317 59
,	40,525,261 16		93,442,874 58

Alterations have been made in the form of ship's report, looking to a better and more comprehensive classification of commodities than hitherto been provided.

Details of tonnage by canals and commercial articles 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, 1908

### 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-seven years is as follows:—

QUANTITY PASSED DOWN TO MO	NTREAL.	To Ports in Ontario.	Quantity from U.S. Ports to U.S. Ports.
882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 893. 893.	Tons.  180,694 186,814 142,194 96,569 203,940 185,034 160,358 267,769 288,513 (295,509 261,954 501,806	Tons.  10,650 12,153 11,909 9,881 11,838 25,599 19,075 16,899 6,805 8,942 25,555 16,699	Tons. 63,881 121,876 104,537 117,346 151,551 134,868 169,664 213,766 245,932 202,710 201,540 222,958 203,979
995 996 897 998 999 900 901 902 903 904 905 906 996 997	231,491 461,049 560,254 519,532 332,746 244,661 151,566 208,215 351,936 (198,246 341,431 404,935 635,573 756,141	32,096 73,386 53,257 31,279 40,197 17,525 13,732 22,787 29,062 23,711 42,061 33,351 42,032 38,142	133,823 160,372 157,756 144,612 68,011 84,589 83,370 81,164 111,828 102,523 129,270 176,119 163,295 135,172

<sup>\*</sup> 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 332,746 tons in 1899 to 756,141 tons in 1908, and the quantity passed down the Welland Canal from United States ports to United States, has increased from 68,011 to 135,172 tons for 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 ollows:—

		Tons.
Pour	1896	153,717
	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

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

		Tons.
Pour	1896	495,898
	1897	604,200
	1898	575.097
	1899	372,291
	1900	295,928
	1901	203,316
		242,225
	1903	400,057
	1904	220,076
	1905	375,630
	1906	449,673
	1907	684,697
	1908	776,374

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:—

For 1907	
Showing an increase of	120,568

The quantity of grain and pease carried to Montreal via Canadian Pacific and Grand Trunk Railways, is reported as follows:—

For 1907	
Showing a decrease of	98,473

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The quantity of grain arrived at the tide-water by New York canals, is reported as follows:—

For 1907	
Showing a decrease of	55,917

The quantity of grain carried to tide-water by the New York railways, is reported as follows:—

For 1907	
Showing a decrease of	678,693

The increases and decreases for 1908 as compared with 1907 on the several routes competing for the carrying trade to the sea board are as follows:—

-	Increase.	Decrease.	Increase.	Decrease.
On the St. Lawrence	Tons.		Per cent.	
" Canadian Pacific and Grand Trunk Railways "New York Canals "Railways,		55.917		• • • • • • • • • • • •

By reference to Appendix U, it will be seen that the quantity of freight from ports west of Port Colborne to the United States ports, Oswego, Ogdensburg, &c., has decreased from 285,963 tons in 1897 to 227,047 tons in 1908, and the quantity to Ontario ports between Port Dalhousie and Cornwall, and an increase from 166,626 tons in 1897 to 200,520 tons in 1903. The quantity passed down to Montreal shows an increase from 581,047 tons in 1897 to 864,926 tons in 1908.

### 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.
	1894,	125	cargoes,	with an aggi	regate quantity of	 159,145
	1895,	123		n	- 11	 136,617
	1896,	196		11	ft.	 227,912
	1897,	180		t!	11	 229,265
	1898,	166		11	H	 224,021
	1899,	162		f1	11	
	1900,	325		H	11	 183,200
	1901,	112		11	Ħ	 132,558
	1902,	131		H	11	 175,514
	1903,	170		11	Ħ	 218,840
	1904,	115		TT.	11	 174,121
	1905,	167		Ð	11	 239,418
	1906,	205		11	n n	 344,605
	1907,	255		n .	11	 427,813
	1908,	355		11	H	 598,941
20	a=2					

In the United States vessels there were in-

				Tons.
1894,	84 cargoes,	with an aggregate	quantity of	 106,236
1895,	56	H .	11	 73,987
1896,	158	TF.	T)	 217,978
1897,	197	11	11	 285,847
1898,		11	11	 464,852
1899,		T1	11	 205,571
1900,		H	10	 163,575
1901,	135	ti	11	 123,229
1902,	135	II.	11	 136,652
1903,	219	11	11	 273,986
1904,	118	tt .	11	 150,359
1905,	235	11	11	
1906,	178	11	н	 269,800
1907,	263	11	11	 4 7 0 0 3 -
1908,	271	11	11	 330,514

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.

The quantity of grain transhipped at Port Colborne in 1908 and the four previous years is given below.

The total number of grain-laden vessels lightened at this port in 1908 was 69, against 93 the previous year.

The quantity of grain lightened was as follows:—

Articles.	1904.	1905.	1906.	1907.	1908.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat		679,840 104,027	1,009,474 110,629	1,428,300 112,036	1,106,244
Oats Barley. Flax Seed.	15,353 9,686		29,118 2,103	30,824	23,945 56,544 49,628

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The quantity of wheat discharged at Port Colborne in 1908 and two previous years from vessels which did not enter the canal, is as follows:

1906.	1907.	1908.
Bush. 383,437	Bush. 74,014	Bush. 715,347

### WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1908 was 1,703,453 tons; of this quantity 8,024 were way or local freight.

There were 1,292,493 tons of freight passed eastward, and 410,960 passed west-

ward.

### 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 1908 was 1,695,429 tons.

Of this quantity 1,285,229 tons were east bound and 410,200 west bound freight. Of the east bound through freight, Canadian vessels carried 767,118 tons and United States vessels carried 518,111 tons; and of the west bound through freight Canadian vessels carried 154,203 tons and United States vessels carried 255,997 tons, or a total of 921,321 tons for Canadian and 774,108 tons for American vessels.

### ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1908 was 2,009,102 tons; of this quantity 1,424,646 tons passed eastward and 584,456 passed westward.

### East and West bound Through Freight.

The total quantity of through freight was 1,572,999 tons; of this quantity 1,315,682 tons were east bound and 257,317 tons were west bound.

### Way Freight.

Of the total quantity of (way) or local freight 108,964 tons were east bound and 327,139 tons west bound freight.

THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC.

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

	Eastward. to Montreal. Tons.	Westward. from Montreal. Tons.
1894	292,191	9,439
1895	266,659	10,555
1896		10,050
1897		4,542
1898		4,436
1899		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.		96,791
1907	. 789,167	1,281
1908		3,472

### 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, is as follows:—

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1894	361,319	230,948	592,267
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

The total quantity of freight passed through the Welland Canal from United States ports to United States ports shows an increase of 51,997 tons as compared with the previous year; and a decrease of 143,613 tons as compared with 1894.

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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 1908, inclusive.

Fiscal Year.	Aggregate number of Vessels.	Total quantity transported on the Welland Canal.	Quantity passed from United States ports to United States ports.
	No.	Tons.	Tons.
1867 1868 1869 1870	5,405 6,157 6,069 7,356 7,729	933,260 1,161,821 1,231,903 1,311,956 1,478,122	458,386 641,711 688,700 747,567 772,756
Season of navigation.			
1872 1873 1874 1875 1876 1877 1878 1889 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1899 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1899 1900 1901 1902	6,063 6,425 5,814 4,789 5,129 4,429 3,960 4,104 3,332 3,334 3,267 3,138 2,785 2,647 2,975 2,843 2,412 2,222 2,766 2,725 2,725 2,384 2,241 2,725 2,384 2,1547 1,547 1,548 1,787	1,333,104 1,506,484 1,389,173 1,038,050 1,099,810 1,175,398 968,758 865,664 819,934 686,506 790,643 1,005,156 837,811 784,928 980,135 777,918 878,800 1,085,273 1,016,165 975,013 955,554 1,294,823 1,008,221 869,595 1,279,987 1,274,292 1,140,077 789,770 719,360 620,209 665,387 1,002,919 811,371	606,627 656,208 748,557 477,809 488,815 493,841 373,738 284,043 179,605 194,173 282,806 432,611 407,079 384,509 464,478 340,501 434,753 563,584 533,957 553,800 541,065 631,667 592,267 469,779 653,213 564,694 487,539 360,529 318,529 274,019 269,029 370,225 252,481
1904. 1905. 1906. 1907. 1908.	1,433 1,595 1,536 1,982 2,351	1,092,050 1,201,967 1,614,132 1,703,453	305,096 321,431 396,743 448,654

The total quantity of freight passed through the several divisions of the canals during the season of 1908 is as follows:

	Farm Stock.	Forest Produce of Wood.	Manufac- tures.	Merchan- dise.	Agricultural Products.	Total.
Welland. St. Lawrence. Chambly.	785	Tons.  70,647 180,022 364,396	Tons.  126,892 135,081 2,619	Tons.  496,983 826,177 126,034	Tons.  1,008,931 867,037 10,026	Tons.  1,703,453 2,009,102 503,276
Ottawa Rideau Rideau St. Peters. Murray Trent Valley. Sault Ste. Marie	523	204,490 33,225 5,952 603 65,377 62,719	504 6,518 2,046 4,478 1,152 190,535	46, 293 43,859 50,543 19,055 14,004 10,086,814	6,717 6,008 13,456 1,757 817 2,419,146	258,527 89,640 72,015 25,901 81,690 12,759,216

The total quantity of freight moved on the Welland Canal was 1,703,453 tons, of which 1,008,931 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 2,009,102 tons, of which 867,037 were agricultural products, and 826,177 tons were merchandise.

On the Ottawa canals the total quantity of freight roved was 258,527 tons; of this quantity 204,490 tons were the produce of the forest.

Comparative Statement of the Commerce through the United States, St. Mary's Falls Canals and Canadian Sault Ste. Marie Canal, for the Seasons of 1907 and 1908.

	Traffic fo	or 1908.	Total tra	affic for	Increase.	Decrease.
	United States canal.	Canadian canal.	Season 1908.	Season of 1907.	Amount.	Amount.
Vessels Number Lockages " Tonnage registered Net Tons     "freight " Passengers Number Coal (hard) Net Tons     " (soft) " Flour Barrels Wheat Bushels Grain (excluding wheat) " Manufactured & pigiron .Net Tons Salt Barrels Copper Net Tons Iron ore " Lumber ft. B.M. Silver ore Net Tons Building stone " Unclassified freight "	6,739 21,487,499 28,657,297 23,079 1,023,686 6,494,563 3,767,493 48,131,791 22,870,302 162,476 448,510 92,474 17,251,898 423,513,000	9,638,887 12,759,216 30,227 338,749 2,051,360 1,847,157 58,567,143 20,582,403 145,703 100,744 8,855 7,385,103 33,652,355	10,406 31,126,386 41,416,513 53,306 1,362,435 8,545,923 5,614,650 106,698,934 43,452,705 308,179 549,254 101,329 24,637,001 457,165,355	14,020 44,117,079 58,220,011 63,535 1,522,018 9,909,905 6,515,435 98,240,260 37,847,182 330,643 460,872 93,686 39,587,112 638,315,546	8,488,674 5,605,523 22,464 7,643	12,990,693 16,803,498 10,229 159,583 1,353,982 900,785  88,382 14,950,111 181,150,191 

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The United States canal was open to navigation during the season of-

1889	234	days	1899 2	231	days
1890	228		1900 2		
1891	225		1901		
1892	233	66	1902	256	66
1893	219	66	1903 2	49	66
1894	234	"	1904 2	223	"
1895	231		1905 2		
1896	232	66	1906 2	49	66
1897	234		1907 2		
1898	241	66	1908	31	66

The Canadian canal was open to navigation during the season of-

1895	87 days	1902	264	days
1896	218 "	1903		
1897	238 "	1904	241	66
1898	243 "	1905	255	6.6
1899	239 "	1906	253	66
1900	238 "	1907	238	5.6
1901	246 "	1908	235	6.6

The average number of vessels passing per day through the two canals for the season of 1908 was over sixty-five.

## GRAIN FREIGHTS BY LAKE—SEASON OF 1907.

The following were the current rates on Wheat and Corn from Chicago, Buffalo, Ogdensburg, Depot Harbour, and Montreal; also to New York by Lake and Erie Canal, for each week during the season of navigation.

			9-10 EDWARD VII., A. 1910
to New rk, d Canal.	Corn per bush.	Cts.	
*Chicago to New York, Lake and Canal.	Wheat per bush.	Cts.	
Canal, Buffalo New York.	Corn per bush.	Cts.	्याचावावावावावावावावावावावावावावावावावावा
Erie Canal, Buffalo to New York.	Wheat per bush.	Cts.	ब्रा का
utreal.	Corn per bush.	Cts.	- 10 FO - 12 - 12 44 44 12 12 12 44 44 12 44 44 44 44 44 44 44 44 44 44 44 44 44
To Montreal.	Wheat per bush.	Cts.	ි. කි. කි. කි. කි. කි. කි. කි. කි. කි. ක
Harbour.	Corn per bush.	Cts.	
To Depot Harbour	Wheat per bush.	Cts.	**************************************
nsburg.	Corn per bush.	Cts.	क अंद्रिक के क्षेत्रिक के के क्षेत्रक के के क्षेत्रक के के क्षेत्रक के क्षेत्रक के क्षेत्रक के क
To Ogdensburg.	Wheat per bush.	Cts.	- निर्म निर
o Buffalo.	Corn per bush.	Cts.	
To Bu	Wheat per bush.	Cts.	ongrammentation of the strategies of the strateg
			April 6.  " 20.  May 4.  I 11.  " 18.  June 8.  " 29.  July 13.  20.  Aug. 3.  Aug. 3.  Aug. 3.  Aug. 3.  17.  18.  20.  19.  19.  20.  11.  21.  22.  Aug. 3.  11.  24.  26.  26.  27.  Aug. 28.  Oct. 5.

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\* Exclusive of Buffalo charges.

Nov. 2. 1. 16. 1. 23. 1. 30. Dec. 7.

### AVERAGE LAKE FREIGHTS.

The following statement shows the average rates of lake freights on wheat and corn between Chicago and Buffalo during each month in the past ten years, the highest and lowest rate on wheat in each year, and the average rates on wheat each year in cents, per bushel:—

### (Per Report of Secretary of Merchants' Exchange, Buffalo).

	May.	June.	July.		Sept.	Oct.	Nov.
	cts.		cts.	cts.	cts.	cts.	ets.
1898 Wheat	1.3	0.1	0.9	1.2	1.4	2.5	2.3
Highest rate, wheat, 1898, 31c.: lov	1°2 vest. 14 :	average	for the se	1°1 ason 1°5	1.3	2.3	$2^{\cdot}1$
1900 (Wheat	2 0	2.0	2.2	2.5	3.1	3.5	2.5
$1899 \begin{cases} \text{Wheat} \\ \text{Corn} \end{cases}$	1.8	$\frac{2.0}{1.9}$	2.0	$2 \cdot 3$	3.2	3.4	$2 \cdot 3$
Highest rate, wheat, 1899, 3\frac{3}{4}c.; lov							
1900 { Wheat	1.8	1.9	2.1	1.6	$\frac{1.7}{1.6}$	1.7	2.0
Highest rate, wheat, 1900, 3c.; low	est, 1½c.	average	for the s	eason, 1.8	3c.	1.5	1.8
1001 (Wheat	1.9	1.5	1.6	1.3	1.6	1.3	2.0
1901 { Wheat	1.8	1.3	1.4	$1.\overline{2}$	1.5	1.2	1.5
Highest rate, wheat, 1901, 2½c.; lov	vest, 1‡c.	; averag	e for the	season, 1			
1902 { Wheat	1.3	1.3	1.2	$\frac{1.6}{1.4}$	1·5 1·4	$\frac{1.7}{1.6}$	1·9 1·7
Highest rate, wheat, 1902, 2½c.; lov	vest, 18c.	: averag	e for the	season, 1	1 4 5c.	1.0	1.4
					1.2	1.4	1.8
1903 { Wheat	I.3	1.2	1 2	1.0	1:0	1.3	1.6
Highest rate, wheat, 1903, 21c.; low							
1904 { Wheat	2.5	1.7	1.0	1.2	1·2 1·1	1·3 1·2	1.6 1.5
Highest rate, wheat, 1904, 3c.; lower	est. 1c. :	average	for the se	1 ປ ason. 1 ວັດ	1°1	1.5	1.9
					1.4	2.2	2.8
1905 (Wheat	1.0	1.2	1.1	$\hat{1}\cdot\hat{2}$	1.3	$2 \cdot 0$	$\tilde{2}\cdot\tilde{7}$
Highest rate, wheat, 1905, 3c.; lower							
1906 { Wheat	1.3	1.3	1.5	1.9	1.7	2.0	2:0
Highest rate, wheat, 1906, 2½c.; low	vest. 1\frac{3}{2}c.	: averag	e for the	season. 1	1.6 7c.	1.9	1.7
					1.6	2.0	1.5
1907 { Wheat	1.2	1.6	1.4	1.1	1.5	1.8	1.3
Highest rate, wheat, 1907, 2c.; lower	est, 1\fc.;	average	for the s	eason, 1.5	ic.		

### LAKE FREIGHT FROM DULUTH TO BUFFALO ON WHEAT (AS REPORTED BY THE

Secretary of the Merchants' Exchange, Buffalo, N.Y.)
The following statement shows the lake freight rates on wheat from Duluth to Buffalo, during the season 1907:—

1907.	Wheat bushels.	1907.	Wheat bushels.
April 22. May 14.  " 21.  " 23. July 6.  " 13.  " 17.  " 19. Aug. 7.  " 19.  " 19.  Sept. 10.	cts. 2 2 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Sept. 26 Oct. 1 1 12 Nov. 6 1 8 1 9 1 11 1 14 1 19 2 2 2 3 Dec. 3 To load after the 5th	cts. 2 14-514 22 2 1 1 1 1 1 2 2 1

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In 1885 the range of freight on wheat, Duluth to Buffalo, was  $1\frac{1}{2}$  to 5c.; in 1886,  $3\frac{1}{4}$  to 8c.; in 1887, 5 to 8c.; in 1888, 2 to 5c.; in 1889, 2 to 5c.; in 1890, 2 to 5c.; in 1891,  $1\frac{1}{4}$  to  $9\frac{1}{2}$ c.; in 1892,  $2\frac{1}{4}$  to 4c.; in 1893,  $1\frac{1}{4}$  to  $3\frac{1}{2}$ c.; in 1894,  $1\frac{1}{4}$  to 3c.; in 1895, 2 to 6c.; 1896,  $1\frac{1}{4}$  to 3c.; in 1897, 1 to  $2\frac{1}{2}$ c.; in 1898, 1 to  $3\frac{1}{2}$ c.; in 1899,  $2\frac{1}{2}$  to 6c; in 1900,  $1\frac{1}{2}$  to  $3\frac{3}{4}$ c.; in 1901,  $1\frac{1}{8}$  to  $3\frac{3}{4}$ c.; in 1902, 1 to  $2\frac{1}{4}$ c; in 1603,  $1\frac{1}{8}$  to  $2\frac{3}{4}$ c.; in 1904, 1 to 5c.; in 1905,  $1\frac{1}{4}$  to 4c.; in 1906,  $1\frac{3}{4}$  to 3c.; and in 1907, 1 to  $2\frac{1}{2}$ c. per bushel.

The first departure by lake, at Duluth in 1907, was April 27; in 1906, was April 13; in 1905, was April 8; in 1904, was May 14; in 1903, was April 9; in 1902 was on March 31; in 1901 was on May 6; in 1900 was on April 22; in 1899, on April 29; in 1898, was on April 16; in 1896, on April 22; and in 1895, on April 21. In 1894 season opened on April 19; in 1893, on May 8; in 1892 on April 21; in 1891, on April 30; in 1890, on March 26; in 1889, on April 20; in 1888, on May

12; in 1887, May 4; in 1886, on May 7.

Wheat was shipped at Kingston, Canada, per bushel, during the season of 1887, at  $6\frac{1}{4}$  to  $7\frac{3}{4}$ c. : in 1888, at 4 to 5c. ; in 1889, at — ; in 1890,  $5\frac{3}{4}$ ,  $5\frac{1}{2}$ ,  $4\frac{1}{2}$ ,  $4\frac{1}{4}$ , 4c. ; in 1891, during May,  $3\frac{2}{4}$ ,  $3\frac{1}{2}$ ,  $2\frac{1}{2}$ c. ; during June 3c. ; and on July 25,  $2\frac{1}{2}$ c : in 1892, 5c. in April; 5 to  $5\frac{1}{4}$ c. in May; 4c. in June;  $4\frac{1}{2}$ c in July; 3c. in August; 6 to  $6\frac{1}{4}$ c. in October; in 1903, ranged from  $5\frac{1}{4}$  to  $4\frac{1}{2}$ c. in April;  $4\frac{1}{2}$  to  $4\frac{3}{4}$ c. in May; 4 to  $3\frac{1}{2}$ c. in June;  $2\frac{3}{4}$  to 3c. in July;  $3\frac{1}{2}$  to  $3\frac{3}{4}$ c. in September; no figures quoted after that date. In 1894 ranged from  $3\frac{1}{4}$  to  $3\frac{1}{2}$ c. in May;  $3\frac{1}{2}$ c. in June;  $2\frac{1}{2}$ c. in July;  $2\frac{1}{2}$  to  $3\frac{1}{4}$ c. in August; 4c. in September, and  $4\frac{1}{2}$ c. in October. On August 25 and November 3, 1894, wheat to Ogdensburg, at  $3\frac{1}{4}$ c. and  $4\frac{1}{2}$ c. respectively. In 1895, wheat to Kingston from 3c. to  $5\frac{1}{2}$ c.; and in 1897, wheat to Kingston from 3c. to  $3\frac{1}{2}$ c., according to the time of year; 1898 to 1899 not given.

### LAKE FREIGHTS FROM TOLEDO TO BUFFALO ON WHEAT.

The following statements show the ruling rates of lake freights on wheat from Toledo to Buffalo, during the season of 1907 on the dates specified, as reported by the Secretary, Merchants' Exchange, Buffalo.

Date, 1907.	Wheat and Corn per Bushel.	Wheat and Corn per bushel.	
Opening to April 1	Cts. $1 \\ 1\frac{1}{2} - 1\frac{1}{8}$	April 1 to July 14	Cts. 11/2 11/4-11/2

The range for 1886 was  $1\frac{3}{4}$  to 3c.; for 1887,  $2\frac{1}{4}$  to 3c.; for 1888,  $1\frac{1}{2}$  to  $2\frac{1}{8}$ c.; for 1889,  $1\frac{3}{4}$  to 2c.; for 1890,  $1\frac{1}{2}$  to 2c.; 1891, 1 to 3c.; for 1892,  $1\frac{1}{2}$  to  $2\frac{1}{2}$ c.; for 1893, 1 to 2c.; for 1894, 1 to 2c.; for 1895, 1 to  $2\frac{1}{4}$ c.; for 1896,  $1\frac{1}{4}$  to  $1\frac{3}{4}$ c.; for 1897, 1 to  $1\frac{1}{4}$ c.; for 1898, 1 to  $1\frac{1}{2}$ c.; for 1899,  $1\frac{1}{2}$  to 2c.; for 1900,  $1\frac{1}{2}$  to 2c.; for 1901,  $1\frac{1}{4}$  to  $1\frac{1}{2}$ c.; for 1902,  $1\frac{1}{8}$  to 2c.; for 1903,  $1\frac{1}{8}$  to  $1\frac{1}{2}$ c.; for 1904, 1 to  $1\frac{3}{4}$ c.; for 1905, 1 to  $1\frac{1}{2}$ c. for

1906, 1 to  $1\frac{1}{2}$ c.; and for 1907  $1\frac{1}{8}$  to  $1\frac{1}{2}$ c. per bushel.

From Toledo to Ogdensburg, wheat and corn shipped at 6 to 7c. in 1887; at  $4\frac{1}{2}$  to 6c. for wheat and 5c for corn in 1888; and 5 to  $5\frac{7}{3}$ c. for wheat in 1889 per bushel. From Toledo, on October 8, 1887, corn shipped to Kingston at  $3\frac{1}{2}$ c., and on November 12, at  $4\frac{1}{2}$ c. per bushel. In 1888, corn, Toledo to Kingston  $4\frac{1}{2}$  to 3c.; and wheat at  $3\frac{1}{2}$  to 3c. per bushel. In 1889, wheat, Toledo to Kingston, 3c.; and in 1891, rye, Toledo to Kingston at 3c. per bushel. From Toledo, on June 2, 1887, wheat shipped to Montreal by propeller at  $6\frac{1}{2}$ c.; on June 14, corn at same price; but on September 26, the rate on corn was only 5c. per bushel. In 1888, corn, Toledo to Montreal, at 6 to  $5\frac{3}{4}$ c., and wheat at  $5\frac{1}{2}$ c per bushel. From 1889 to 1899, no shipments to Montreal or other places in Canada reported.

### CANAL FREIGHT FROM BUFFALO TO NEW YORK.

The following shows the changes in the ruling rates of freight to New York from Buffalo, on the days specified in 1907 (as reported by the Secretary, Merchants' Exchange, Buffalo).

Date, 1907.	Wheat, Bushels.	Corn, Bushels.	Date, 1907.	Wheat, Bushels.	Corn, Bushels.
May 1	Cts.	Cts.	Nov. 4, to close	Cts. 5\frac{1}{2}	Cts.

Freight on oats varied from  $3\frac{1}{4}$  to  $3\frac{1}{2}c$ . per bushel. Pine lumber, per 1,000 feet, was carried from Buffalo to Tonawanda to New York as follows: Opened at \$2.00; June, \$2.00; July, \$2,00; August, \$2.00; September, \$2.25; October, \$2.25; to close. Rates to Albany opened \$2.50; June, \$2.50; July, \$2.50; August, \$2.50; September, \$2.75; October, \$2.75 to close.

### AVERAGE CANAL FREIGHTS.

### BUFFALO TO NEW YORK.

The following statement shows the average rates of canal freights on wheat and corn between Buffalo and New York during each month in the past ten years, and the highest and lowest rates on wheat and average rate on wheat on each:—

### (Reported by Sec. Merchants' Exchange, Buffalo.)

a :	May.	June.				Oct.	Nov.
Grain.	cts.	cts	cts.	cts.	cts.	cts.	cts.
1898 (Wheat	3.0	$\frac{2 \cdot 9}{2 \cdot 3}$	$\frac{2}{2} \cdot \frac{8}{4}$	$\frac{2.7}{2.1}$	$\substack{2\cdot 6 \\ 2\cdot 2}$	3.0	3·0 2·6
1899 (Wheat	2.5	$\frac{2.7}{2.3}$	$\frac{2\cdot 4}{2\cdot 1}$	$\frac{2.5}{2.1}$	$2.5 \\ 2.2$	3·6 3·6	4·2 3·5
1900 { Wheat	2.4	$\frac{2 \cdot 2}{2 \cdot 0}$	$2 \cdot 3$ $2 \cdot 1$	$2 \cdot 3$ $2 \cdot 0$	$2 \cdot 2$ $2 \cdot 0$	$\begin{array}{c} 2.7 \\ 2.4 \end{array}$	3·5 3·5
1901 { Wheat	3 4 2.7	3·2 2·7	$\frac{3 \cdot 2}{2 \cdot 8}$	$\frac{3 \cdot 2}{2 \cdot 9}$	3·3 3·1	4·0 3 7	4·1 3·8
Highest rate, wheat, 1901, 4sc.; lo	3.6	3·8 3·4	3·3 3·1	3·3 3·1	$\frac{3.8}{3.5}$	4·0 3·7	4·1 3·8
Highest rate, wheat, 1902, 4½c.; lo 1903 { Wheat	. 4·1 3·7	4·1 3·7	$\frac{4 \cdot 2}{3 \cdot 8}$	$\frac{4 \cdot 2}{3 \cdot 8}$	3·6	3·7 3·3	3·7 3·3
Highest rate, wheat, 1903, 4½c.; lo	3.5 3.0	3·2 2·7	$\frac{2 \cdot 7}{2 \cdot 4}$	$\frac{2.6}{2.1}$	$\frac{2.8}{2.4}$	3·5 3·0	3·7 3·1
Highest rate, wheat, 1904, 3½c.; io 1905 { Wheat Corn Highest rate, wheat, 1905, 5c.; lov	. 4·0 . 3·6	3.4	$\frac{3.0}{3.3}$	$\frac{3.0}{3.3}$	$\frac{3\cdot6}{3\cdot2}$	4·3 4·1	5°0 4°8
1906 Wheat	. 4·0 . 3·6	4·0 3·6	4·0 3·6	$\begin{array}{c} 4 & 0 \\ 3 & 6 \end{array}$	$\frac{4.1}{3.7}$	4·6 4·3	5·0 4·6
1907 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	. 5·0 . 4·6	5·0 4·6	5·0 4·6	5·0 4·6	5·0 4·6	5.0 4.6	5·5 5·5

Note.—Canals free of tolls since 1882.

#### FREIGHT, TOLLS, ELEVATING AND STORAGE RATES COMPARED.

The following statement shows the receipts of grain and flaxseed at Buffalo, the average canal freight on wheat, and the tolls on wheat to New York, and the elevating and storage rates at Buffalo for a series of years (as reported by Secretary, Merchants' Exchange, Buffalo):—

Year.	Grain received.	Average Canal Freight on Wheat.	Tolls on Wheat,	Elevating, including Storage.
	Bush.	Cts.	Cts.	Cts.
1870 1871 1872 1873 1874 1875 1876 1877 1878 18877 1878 1880 1881 1882 1883 1884* 1885* 1886* 1887* 1888* 1889* 1890* 1890* 1891* 1890* 1890* 1891* 1890* 1891* 1890* 1891* 1890* 1891* 1892* 1893* 1894* 1895* 1896* 1897* 1896* 1897* 1898* 1896* 1897* 1898* 1896* 1897* 1898* 1896* 1897* 1898* 1899* 1990* 1900	Bush.  32,208,039 61,319,313 58,703,666 65,498,955 55,660,198 52,833,451 44,207,121 61,822,292 78,828,443 75,089,768 105,133,009 £6,389,827 51,501,503 65,722,080 58,011,800 52,671,090 75,570,850 87,073,570 73,977,390 92,290,550 91,994,680 135,315,510 140,796,410 105,435,577 121,225,497 172,474,664 204,964,103 221,383,945 153,393,184 157,655,968 132,646,828 132,646,828 124,664,828	Cts.  11·2 12·6 13·0 11·4 10·0 7·9 6·6 7·4 6·0 8 6·5 4·7 5·4 4·9 4·2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Cts.  3:1 3:1 3:1 2:0 1:0 1:0 1:0 1:0 0 0 0 0 0 0 0 0 0 0 0	ts. 14449444441111111111111111111111111111
1903. 1904. 1905.	140,438,822 100,838,000 126,465,729	4·0 3·2 3·9	do do do	12112112
1906. 1907.	136,066,528 132,438,798	4·2 5·0	do do	22 12 22

Note.—Prior to 1870 tolls 6.21 cents per bushel, and the elevating charge 2 cents per bushel. \*[Including flaxseed.

# AVERAGE FREIGHT CHARGES PER BUSHEL.

For the transportation of Wheat and Corn from Chicago to New York for a series of years.

(From Report of Board of Trade, Chicago.)

		Corn.			WHEAT.	
Year.	By lake and canal.	By lake and rail.	By all rail.	By lake and canal.	By lake and rail.	By all ra
	s	8	8	\$	8	\$
858	.127		3619	1550		*386
559	1570		3248	1663		.348
860	a · 0833		.3248	a.095		.348
861	a · 1062		.3881	a · 1210		.415
862	a : 0957		4480	a 1062		.480
863	a · 063		4592	$a^{-}072$		•492
864	a.09		.5600	a : 0052		. 60
665	a 0864		*4188	a · 0894		.448
866	a · 1075		4312	a 1377		*462
867	a · 0511		4176	a · 08		. 447
868	a · 0604		3532	a · 0802		.378
669	a 0584	2355	3320	a · 0651	.2520	.355
870	a 16	2220	.28	a · 0677	2250	.30
371	a 0754	•2372	2968	a · 0687	2542	'318
(7-1) (7-1)	a 1072	2660	3266	a · 1110	2950	349
779	a 0816	2298	2893	a 0917	2461	.310
74.	a · 0382	1388	2450	a 0400	1907	26
575	a 034	1303	2240	a · 0378	1389	240
376	b 0875	1079	1574	b · 0982	1136	168
	b.0959	1406	1890	b 1100	1546	20
	£.0883	1053	1652	6.0966	1209	.17
378	b·1049	1220	1456	b·1187	•1313	177
79	6.1341	1443	1748	b 1313	1580	198
880	b. 0777	0942	1340	b 0867	1049	14
881	b·0672	1028	1350	b·0723	1091	.14
882	b 0803	.11	1512	b: 0901	1163	.16
383	b 0803	.085	1232	b·07	1103	133
84	b.063	.0801	1232	b·0654	0902	13
885	b·0845	.1120	114	6.0910	12	15
886	b 0840	1120	1470	6.0950	12	15
87	b·0671	1026	1354	b 0330	·ii14	•14
88	b 0632	.0819	126	b:0692	0897	15
89	b·0593	0732	1136	b.0676	0852	14
90	b·0632	0753	1400	b 0695	0857	15
91		0733	1296	b 0645	0759	13
92	b.0595	0797	1365	b 0045	0733	14
93	b:0718	0650	1232	b·0511	0700	13
94	b·0493 b·0450	0640	1029	b 0486	.0696	113
95		0040	1050	b 0430	0661	120
896	b:0575	0613	1143	b·0522	0001	12
897	b:0453	0032	0980	1.0445	0491	•120
398	10381			‡·0581	0663	.110
399	‡:03S1 ‡:0508 ‡:0407	.0583	1008		0510	-05
000		0472	0919	± 0449 ± 0511	0554	.09
01	±:0461		0921	+ 0511	0589	100
902	‡·0483	0551	1054	‡:0526 ‡:0540	0637	111
03	‡·0485	0482	1034	± 0340 ± 0473	0550	.11
004	‡:0363		1038		0550	.09
905	‡:0476	0519	0940	± 0553 ± 0603	0635	109
906	‡:0551 ‡:0612					10
07	1 (1012	.0620	1017	<pre>‡.0665</pre>	.0709	10

a To Buffalo only. b Including Buffalo charges and tolls. ‡ Exclusive of Buffalo charges.

#### FOREIGN FREIGHT RATES.

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

Shipped to	Articles.	1907.	1906.	1905.	1904.	1903.
		8	\$	\$	8	8
Liverpool	Grain	.1922	.1875	. 1916	.2019	. 2268
	. Sacked flour	.2125	.2050	.2240	.2100	.2519
	Provisions	.4085	.4100	.3849	.3656	.4190
Glasgow	Grain	.1967	.1925	.2000	.2238	.2443
	. Sacked flour	.2391	.2360	.2250	.2320	. 2538
11	. Provisions	.4688	.4563	.4323	.4406	.4688
London		.2054	.1925	.2023	.2150	. 235
	. Sacked flour	.2363	.2250	. 2364	.2225	. 251
	. Provisions	.4626	.4626	.4088	.4406	. 440
Antwerp		. 4556	.4761	.4370	.4828	. 496
Hamburg	. 11	.4600	.4900	. 4575	.4600	.470
Amsterdam		.4500	.4600	. 4542	. 4200	.420
Rotterdam		4500	.4600	.4553	. 4200	.420
Copenhagen	. n	.5100	.5100	.4866	.4688	.496
Stockholm		.5300	.5350	.5147	. 4969	. 525
Stettin		.4900	.5000	.4818	4688	. 496
Bordeaux		.5500	.5300	.5145	. 5625	.562

# LAKE FREIGHTS ON COAL FROM BUFFALO TO CHICAGO AND OTHER PORTS.

The following statement shows the average freight rate on Coal (per net ton, in cents) from Buffalo to the ports named, during the seasons of 1906 and 1907.

# (Buffalo Merchants' Exchange.)

	1906.	1907.
Freight on hard Coal, Buffalo to Chicago, per ton	46 45 39	40 46 31

9-10 EDWARD VII., A. 1910  $A-T_{\rm ABLE}$  showing the total Tonnage of the undermentioned Articles moved Up and Down.

			VEG	ETABLE FOOI	D,		
Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles.
1869*	Tons. 45,674	Tons. 313,825	Tons. 120,599	Tons. 20,951	Tons.	Tons. 904	Tons. 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
			144,501	18,455	24,496	1,454	3,198
1876	15,778	201,906				1	
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
			118,811		10,746	1,320	9,168
1884	13,683	144,851	· ·	7,155		1,520	
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	441,092 169,233	18,599 28,353	31,283 27,962	3,671 567	36,981 60,673
1894 1895	33,628 44,044	270,993 203,088	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	24,037	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 22,683
1907	22,739	488,565	271,693 127,402	13,240 $31,172$	73,369 33,423	2,270 6,687	21,668
1908	23,209	732,131	nde neave ro		00,720	0,111.7	21,000

<sup>\*</sup> Fiscal. + Apples, meal of all kinds, pease, potatoes.

SESSIONAL PAPER No. 20a through the Welland Canal, during a period of thirty-eight years, ended Dec. 31, 1908.

			1	HEAVY GOODS.			
Total.	Railway Iron.	Other Iron.	Salt.	Iron and Salt having paid full tolls on St. Lawrence Canals.	Coal.	Ores.	Total.
Tons. 503,860	Tons. 46,806	Tons. 16,924	Tons. 91,575	Tons. 37,153	Tons. 103,126	Tons. 58,781	Tons. 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	431,31
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,56
409,788	51	7,997	30,300	20,327	288,211	81,654	378,54
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,10
403,403	10	11,518	3,980	12,686	295,318	15,229	338,74
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,67
442,182	5,360	4,812	413	22,273	109,986	34,139	176,98
269,395	4,585	7,013	10	30,682	128,113	18,785	189,18
306,482		5,348	50	17,327	237,559	23,700	283,98
373,326	1,237	7,922	66	17,037	307,058	31,785	365,10
				1			
305,734	698	652	461	3,242	274,471	53,205	332,72
273,905	78	2,055	-597	14,243	248,272	26,728	291,97
414,812	166	6,123	48	12,324	271,356	27,447	317,46
394,971	1,351	5,636		6,715	145,193	13,866	172,76
419,786	93	3,220	316	13,617	223,871	16,872	257,98
542,043	47	2,479	1,254	20,269	268,305	2,435	294,78
519,291		753	1,027	28,047	202,384	8,138	240,34
367,177	127	1,610	2,567	7,953	224,644	3,415	240,31
527,426	163	1,567	878	3,666	211,616	355	218,24
805,253	6	2,075	374	8,139	233,096		243,69
591,409		3,072	159	977	203,608		207,81
486,421	185	6,245	54	2,819	158,866	1,140	169,30
788,974	1,192	6,332	82	3,264	223,445	1,158	235,47
816,914	7,206	17,012	227	590	176,226		201,20
720,183	1,444	11,722	799	734	162,336	13,433	190,46
459,688	567	6,361	1,282	1,318	97,732	26,125	133,38
375,720		8,190	533	4,800	47,392	58,400	119,31
290,909	83	6,094	327	8,773	49,480	99,487	164,24
350,792	64	7,488	0 == 4	15,201	64,014	22,480	109,24 220,50
537,252	488	5,407	2,554	45,846	147,884	18,323 39,683	179,80
373,568 576,989	11,381	9,957	1,093	4,164	113,525	22,381	213.03
	2,651	10,912	226	4,221	172,642	5,862	181,99
650,172 894,559	3,747	8,493	100	16,204	147,587 267.212	25,040	317,1
975,672	961	4,923 35,726	246 429	18,761	316,921	18,004	0

B.—Table showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal during a series of thirty-eight years, ended December 31, 1908.

VEGETABLE FOOD.

			VEGETA	BLE FOO	νυ. —————			
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

<sup>\*</sup> Fiscal. + Apples, meal all kinds, pease, potatoes.

SESSIONAL PAPER No. 20a

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-eight years, ended December 31, 1908.

SIONAL	PAP	ER No. 20a
	Total.	Tons. 235,962 224,244 227,344 227,344 227,344 227,344 227,344 227,344 227,344 227,347 220,371 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471 220,471
	Ores.	Tons. 35,912 59,942 19,651 89,942 19,651 89,651 89,651 89,651 89,851 11,7,797 18,336 11,353 11,7,797 18,336 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,364 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406 11,406
Goods.	Coal.	Tous. 28,566 95,741 170,242 203,673 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 118,573 11
HEAVY	Salt.	Tons. 89,086 40,507 22,888 40,507 22,931 22,931 22,931 22,931 88 8 8 371 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Other Iron.	Tons. 14,834 13,828 8,824 123,828 12,824 123,828 10,011 13,016 12,016 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11,017 11
	Railway Iron.	Tons. 68,064 24,050 4,650 604 24,050 604 14,050 604 14,050 604 1,200 608 608 608 608 608 608 608 608 608 6
	Total.	Tons. 234,536 234,537 243,367 243,368 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569 246,569
	*Other articles.	Tons.  1,006 608 808 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,920 1,9
	Rye.	Toms. 667 667 550 550 525 258 258 684 684 480 1,197 1,197 1,197 1,197 1,197 2,149 4,174
E Food.	Oats.	Toms.  1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186 1,186
VEGETABLE	Barley.	Tons. 1,9942. 1,391. 1,9942. 1,603. 1,603. 1,603. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1,551. 1
	Corn.	70ns. 99,751 101,329 101,329 101,329 102,627 103,020 33,001 104,020 105,329 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 105,031 10
	Wheat.	70ms. 229,052 229,053 229,053 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052 227,052
	Flour.	7008. 8.230. 8.230. 10.8482. 10.8682. 11.881. 11.881. 11.881. 11.891. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.791. 11.79
	YEARS.	1869 1873 1874 1875 1876 1876 1876 1876 1877 1878 1889 1889 1889 1889 1889 1889

\* Apples, meal all kinds, pease, potatoes.

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 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906 and 1907, 1908.

		Canadian	VES	SELS.		AMERICAN	VES	SELS.	Т	OTAL.
Articles.	5	Steam.		Sail.	,5	Steam.		Sail.	Ste	am and Sail.
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	225	131,907	163	76,760	388	382,231	144 86,675		920	677,573
1897.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat		121,762 33,694 223		55,724 15,244		106,064 274,855 14,173 23,515		37,891 66,822 1,168		321,441 390,615 14,173 24,906
Pease Rye Coal Miscellaneous merchandise Shingles, woodenware, &c		1,851 2,047 3,873 15,739 1,268		919 3,947 3,290 5		5,517 368 70,968 404		1,615 4,174		1,851 8,483 9,803 94,071 1,677
Sawed lumber Ft. B.M. Square timber Cub. ft Staves No. Firewood Cord.	•	1,573,447 1,327,823 2,577,160 4		2,217,629		20,284,446		90,673,202 616,093		2,531,095 4,161,545 2,577,160 4
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	<u>2</u> 16	126,398	104	59,532	354	355,702	195	108,720	869	650,352
1898.		Tons.		Tons.		Tons.		Tons.	ļ ,	Tons.
Wheat. Corn. Barley.		95,567 56,538		36,157 30,455		54,934 284,059 9,465 17,329		18,355 66,761 2,821		205,013 437,813 12,286 17,329
Oats Pease Rye Coal Miscellaneous merchandise		260 3,564 575 19,385		1,480 1,916 4,104		45 9,135 759 47,271		1,948 2,620 8,758		305 16,127 5,870 79,518
Shingles, woodenware, &c Sawed lumberFt. B.M. Square timberCubs ft. FirewoodCord.		4,910,669 825,545		1, 641,783 1,183,821	1	6,220,972	2	388,410	4	7,257,707 2,397,776
StavesNo.		249								249
	No.	Tounage.	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.	7	Γons.
Wheat		91,901 28,015 1,557		80,928 18,905	,	16,250 138,834 2,424 21,646		7,244 18,250		196,323 204,004 2,424 23,203
Peas. Rye. Coal. Miscellaneous merchandise. Shingles, woodenware, &c Sawed lumber Ft. B.M Square timber Cub. ft. Firewood Cords.		435 25,203 485 2,077,748 322,138		6,736 18,651 916 772,739 585,780	1	923 49,522 4,855,338 20,802	1	3,398 1,567 100 9,949,079 328,806		923 10,569 94,943 1,501 7,654,904 1,257,526
Staves No.										

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

		Canadia	V VE	SSELS.	U	NITED STAT	res V	ESSELS.	Г	OTAL.
Articles.	S	Steam.		Sail.	S	team.		Sail.	an	Steam d Sail.
	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.	7	Γons.		Tons.		Tons.		Tons.	7	Cons.
Wheat. Corn Barley. Oats Peas		67,694 39,597		43,157 31,248		23,066 78,701 2,402 39,706 4		2,130 13,963 1,047 407		136,047 163,509 3,449 40,113 119
Rye. Coal. Miscellaneous merchandise. Shingles, woodenware, &c Sawed InmberFt. B.M.		1,389 723 53,649 1,078		637 31,536 5,344,258	7	2,149 433 43,344 4,984,483		559 3,564 18,770,405	А	3,538 2,352 132,093 1,078 5,946,425
Square timber Cub. ft. Firewood Cords. Staves No.		6,847,279 439,827 126 1,000		355,951 255		11,583		198,420		1,005,781 381 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.	7	Γons.
Wheat Corn. Barley. Oats.		944		58,973 4,689		31,955 55,717 7,119 27,197		1,241		149,810 67,756 7,119 28,141
Peas Rye Coal. Miscellaneous merchandise Shingles, woodenware, &c		2,961 1,960 71,300 18		362 32,312		357 12,874		7,469		2,961 2,679 123,955 18
Sawed lumber Ft. B.M. Square timber Cnb. ft. Firewood Cords. Staves No.		6,533,423 362,441 165		4,060,251 204,682 264	1	1,089,806 9,384		13,092,940 149,531	3	4,776,420 726,038 429
	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.	7	Γons.
Wheat		82,954 148 1,200		85,973 1,388		52,889 66,111 7,418 9,963				221,816 67,647 7,418 11,206
Peas. Rye. Coal. Miscellaneous merchandise. Shingles, woodenware, &c		3,808 3,977 33,111 47		25,732 8,723 28		271 13,497 38,351 4		8,332 1,594		4,079 51,538 81,779 79
Sawed lumber Ft. B.M. Square timber Cub. ft. Firewood Cords.	1	3,218,960 370,718 56		3,256,187 557,689 40		25,437,287		19,540,426 115,000	6	1,452,860 1,043,407 96
StavesNo.	• • • •			14,000					J	14,000

9-10 EDWARD VII., A. 1910

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

Vanish and the second s						_	-			
		Canadian	VES	SELS.	U2	NITED STAT	res V	ESSELS.	г	'OTAL.
ARTICLES.		Steam.		Sail.		Steam.		Sail.		Steam d Sail.
	No.	Tounage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	239	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903.		Cons.	ŗ	Γons.		Tons.		Tons.	r	Cons.
Wheat. Corn. Barley. Oats. Peas Rye.		149,378 21,356 2,580 306 63		38,473 4,682 667 1,335		60,514 174,588 11,409 6,112 22 4,904		6,305 10,132		254,670 210,758 14,656 7,753 85 4,904
Coal		389 39,563		$12,991 \\ 3,367 \\ 54$		8,133 41,584		8,496 2,000		30,009 86,514 54
Sawed lumber Ft. B.M. Square timber Cub. ft. Firewood. Cords. Staves No.		2,841,552 572,000		1,625,855 660,000 210 641,000		7,871,652 9		4,733,677 84,200		7,072,736 1,316,200 219 641,000
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	228	157,539	55	39,375	205	187,748	42	15,918	530	400,580
1904.		Tons.	7	Tons.		Tons.		Tons.		Tons.
Wheat		116,794 12,768 2,619		33,302 7,814 824		14,269 95,362 23,728 16,261 3				164,365  116,444  27,171  16,261  3
Peas. Rye Coal. Miscellaneous merchandise. Shingles, woodenware, &c		1,925 34,907 29,567		7,187		17,133 1,925 60,548		7,668		33,913 36,832 90,115
Sawed lumber. Ft. B.M. Square timber. Cub. ft. Firewood. Cords. Staves. No.		5,077,382 944,508 634,000		854,811 744,000		717		9,572,655 149,000		8,259,389 1,837,508 717 634,000
	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 Corn. Barley. Oats. Peas		188,706 6,385 6,870 8,225		18,575 6,636 1,451 2,570		$28,757 \\ 163,374 \\ 47,111 \\ 21,535 \\ 76$		2,512 4,526 3,742		238,550 180,921 55,432 36,072 76
Rye. Coal. Iron ore. Merchandise. Shingles, woodenware, &c		18,756 14,358 29,375		35,324 8,023 7,485 2,748,941		1,711 28,330 		8,678 3,126	۹	1,711 91,088 22,381 114,961 2,325
Sawed lumber Ft. B. M. Square timber Cub. ft. Firewood Cords.		2,867,147 355,000		951,524 183,000		900		12,479,698	5	4,589,200 538,000 900

D.—Statement showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—Concluded.

		Canadian	VES	SELS.	U	NITED STA	tes V	ESSELS.	r	OTAL.
ARTICLES.		Steam.		Sail.	S	Steam.		Sail.	Stear	n and Sail
	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.	7	Cons.
Wheat		250,493 8,177 8,546 21,900		34,355 5,046 16,083		35,578 202,250 17,854 11,323		1,378		320,436 49,306 31,446 49,306 11
RyeCoalIron oreMerchandise	- * * *	30,455 5,862 35,383		5 47,242 7,009		1,406 24,190 110,263		9,356		1,411 111,243 5,862 152,705
Shingles, woodenware, &c Sawed lumber Ft. B. M. Square timber Cub. ft. Firewood Cords.		35,385 16 3,471,514 375,000 110		235,624 200,000 18	2	110,203 851 25,711,196	1	0,769,755	4	904 0,188,089 575,000 1,221
Staves						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.		$\Gamma$ ons.		Tons.		Tons.		Tons.
Wheat		294,298 6,713 8,726 49,689		50,808 514 468 16,647		130,818 259,895 4,046 7,033		4,429 4,571		480,303 271,693 13,240 73,369
Peas. Rye. Coal.		31,506		47,373		25 2,270 50,183		14,493		25 2,270 143,555 20,990
Merchandise		12,040 21,545		8,950 9,436	1	5,231 2,222 14,395,124		6,235	2	42,447 2,222 5,596,570
Square timberCub. Ft. FirewoodCords.		558,090		323,000		660				881,090
	No.		No. 149	Tonnage. 64,034	No. 428	Tonnage. 319,030	No. 36	Tonnage.	No.	
	1 63034	452.025								
1908.	567	432,623 Tons.		Tons.		Tons.		Tons.		Tons.
1908. Wheat	507	<u> </u>								Tons. 730,751
Wheat. Corn Barley. Oats.	501	Tons.		Tons.		Tons.  183,101 124,997 10,264 2,689		Tons.		730,751 127,402 31,172 33,423
Wheat. Corn Barley.		Tons. 505,151 2,405 19,775		Tons. 39,001 1,133		Tons.  183,101 124,997 10.264		Tons.		730,751 127,402 31,172

# WELLAND CANAL THROUGH PREIGHT—RECAPITULATION.

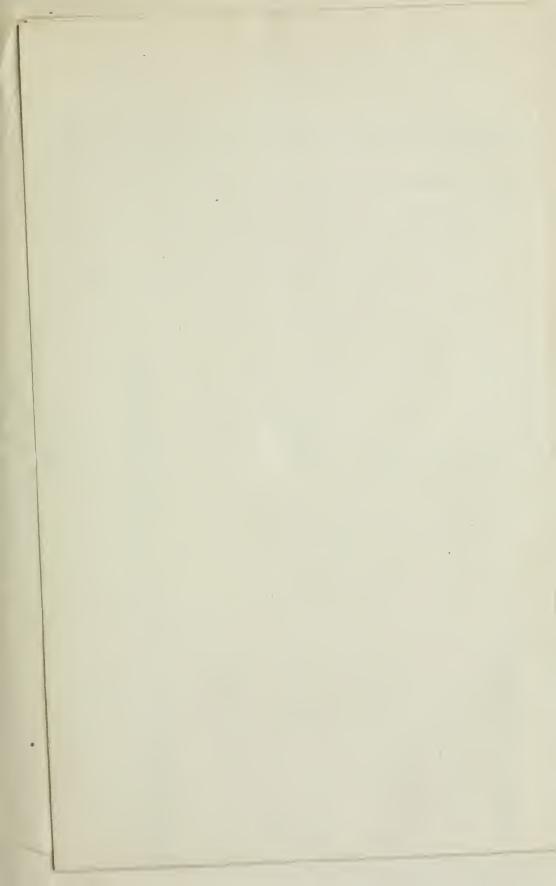
#### WELLAND CANAL—WEST BOUND FREIGHT.

THE total quantity of Through Freight passed Up the Welland Caual in Canadian and United States Vessels during the Season of Navigation in 1908 is as follows:—

Summary.	Tons.	Tons.
In Canadian steam vessels	142,517 11,686	154,203
" sail "		255,997
Grand total freight passed Up the Welland Canal in Canadian and United States vessels		410,200

STATEMENT of the Quantity of Through Freight passed Up and Down the Welland Canal during the Season of Navigation in 1908.

Summary.	Tons.	Tons.
In Canadian steam vessels up	142,517 660,832	
Total in Canadian steam vessels		803,349
In Canadian sail vessels up	11,686 106,286	
Total in Canadian sail vessels.		117,972
Total quantity in Canadian vessels		921,321
In United States steam vessels up	255,990 481,615	737,605
Total in United States steam vessels	7	101,000
In United States sail vessels up	36,496	
Total in United States sail vessels		36,503
Total quantity in United States vessels		774,108
Total in Canadian and United States vessels		1,695,429
	Down or East Bound.	Up or West Bound
In Canadian essels. In United States vessels.	767,118 518,111	154,203 255,997
Total,	1,285,229	410,200



A. 1910

E-Statement of Large Class of Vessels Lightened at the Welland Railway Elevator at Port Colborne, showing the Tonnage, Dimensions, Depth of Water, Number of Cargoes passed through the enlarged Welland Canal during the season of Navigation in 1968. CANADIAN STEAM VESSELS.

	ča ur	Dimension			h of Water			Origini	l Cargo to	the Well	land Can	al.			Lighterns	go over We	lland Radway	Lighte	rago ovez	Welland	Builway	In Tons.		Grain Ca	argo and l	Rolling Fre	ight thro	ough Wel	lland Canal	L				
Date ) Names of Vessels roval	Register of Tour		Depth of 16-54	110 90 43	d Aft	Wheat	Wheat	Barley	Barley.	Oats.	Oate	Flax Sted	Flax Seed	Rolling Freight.	Wheat,	Burley.	Flax Seed,	wheat	Barley.	Flax Seed.	Oats.	Rolling Freight.	Wheat	Barley.	Flux Seed.	Oats W	heat.	Barley	Flux Seed	kase :	Total Cargo throug Canal	Depth Water Midship through Canal		Destination.
16. 2 II. Concerned  4 Steptoments  4 Steptoments  5 Steptoments  6 Disposes  7 Not almost  7 Not almost  8 Observation  7 Not almost  9 Observation  10 Downship  11 Not almost  12 Downship  12 Downship  13 Downship  14 Not almost  15 Downship  15 Downship  16 Downship  17 Downship  18 Downship  19 Downship  10 Downship  10 Downship  10 Downship  11 Downship  12 Downship  13 Downship  14 Downship  15 Downship  16 Downship  17 Downship  18 Downship  19 Downship  19 Downship  10 Downship  10 Downship  10 Downship  11 Downship  12 Downship  13 Downship  14 Downship  15 Downship  16 Downship  17 Downship  18 Downship  19 Downship  10 Downship  10 Downship  10 Downship  11 Downship  12 Downship  13 Downship  14 Downship  15 Downship  16 Downship  17 Downship  18 Downship  19 Downship  10 Downship  10 Downship  10 Downship  11 Downship  11 Downship  12 Downship  13 Downship  14 Downship  15 Downship  16 Downship  17 Downship  18 Downship  19 Downship  10 Downship  10 Downship  10 Downship  11 Downship  12 Downship  13 Downship  14 Downship  15 Downship  16 Downship  17 Downship  18 Down	Tom: Pt	17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1   22   23   24   24   25   25   25   25   25   25	Fr. 16 6 15 15 16 16 17 17 17 17 17 17 17 17 17 17 17 17 17	166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6 166 6	## 1	2.400 (1) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1988 1,385 1,249	35,063 45,000	C49	Brish. 61,764 6	2 54 Tons	Tons.	Bosh.  20,984 24,695 24,695 24,695 24,695 24,695 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 25,295 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25,295 25,295 25,295 25,295 25,295 25,295 25	Bush. 10,371 9,623 6,341 11,001 4,704	9.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.00*   10.0	THE	248 291 153 265 116	20%	Toos 23%	Toms Popular	Besh 73,000 73,000 73,000 74,001 77,271 78,001 77,271 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,000 78,0	15, 692 8,259 45,685 86,422	20,800 23,600 3,600	Bush 7 1 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2,2,006 2,2,2410 2,2,2,664 2,2,410 1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	Toss. 1,577 198	Tons. T	pa.	2 pr	Ft. m	Frest William  Port Arthor Fort William  Port Arthor Fort William Port Arthor Fort William Port Arthor Fort William Port Arthor Fort William Port Arthor Fort William Fort Arthor Fort William	Montreal Kingston, Montreal Kingston
14 Far count Westmitch 17 Be centres Global and the centres 22 Sec. 22 25 Denois 10 Three 2 25 Lines 4 25 Lines 4 25 Lines 4 25 Lines 4 25 Lines 4	1 184			1 17 1 18 4 19 0 17 1 19 1 19 1 19 1 19 1 19	16 16 16 16 16 16	9 32,61 65,12 8 89,60 11 31,81 95,66 146,66 52,87	1 1,6 0 2,6 2 2,8 0 2,8 0 3,6 4 2,1	80 26,14 66 46,00 71 10,00 56 - 51 10,19 61	2 240	130,000	1,866	69,645	2,580	,84	6,458 18,927 16,669 31,842 19,548 19,616 10,816	6,901 7,512 56.544	3,248 27,189 48,624 23,9	508 490 106 197 571 475	181	91 	53		29,186 38,241 72,338 75,452 80,990 67,014		00,397 75,410	10,119 1,000 1,000 2,000 2,000	786 ,148 ,172 264 ,130 ,012	2			2,000 1,587 2,100 2,247 1,005 2,34 2,012 2,118 2,118 34 1,90,135	14 2 14 11 13 1 14 14 14 14		Montreal, Kingston, Thorn 1 Toronto Presents

QUANTITY of Grain discharged at Port Colborne during the season of 1908, which did not enter the Welland Canal.

Date.	Versola,	Destination.	Bushels.
July 4	Erg J. P. Whitney. Stealast Algoriquian Ding J. P. Whitney. Stealast Mediand Prince "Woogan"	Fort William 60 Port Colbarus  Port Arthur Dimension —  Dimension —  Dimension —  Dimension —  Dimension —  Dimension —  Vent William —  Vent William —	621,763 778,220 62,600 7,652 60,222 6,071 314,200 40,970 62,250 20,344
		Total	715,347

SESSIONAL PAPER No. 20a F.—Statement showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St.

686,626 1,543 24,318 10,454 27,500 5,028 6,662 790,321 Cons. 1908. 450,446 124 66.941 105,984 688,749 Tons. 1907. \$0,570 9,174 269 21,196 55,559 1,405 289.611499,895 9 Tons. 1906. 22. 190,505 2,847 53 384 21,404 43,607 84,204 15,694 14,571 384,727 Tons. 1905. Lawrence canals, to Montreal, during the season of navigation 1896 to 1908. 133,528 19: 8,170 24,662 7.846 9,697 241,522 17 1,651 Tons. 1904. 2,438 462 63 2,542 2,206 123,864 3,643 226,746 250 16,151 382,858 Tons. 1903 200,975 220,805 1,442 4,079 13 Tons. 1902. 246 23 132,702 1,400 1,785 1,083 2,961 161,849 Tons. 1901 4,292 5,420 121,896 1,595 3,078 25 109,359 8,925 256,491 Tons. 1900. 169,978 15 4,229 150,999 10,250 923 183 200 3,000 345,565 55 32 Tons. 1899. 55 15,488 184,154 73 310,498 5.687 99 532,499 Tons. 1898. 267,588 3,293 1,029 6,847 2,078 8,435 216 278, 498 576,008 133 Tons. 1897 1,263 240 12,373 3,020 2,020 542 11,964 255,198 182,330 8,323 53 3 477,541 Tons. 896. Rye.
Salt.
Salt.
Hads.
Hay, pressed.
Tobacco, raw. vegetables.
Hides, skins, horns and hoofs.... Cement and water lime..... All other agricultural products, Horses. Lard and lard oil... Meats, all kinds.... Steel....Stone, for cutting..... Meal, all kinds.... All other agricultural products, Agricultural implements..... Pork Ashes Bricks Wheat. all other..... Total, class 3..... Clay, lime and sand.... fron, railway..... Orl cake..... Flour Oats..... Apples....Barley. Articles. Class 3. Corn.... Flaxseed.... Pease. .... Tallow

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.—Concluded.

1908.	Tons.	30, 002	1,056	34,730			42,075	43,367	869,398
1907.	Tons.	22,111	1,224	25,749	4,180	4,180	70,489	70,489	789,167
1906.	Tons.	11,085	614	21,164	2,400	4,000	29,172	29,172	554,231
1905.	Tons.	20,700 20,700 20,19 20,19	204 635 851	25,572	3,957	5,217	29,351	33,188	448,704
1904.	Tons.	6 3 3 112,848 77	766	14,456	394	1,938	17,362		275,278
1903.	Tons.	15 16 240 14,619 14,619 20	582	15,569					398,427
1902.	Tons.	54 12,091	419	12,577	1,085	1,117	15,976		250,475
1901.	Tons.	14,987 17,17 11,287	32, 420,	19,366	2,635	3,205			184,420
1900.	Tons.	15,647	91126	15,798	182	15,942			28,231
1899.	Tons.	7,143	518	7,969	924	951			354,485
1898.	Tons.	75 56 1,141	866	2,215	3,065	3,394			538,108
1897.	Tons.	112 0 23 1	1,226	1,580	257 478 4,716 1,207	6,658			584,246
1896.	Tons.	23 23 4 1	376	629	657	1,857			480,077
Articles	*2010	Crockery.  Grass 4—Con.  Glass, all kinds.  Molasses.  Nails  Nails  Oil  Paint.  Pitch and tar  Rags.  Rags.  Rags.  Soda ash.  Soda ash.  Sugar  Tolnaco.	White lead. Whisky, beer and other spirits. Merchandise not enumerated.	Total, class 4	Barrels, empty Hoops. Sawed lumber. Staves, pipe and barrel. "West India and pipe. Timber, square, in reseals. Woodenware.	Total, elass 5	Coal. Special Class. Iron ore. Stone, all kinds.	Total, special class	Grand total

SESSIONAL PAPER No. 20a

-STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Eric, during the Seasons of Navigation in 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906 and 1907. 5

				1									
Articles. ,	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904	1905.	1906.	1907.
	Tons	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Toms.	Toms.	Tons.	Tons.	Tons.	Tons.
Bricks.	24	15	70	02	F61	49	196	53	80	115	132		556
Clay, line and sand.	1,859	1,686	837	996	997	1,931	2,916	178	3,924	39	181	88 :	133
Fish GvDsum.		: : : 11:	10	6	10 10	00	· ∞		<sup>2</sup> ∞	4			39
Iron, railway   pig.   all other	1,831 932	1,687 28 727 822	6 559 25	699	1,318	74 3 1,428 48	748 4,950 75	11,735 558 2,904 4	39,641 273 5,845 87	3,782	126 312 3,633 150	7,239 680 8,235 17	4,119 7,655 6,987
Steel. Stone for cutting Flour Hav	528	4	62	19	Σ : : Σ : : : :		n :91	F :::	3335	538	192	111	2,561
Meals Oats									17	25			∂ : :
Fotatoes. Seeds, all kinds. Tobacco, raw.	25	66	121		121	218	302	588	325	164	35	71	
Agricultural products not enumerated, vegetables Hides and skins. Horses.	26 26	: :-	4				1	16	9		127		
Lard and lard oil.  Meats other than pork.				(6)				# :		25	28	20	15
Wool All other articles not enumerated													
Total, class 3	5,432	5,080	1,698	2,031	2,500	3,764	9,222	15,520	50,768	4,647	4,934	16,457	22,076
Agricultural implements	12	833	14			120		• •	32	291	155	5 294	456
(and a far				:	:		:			2			N

G.—Statement showing the Quantity of Freight passed Westward from Montreal, through the whole leugth of the St. Lawrence and Welland Canal to Lake Erie, &c.—Continued.

V loi sta	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
Arudes.	Toms.	Tons.	Tons.	Tons.	Toms.	Tons.	Toms.	Toms.	Tons.	Tons.	Tons.	Toms.	Tons.
Classe 4—Concluded. Furniture. Glass, all kinds. Manila.	394	612	799	150	299	456	615	1,384	1,207	1,671	1,641 93	2,519 37 37	3,534 15
Molasses. Nails. Oil, in barrels Paint Pritch and tar Rags.	20 1,149 31 75 67	403 833 660 660	681 28 8	229 15 35 37		30 74 123	675 83 89 69 27	1,292 14 97 27	20 20 20 20 20 20 20 20 20 20 20 20 20 2	2,009 1,418 202 199	3,061 120 367 367 15	: :	ω, ω,
Resin. Soda ash. Stone, wrought.	- FS	74	249	888	108	69	169	201	264		86	310	32.0
Sugar Tin	396	395	359 359	937 237	159	117	338	1,914 506	202	398	928	1,365	1,173
White lead Whiting Whisky, beer, &c Merchandise not enumerated	113 77 1,268	10 56 51 1,247	5 104 93 711	93 793	1 89 178 482	295 295 744	11, 131 1,516	37 61 182 1,049	80 22 452 3,674	82 33 432 6,200	80 158 384 15,360	304 93 483 11,707	283 18 1,040 16,498
Total, class 4	5,123	4,970	2,844	2,405	3,491	2,447	4,492	6,169	9,294	13,379	23,566	23,116	33,049
Barrels, empty. Firewood in vessels. Pulpwood.								3,600	40,026	40,425	43,982	54,906 2,307	2,337 101,989
Railway ties in vessels									611				
Total, class 5								3,600	40,637	40,425	43,982	57,218	104,326
Coal Iron ore										10,200 2,861			
Total, special class										13,061			
Grand total	10,555	10,050	4,542	4,436	5,991	6,211	13,714	25,289	100,699	71.512	72,482	162,96	159,451

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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 1896 to 1908 inclusive.

											-		
	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
Articles.	Tons.	Tons.	Tons.	Tous.	Tons.	Toms.	Tons.	Tous.	Tons.	Tons.	Tons.	Toms.	Tons.
Bricks Chass 3. Coment and water line		845	300		18			: :			: :	::	
Fish Fron rail way		965	770									02 :	
all other			324	1,008	714	105	30			-	27	98	
Steel	408		2,951	13,522	3,110						53	609	9,086
Stone for cutting	:												
Barley	11,128	14,173	6,909	2,424	. 50 . 50 . 50 . 50	7,119		11,433	16,621	9,197	9,266	2,812	7,148
Corn	175,094	169,057	150,667	6,118	60,5-15 7,966	55,531 17,168	13.785	6,082	8,556	23,622	15,215	18,898	17,691
Hay, pressed		300	:							500			0.00
Meal, all kinds	46,456	-11,644	22,626	18,198	14,24	14,016	12,675	13,546	13,076	9,606	10,668	21,976	21,393
Marble	:	:	:							<u></u>			
Oil oako					2,705	1,302	110	7:10	16,497	228	:	11.4	
Oats	16,137	14,969	12,729	19,526	39,706	26,314	10,006	6,112	20	10,892	1,323	4,74	2,070 5
Peaso	:		45	:	7	:	:	22	:	2	11	<u> </u>	Ģ.
Para	061		1.197	923	2,149			4,174				÷ 1	23
Flax seed.				200				1,59.1			756	: 1	:
Seeds, all kinds	78	606	7	=			91	27	:	<u>sē</u>	30	17	
Tobacco	34.878	28,919	11.268	12,926	18,771	23,557	32,639	15,436	14,269	15,483	13,410	21,892	21,651
Agricultural products, vegetables.			:	:	9	10	:	_		:	_		
Hides and skins, &c	÷°	£1 °	:	:	:-	:	:	9	:	:	:		នី
Lard and lard oil, &c.	1,348	1,444	3,671	864	1,588	1,680	2,413	1 :			: 31 : 31	88	
Meats, other than pork	300	2.F6	1 971	818		026	633	152	379	27.3	508	429	
Sheep		:								:	:	:	190
Tallow	006	197	55 SS	130	 	011 8 3	752	485	13.1	2.12	- 68 :	30	
Total, class 3	303,665	280,319	219,434	158,720	-	147,947	1-16,581	168,720	130,499	163,784	196,301	196,062	182,085
Class 4.							006		30%	622	Por		01
Agricultural implements												ಬ	
Furniture	:		23	10	- : :	272	- 12	:	· · · · · · · · · · · · · · · · · · ·		_	:	:

H.—Statement showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Scason of Navigation from 1896 to 1908 inclusive.—Concluded.

Articles.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
	Tons.	Tons.	Tons,	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Marble Glass 4—Con. Molasses				- ∞,	52							: : :	
Nauls Daint barrels Rags	1,005	198	1119	367	17 36	22	1,594	2,000	171	57.4			15
Soda ash. Soros, wrought. Sugar. White lead	165	: : : : : : : : : : : : : : : : : : :			154	448	280		23	53	840	26,075	
Whiting Whisky, beer and all other spirits. Merchandise	3,990	3,591	3,828	168 6,219	7,889	3,327	1,928	3,010	1,554	2,008	2,324	21 30 41,621	1,857
Total, class 4	5,160	3,820	3,986	6,783	8,164	3,805	4,218	4,017	2,021	2,666	3,660	892,79	1,875
Empty barrels Firewood, in vessels Lumber, sawn, in vessels.	10 165 75,515	68,280	52,844	57,695	5 55,128	282	72,806	48,337	30,194	2,700 15,726	3,609 27,701	1,980 14,314	3,509 21,571
Hasse and speas, in vessels Railway ties in vessels Shingles. Shift rowsts	* * * * * * * * * * * * * * * * * * *					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			154 652	2,248	53	2,151	478
Staves, salt barrels Timber, square, in vessels Woodenware, &c	12	1,040									1,500		
Total, class 5	75,702	69,724	52,844	57,695	55,133	38,367	72,810	48,337	31,717	20,751	32,865	18,516	25,558
Coal Special class. Stone, not suitable for cutting Kryolite Iron ore.	1,255		692	2,293	992	357	501		1,100	3,346	4,400	110,347 2,734 1,316	
Total, special class	1,255		759	2,293	992	257	201		1,100	3,346	4,400	114,397	
Grand total	385,782	353,863	277,023	225,491	218,969	190,476	224,110	221,074	165,337	190,547	237,226	396,743	209,518

Table I.—Number of Vessels passed Down the Welland Canal with Cargoes of Grain for Montreal; the quantity transhipped at Kingston, and the quantity taken to Montreal, for the Season of Navigation in 1908.

	Number of Cargoes.	Total Number.
Wheat	210	211
Total	Tons.	Tons.
Quantity of wheat through the Welland Canal bound for Montreal	440	244.070
Total through the Welland Canal		344,972
Corn		1,239
Quantity of the above cargoes taken to Montreal in vessels in which it arrived at Kingston— Wheat Corn	343,293 440	
Total quantity to Montreal		343,733
Grand total		344,972

J.—Statement showing the Quantity of Grain passed Down the Welland Canal in Canadian and United States vessels entering the Canal at Port Colborne, during the Season of Navigation in 1908.

		Canadian	VES	SELS.	U:	NITED STA	res V	ESSELS.	Т	OTAL.
ARTICLES.	S	teanı.		Sail.	8	Steam.		Sail.		am 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
arley orn ats.		$19,775 \\ 2,405 \\ 30,091$		1,133		10,264 124,997 2,689 40		· • • • • · · · · · · · · · · · · · · ·		31,172 127,402 33,423 40
ye		$742 \\ 505,151$		39,001		5,925 183,101		3,498		6,667 730,751
Total		558,164		40,777		327,016		3,498		929, 455

K.—Statement of the Quantity of Grain arrived at Kingston, Ogdensburg and Prescott, in Vessels which passed Down the Welland Canal, during the Season of Navigation in 1908.

Summary, Tons.	Tons.
. Canadian Steam—330 cargoes of grain	
Total in Canadian vessels.	598,941
United States Steam—269 cargoes of grain. 327,016 . 3,498	
Total in United States vessels.	330,514
Total in Canadian and United States vessels	929,455
Distributed as follows:—  187 Canadian and 54 United States vessels arrived at Kingston, discharged part of their cargoes, taking the balance to Montreal	384,802
Quantity transhipped and taken to Montreal	369,398 138,972 36,283
Total	929,455

L—Comparative Statement of the Quantity of Grain passed Down the Welland Canal to Kingston and Ogdensburg, during the Seasons of Navigation in 1907 and 1908.

	19	07.	190	08.
	No. of Cargoes.	Tons.	No. of Cargoes.	Tons.
Quantity arrived at Kingston in Canadian vessels Quantity arrived at Kingston and Ogdensburg in United States vessels	255 263	427,813 413,087	355 271	598,941 330,514
Total	518	840,900	626	929,455
Ouantity transhipped at Kingston and Ogdensburg in Canadian vessels for Montreal				*369,398 384,802 175,255
Total		840,900		929,455

<sup>\*</sup>Of this quantity 960 tons were transhipped from Kingston, being grain of 1907. 241 vessels took their cargoes through in 1908, against 134 in 1907. 222 vessels discharged all their cargoes in 1908, against 287 in 1907.

M.—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1908, inclusive, is as follows:—

				~			
Years	From Canadian Ports to Canadian Ports.	From Canadian Ports to Canadian Ports.	United St	rom tates Ports to tates Ports.	United St	0	Total.
	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1885. 1886. 1887. 1888. 1889. 1890.	80		193,442 184,564 81,617 172,381 226,352 116,616	4,974 5,400 1,163 878 1,124 615	10,321 22,187 26,775 17,365 12,036 17,280	31,350 49,724 25,968 27,183 25,931 22,781	240,087 261,875 135,523 217,807 265,443 202,372
1891 1892. 1893. 1894. 1895.	4		185,190 183,244 204,704 187,794 148,887	1,382 651 2,123 727 603	17,374 12,391 8,325 1,269 1,565	20,698 15,330 17,944 13,947 7,807	224,644 211,616 233,096 203,737 158,866
1896 1897 1898 1899 1900	20		206,093 165,143 156,055 86,638 45,032	1,255 759 2,293 992 357	4,127 1,277 986 525	11,740 9,799 4,536 8,276 1,360 2,322	223,445 176,223 162,336 97,732 47,392 49,480
1901 1902 1903 1904 1905 1906	2,919		46,345 12,410 113,076 62,782 70,118 29,123	1,100 3,346 4,400	$ \begin{array}{r} 450 \\ 65 \\ 4,796 \\ 3,711 \\ 11,436 \\ 7,161 \end{array} $	51,037 30,009 32,813 37,742 106,843	64,013 147,884 103,325 172,642 147,587
1907 1908	2,857 4,401		110,347 158,351	4,400	10,453 5,988	143,555 148,181	267,212 316,921

N.—Statement showing the quantity of Coal passed through the whole length of the St. Lawrence Canal during the seasons of 1885 to 1908, inclusive.

Years.	Quantity passed up.	Quantity passed down to Montreal.	Total Quantity passed up and down
,	Tons.	Tons.	Tons.
205	5,035	122,829	127,864
885,	3,301	118,802	122,103
886	7,579	121,618	129,197
388	8,341	123,050	131,391
389.	5,360	124,290	129,650
890.	6,538	135,168	141,706
891	7,951	141,701	149,652
892.	7,543	157,134	164,677
893.	2,285	147,139	149,424
894	16,213	169,552	185,765
895.	10,210	165,151	165,151
896.	689	161,551	162,240
897	40	164,963	165,003
898	400	175,609	176,000
899	448	201,546	201,994
900.	10	280,169	280,179
901	2,765	298,245	301,010
902	9,231	95,702	104,933
903	30	290.548	290,578
904	9,670	320,973	330,643
905	8,518	345,589	354,107
906	6,989	313,080	320,069
907	1,281	406,978	408,259
908	23,939	448,140	472,079

O .- STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &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 the south side of Lake Ontario.
1897.	Tonnes.	Tonnes.	Tonnes.
Barley. Corn. Oats. Pease. Rye. Wheat	264,396 6,774 2,078 8,435 278,498	11,103 3,046 3 48 39,057	14,173 115,689 15,233
Total grainOther articles	*560,254 20,793	53,257 114,989	157,756 122,207
Total	581,047	166,2 46	285,963
1,898.  Barley. Corn. Oats. Pease. Rye. Wheat.	3,960 310,498 3,975 260 16,133 184,706	1,417 13,338 625 39 15,860	6,909 116,317 12,729 45
Total grainOther articles	†519,532 19,773	31,279 79,614	144,612 114,259
Total	539,305	110,893	258,871
Barley. Corn. Oats. Pease. Rye.	568 150,999 10,250	16,594 1 24,602	1,828 43,854 13,139
Wheat  Total grain	169,978 ‡ 332,736	40,197	68,011
Other articles	21,739	68,671	104,727
Total	354,485	108,958	172,732
1900.  Barley	1,288 109,358 8,925 115 3,078 121,896	563 9,844 348 160 6,610	1,598 44,406 30,840 4 300 7,541
Total grainOther articles	**244,661 43,670	17,525 95,680	84,589 93,287
Total	288,231	113,205	177,876

<sup>\*</sup> Of this quantity, 7,695 tons came down in 1896 and were transhipped to Montreal in 1897.

+ Of this quantity, 6,550 tons came down in 1897 and were transhipped in 1898.

‡ Of this quantity, 14,077 tons came down in 1898 and were transhipped to Montreal in 1899.

\*\* Of this quantity, 12,171 tons came down in 1899 and were transhipped to Montreal in 1900.

 $<sup>20</sup>a - 4\frac{1}{2}$ 

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 United States Ports on the south side of Lake Ontario.
1901.	Tons.	Tons.	Tons.
Barley	14,319 1,584	4,928 853	49,609 25,704
Hease Rye Wheat	2,961 132,702	8,051	9,057
Total grain	†151,566 32,854	13,732 128,614	83,370 91,799
Total	184,420	142,346	175,169
1902.  Barley	1,719 1,412 4,079	10,335	7,418 55,583 9,764
Total grain Other articles	$ \begin{array}{r} 200,975 \\  \hline                                  $	22,787 32,946	8,389 81,165 179,914
Total	250,475	55,733	261,078
1903.  Barley	2,206 116,223 2,438 63 4,200 226,746	1,017 13,846	11,433 80,689 5,315 22 644 13,725
Total grain	\$351,936 38,850	29,062 82,298	111,828 101,621
Total	390,786	111,360	213,449
1904.			
Barley	9,697 55,021	853 3,950	16,621 57,473 16,497
Rye	*133,528	18,908	11,929
Total grain	198,246 77,031	23,711 80,092	102,523 138,475
Total	375,277	103,803	240,998

<sup>+</sup> Of this quantity, 9,324 tons came down in 1900 and were transhipped to Montreal in 1901.

† Of this quantity, 6,096 tons came down in 1901 and were transhipped to Montreal in 1902.

§ Of this quantity, 2,890 tons came down in 1902 and were transhipped in 1903.

\* Of this quantity, 4,014 tons were transhipped to Montreal, being grain of 1903.

O .- STATEMENT showing the Quantity of Through Freight passed down the Welland Canal, &c.—Concluded.

#### RECAPITULATION-Concluded.

Articles.	Quantity passed down to Montreal.	down to	Quantity passed down to United States Ports on the south side of Lake Ontario.
1905.	Tons.	Tons.	Tons.
Barley	43,607 84,204 21,404	2,628 3,095 3,776	9,197 93,622 16,892 76
Rye	1,711 190,505	32,562	15,483
Total grain	**341,431 107,273	42,061 123,225	129,270 104,747
Total	448,704	165,286	234,017
1906.			
Barley	21,196 55,559 37,164	984 15,688 819 11	9,266 140,558 11,323
Rye. Wheat	1,405 ***289,611	15,843	14,972
Total grain	404,935 118,224	33,351 176,277	176,119 59,884
Total	523,159	209,628	236,003
1907.  Barley. Corn. Oats Pease.	9,936 106,299 67,063	492 31,901 1,565	2,812 133,493 4,741 25
Rye Wheat	2,266 *450,009	8,072	22,222
Total grain Other articles	635,573 153,594	42,032 126,423	163,295 93,127
Total	789,167	168,455	256,422
1908.			
Barley Corn. Oats Pease.	24,318 10,454 28,081	3,546 11,489 3,272	3,308 105,459 2,070 40
Rye. Wheat	6,662 +686,626	19,832	24,293
Total grain	756,141 108,785	38,142 162,378	135,172 91,875
Total	864,926	200,520	227,047

<sup>\*\*</sup> Of this quantity, 2,809 tons were transhipped to Montreal, being grain of 1904.
\*\*\* Of this quantity, 4,191 tons were transhipped to Montreal, being grain of 1905.
\* Of this quantity, 2,994 tons were transhipped to Montreal, being grain of 1906.
† Of this quantity, 960 tons were transhipped to Montreal, being grain of 1907.

Table 1.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation 1907 and 1908.

f Cargo.	Canadian.				776, 245 1, 261, 651 379, 674 258, 527 71, 519 72, 615 81, 690 2, 092, 231	5,012,147
Origin of Cargo.	United States.				927,208 747,451 123,602 12,121 13,306 10,666,985	4,265,592 13,237,228 17,502,820 12,490,673
Total Tons.			1,614,132 2,100,466 625,282 337,850 82,369 73,167 69,806 52,402 15,588,165	20,543,639	1,703,453 2,009,102 503,276 258,527 88,640 72,015 81,690 25,901 12,759,216	17,502,820
ns.	Down.		1,223,968 1,316,354 137,642 337,526 43,473 47,411 56,181 40,052 12,603,879	4,737.753 15,805,886	1, 292, 493 1, 424, 646 134, 342 256, 169 48, 672 49, 550 18, 692 9, 943, 369	13,237,228
Tons	Up.		390,164 784,112 488,240 324 38,896 25,756 13,625 12,350 2,984,286	4,737.753	410,960 584,456 368,934 23,358 41,568 22,420 11,840 7,209 2,815,847	1
ted States n Ports.	Down.		525,593 428,709 126,815 9,195 26,492 239,908	1,356,712	495,736 583,340 123,612 691 12,308 13,306 218,226	1,447,219
From United States to Canadian Ports.	Up.		10,453 18,242 18,242	819,369	8,377 6,635 955,288	972,300
From United States to United States Ports.	Down.		177,660 219,083 232 2,515 53,098 1,814,067 10,786,182	11,060,878	209,518 1,227 1,227 8,008,121	8,218,866
From United States to United States Ports.	Up.		177,660	1,991,959	239,136 753 1,464,421	1,704,310
anadian tes Ports.	Down.		26,773 124 1,644	226,138	15,278 198 28,855 4,051	278,721
From Canadian to United States Ports.	Up.		110,556 264,292 483,423 4,735 28,296	891,692	35,370 140,162 364,774 1,998 17,940	560,736
unadian D n Ports.	Бомп.	•	452,519 885,006 10,227 284,428 32,634 47,411 56,181 13,560 1,380,152	3,162,158	571,961 S39,881 10,730 226,633 31,713 49,595 69,850 5,380 1,486,689	3,292,422
From Canadian to Canadian Ports	Up.		91,495 501,346 4,817 324 34,161 25,756 13,625 11,960 351,249	1,034,733	128, 077 434, 906 4, 160 2, 358 39, 570 11, 840 6,717 378, 198	1,028,246
Canals.		1907.	Welland St. Lawrenee Chambly Ottawa. Rideau. Rideau. Trent Valley Murray.	Grand total	Welland St. Lawrence Chambly Ottawa. Rideau St. Feter's. Trent Valley Murray.	Grand total

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Table No. 2.—Statement showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the Season of Navigation 1908.

Up.   Down.   Up.   Down.   Up.   Down.   Up.     361,107   368,644   129,913   2,736   2,847     36,436   120,635   6,887   2,562   183     36,436   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,035   176,	Vessels.	Total Number of Trips.	From Canadian to Canadian Ports.	nadian Ports.	From C tc United Sta	From Canadian to	From United States to United States Ports.	-	From United States to Canadian Ports.	ed States	Tons.	si.	Total Tons.
1,531   361,107   368,644   129,913   2,736   2,847     6,598   1,101,117   884,027   64,735   230   183     1,773   30,638   1,6035   1,507   1,500     1,382   47,772   47,778   47,778     2,040   2,726,776   2,748,139   318,327   227,316     2,940   2,726,776   2,748,139   318,327   227,316     1,040   2,726,776   2,748,139   318,327   227,316     1,040   2,726,776   2,748,139   318,327   227,316     1,040   1,050   1,556   131,816   3,814     2,040   2,6499   12,361   24,805   107,485   2,709,508     2,040   2,781,363   2,780,844   761,100   351,435   2,980,681     36,529   2,781,363   2,780,844   761,100   351,435   2,980,681			Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
1,531         361,107         368,644         129,913         2,736         2,847           6,598         1,10,117         894,027         64,775         230         183           6,585         1,10,117         89,631         6,887         2,562         183           7,832         91,587         176,035         183         6,887         2,562         183           6,732         97,947         177,832         176,035         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183         183 <td>ADIAN VESSELS.</td> <td></td>	ADIAN VESSELS.												
1,531         361,107         368,644         129,913         2,736         2,847           6,858         1,101,117         834,027         64,775         250         183           1,773         36,436         176,035         6,887         2,562         183           1,773         91,587         92,381         438         2,562         183           1,730         97,947         1778         27,312         2,667         2,027           2,904         2,726,776         2,748,139         318,327         227,315         5,027           1,427         25,909         16,761         204,232         1,237         17,907           2,909         1,000         1,483         17,307         3,814         3,817           1,009         1,6761         204,232         1,237         17,907           2,909         1,6761         204,232         1,237         17,907           1,009         1,483         173         495         3,814           2,009         1,483         1,784         495         3,976,624           2,004         2,699         12,364         244,773         124,120         2,976,624           2,785         2,781,363	team and Sail.												
29,040         2,726,776         2,748,139         318,327         227,315         b,057           830         25,908         16,761         204,232         1,258         1,7907           2,909         1,656         133,81         97         1,797         17,907           1,427         2,508         1,556         133,81         9,81         17,907           1,099         1,000         1,483         1,73         9,81         32,790           1,001         26,990         12,361         24,89         107,485         2,709,508           1,002         12,361         24,89         107,485         2,709,508           1,489         124,120         2,975,624           2,781,363         2,780,844         761,100         351,435         2,980,681	nree. loy. Marie.	1,531 6,598 6,598 1,773 7,832 1,380 5,025 3,289	361,107 1,101,117 29,698 36,436 91,587 47,772 97,947 66,706	368, 644 894, 027 30, 531 176, 035 92, 381 47, 778 1127, 872 61, 272 949, 589			2,847		6,114	120,876 123,389 7,097 1,612 36,074 109,339	499,981 1,166,634 36,585 36,586 92,025 47,772 97,947 106,901 1,314,673	492,256 1,017,646 37,628 178,597 93,993 47,788 127,872 97,346 1,288,559	2,184,280 2,184,280 74,213 215,183 186,018 95,560 225,819 204,247 2,603,232
820         65         273         81,258         5,087         248,177           2,909         1,556         131,816         9,814         17,907           1,909         1,656         131,816         9,814         32           1,009         1,483         173         497         32           2,004         26,990         12,361         24,865         107,485         2,709,608           7,489         64,587         32,706         442,773         124,120         2,976,624           36,529         2,781,363         2,780,844         761,100         351,435         2,980,681		29,040	2,726,776	2,748,139	318,327	227,315	5,057	7,844	348,944	398,387	3,399,104	3,381,685	6,780,789
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	D STATES VESSELS.	820 1,427 2,909 109	65 25,908 25 25 1,000	273 16,761 1,555 97 1,483	81,258 204,232 131,816		248,177 17,907	174,939	2,244 16,590 193	158,891 216,891 147,302 769	331,744 264,637 131,873 1,173	339,190 251,630 148,857 10,404 2,749	670,934 516,267 280,730 10,597 3,922
7,489         64,587         32,705         442,773         124,120         2,975,624           36,529         2,781,363         2,780,844         761,100         351,435         2,980,681	s lley. Marie.	2,004	599	12,361	489 24,805	:::_		3,950,712	65	1,706	1,153 2,955,046	1,881	3,034
36,529 2,781,363 2,780,844 761,100 351,435 2,980,681	United States	7,489	54,587	32,705	442,773		2,975,624	4,142,392	212,835	536,103	3,685,819	4,835,320	8,521,139
	al Canadian and U. S.	36,529	2,781,363	2,780,844			2,980,681	4,150,236	561,779	934,490	7,084,923	8,217,005	8,217,005 15,301,928

9-10 EDWARD VII., A. 1910

TABLE No. 3.—SUMMARY STATEMENT showing the Number, Tonnage and Nationality
December

Vessels.	Total Number of Trips.	From Canadian	)	t	anadian o ates Ports.
	Trips.	Up.	Down.	Up.	Down.
Wrlland Canal.					
Canadian vessels, steamsail	1,180 351	323,565 37,542	327,354 $41,290$	102,300 27,613	
Total Canadian	1,531	361,107	368,644	129,913	2,736
United States vessels, steam :	753 67	64	267 6	70,292 10,966	3,323 1,764
Total United States	820	65	273	· 81,258	5,087
Grand total, Welland Canal	2,351	361,172	368,917	211,171	7,823
Sr. Lawrence Canals.					
Canadian vessels, steam sail	3,435 3,163		445,285 448,742	44,492 20,243	230
Total Canadian	6,598	1,101,117	894,027	64,735	230
United States vessels, steamsail	1,007 420	23,500 2,408	9,528 7,233	141,739 62.493	935 302
Total United States	1,427	25,908	16,761	204,232	1,237
Grand total, St. Lawrence Canals	8,025	1,127,025	910,788	268,967	1,467
CHAMBLY CANAL.					
Canadian vessels, steam	333 352		$24,612 \\ 5,919$	6,860	
Total Canadian	685	29,698	30,531	6,887	
United States vessels, steam	91 2,818	20 5	1,551	616 131,200	
Total United States	2,909	25	1,555	131,816	
Grand total, Chambly Canal	3,594	29,723	32,086	138,703	
Ottawa Canals.					
Canadian vessels, steam	921 852	33,397 3,039	77,024 99,011	150	2,562
Total Canadian	1,773	36,436	176,035	150	2,562
United States vessels, steam	107		97		36 9,778
Total United States	109		97		9,814
Grand total, Ottawa Canals	1,882	36,436	176,132	150	12,376
RIDEAU CANAL.					
Canadian vessels, steam	5,864 1,968	$71,191 \\ 20,396$	$71,010 \\ 21,371$	140 298	
Total Canadian	7,832	91,587	92,381	438	

of Vessels passed through all the Canals during the Season of Navigation ended 31, 1908.

to	aited States to an Ports.	Tons		Total Tons.
Up. Down. Up.	Down.	Up.	Down.	
2,604	92,689 28,187	434,583 65,398	422,779 69,477	857,362 134,875
2,847 6,114	120,876	499,981	492,256	992,237
243,120 172,732 1,656 5,057 2,207 588		315,132 16,612	320,845 18,345	635,977 34,957
248,177 174,939 2,24	158,891	331,744	339,190	670,934
251,024 174,939 8,358	279,767	831,725	831,446	1,663,171
183 157 44:		602,479 564,155	541,718 475,928	1,144,197 1,040,083
183	123,389	1,166,634	1,017,646	2,184,280
17,310 16,431 1,133 597 310 15,453		183,684 80,953	192,817 58,813	376,501 139,766
17,907 16,741 16,590	216,891	264,637	251,630	516,267
18,090 16,741 17,189	340,280	1,431,271	1,269,276	2,700,547
	. 62 7,035	24,447 12,138	24,674 12,954	49,121 25,092
	7,097	36,585	37,628	74,213
32	1,342 145,960	668 131,205	1,346 147,511	2,014 278,716
32	147,302	131,873	148,857	280,730
32	. 154,399	168,458	186,485	354,943
		33,547 3,039	77,024 101,573	110,571 104,612
		36,586	178,597	215,183
198	3 493	193	36 10,368	36 10,561
	493	193	10,404	10,597
	3 493	36,779	189,001	225,780
	1,205	71,331 20,694	72,215 21,778	143,546 42,472
	1,612	92,025	93,993	186,018

9-10 EDWARD VII., A. 1910

Table No. 3.—Summary Statement showing the Number, Tonnage and Nationality December 31,

Vessels.	Total Number of	From C t Canadia	0		Canadian so ates Ports.
	Trips.	Up.	Down.	Up.	Down.
RIDEAU CANAL-Con.					
United States vessels, steamsail	60 89		204 1,279	45 128	2 495
Total United States	149	1,000	1,483	173	497
Grand total, Rideau Canal	7,981	92,587	93,864	611	497
St. Peter's Canal.					
Canadian vessels, steam	234 1,146		13,151 34,637		
Total Canadian	1,380	47,772	47,788		
United States vessels, steamsail					
Total United States					
Grand total, St. Peter's Canal	1,380	47,772	47,788		
TRENT VALLEY CANALS.					
Canadian vessels, steam	4,337 688	78,428 19,519			
Total Canadian	5,025	97,947	127,872		
United States vessels, steamsail					
Total United States					
Grand total, Trent Valley Canals	5,025	97,947	127,872		
MURRAY CANAL.					
Canadian vessels, steam	748 179	55,213 11,493	49,784 11,488	35,581 4,048	
Total Canadian	927	66,706	61,272	39,629	
United States vessels, steamsail.	48 23	509 90	170 5	368 121	
Total United States	71	599	175	489	
Grand total, Murray Canal	998	67,305	61,447	40,118	
SAULTE STE. MARIE CANAL.					
Canadian vessels, steam	2,957 332	859,158 35,248	911,216 38,373	75,190 1,385	221,475 312
Total Canadian	3,289	894,406	949,589	76,575	221,787
United States vessels, steamsail	1,905 99	24,348 2,642	11,664 697	24,205 600	103,018 4,467
Total United States	2,204	26,990	12,361	24,805	107,485
Grand total, Sault Ste. Marie Canal	5,293	921,396	961,950	101,380	329,272

of Vessels passed through all the Canals during the Season of Navigation ended 1908.—Continued.

Total Tons.	ons.	То	ited States in Ports.	į t	ted States o ates Ports.	t
	Down.	Up.	Down.	Up.	Down.	Up.
622 3,300	482 2,267	140 1,033	276 493			
3,922	2,749	1,173	769			
189,940	96,742	93,198	2,381			
26,923 68,637	13,151 34,637	13,772 34,000				
95,560	47,788	47,772				
95,560	47,788	47,772				
173,668 52,151	95,240 32,632	78,428 19,519				
225,819	127,872	97,947				
				• • • • • • • • • • • • • • • • • • • •		
225,819	127,872	97,947				
172,601 31,646	81,271 16,075	91,330 15,571	31,487 4,587	536 30	• • • • • • • • • • • • • • • • • • • •	
204,247	97,346	106,901	36,074	566		
2,434 600	1,492 389	942 211	1,322 384	65		
3,034	1,881	1,153	1,706	65		
207,281	99,227	108,054	37,780	631		••••
2,523,104 80,128	1,247,517 41,042	1,275,587 39,086	106,982 2,357	339,212 2,453	7,844	2,027
2,603,232	1,288,559	1,314,673	169,339	341,665	7,844	2,027
6,863,986 171,669	4,038,154 42,455	2,825,832 129,214	9,751 300	188,396 5,347	3,913,721 36,991	2,588,883 120,625
7,035,655	4,080,609	2,955,046	10,051	193,743	3,950,712	2,709,508
9,638,887	5,369,168	4,269,719	119,390	535,408	3,958,556	2,711,535

Table 4.—Comparative Statement of the Traffic of all the Canals for the Years ending December 31, 1907 and 1908.

Articles.	1907.	1908.	Increase.	Decrease,
Class No. 1.	Tons,	Tons.	Tons.	Tons.
Canadian vessels, steam sail. United States vessels, steam sail.	4,528,064 1,796,715 10,822,555 786,411	5,201,093 1,579,696 7,881,570 639,569	673,029	217,019 2,940,985 146,842
Total, class No. 1	17,933,745	15,301,928	673,029	3,304,846
Class No. 2.	No.	No.	No.	No.
Passengers	279,199	280,830	1,631	
Class No. 3.	Tons.	Tons.	Tons.	Tons.
Barley Buckwheat Corn Flour Hay, pressed Meal, all kinds Oil cake Oats Pease Potatoes Rye Flax seed Wheat All other vegetable Cattle Fish Hogs Hides and leather Horses Dressed meats. Pork and products Sheep Wool. All other animal	154,986 53 410,671 378,644 25,121 49,612 2,028 343,984 822 6,535 13,638 248,940 2,473,202 27,096 552 2,705 578 50 784 701 1,185 332 1,635 12,499 4,156,353	174,628 858 153,713 228,605 18,259 28,100 28,100 256,659 266 6,858 20,6661 234,738 3,199,031 23,838 628 2,220 369 101 701 106 2,273 209 4 10,177 4,338,156	19,642 805 323 13,023 725,829 76 51 1,088	256,958 150,039 6,862 21,512 1.894 118,325 536 
Class No 4.  Agricultural implements. Bricks. Cement and lime. Clay and sand. Crockery and earthenware. Furniture Glass, all kinds. Iron, pig and bloom " all other. Nails. Oils. Paint. Salt. Steel. Whisky and all other spirits. Merchandise not enumerated.  Total, class No. 4.	8,508 20,953 78,347 174,274 1,804 4,165 10,990 155,466 71,208 20,397 59,903 2,473 19,035 22,740 10,682 526,474	11,378 15,769 49,577 126,065 1,813 2,905 10,364 52,952 132,307 12,075 83,742 3,714 22,709 82,902 10,193 531,665	2,870 9 61,099 23,839 1,241 3,674 60,162 5,191 158,085	5,184 28,770 48,209 1,260 626 102,514 8,322

Table 4.—Codpurative Statement of the Traffic of all the Canals for the Years ending December 31, 1907 and 1908—Concluded.

Articles.	1907.	1908.	Increase.	Decrease.
Class No. 5.	Tons.	Tons.	Tons.	Tons.
Floats Firewood, in vessels. Pulpwood Sawed lumber, in vessels. " rafts. Railway ties, in vessels. Masts, spars, &c., in rafts. Square timber, in vessels. " rafts. Shingles. Saw logs Other woods.  Total, class No. 5	39,550 59,999 752,691 533,051 243 3,371 4,630 26,214 10,910 19,087 35,628 2,552	15,684 74,117 393,189 414,405 2,824 2,598 841 17,570 35,502 9,990 18,056 2,655	24,592 24,592 103 41,3	23,866 359,502 118,646 773 3,789 8,644 9,097 17,572
Class No. 6.				
Coal, hard	3,546,683 19,384 10,105,016 4,889 35,969	$\left\{\begin{array}{c} 1,006,259\\ 2,521,850\\ 52\\ 8,855\\ 7,402,672\\ 10,321\\ 77,094 \end{array}\right.$	5,432 41,125	18,574 10,529 2,702,344
Total, class No. 6	13,711,941	11,027,103	46,609	2,731,447
Freight, grand total	20,543,639	17,502,820	1,006,925	4,047,744
Freight, grand total, decrease.				3,040,819

# APPENDIX A.—Continued.

Table 5—Statement of Traffic on the undermentioned Canals during the Season of Navigation in 1908.

	9-10 EDWARD VII., A. 191
Sault Ste. Marie Canal.	Tons. 2,523,104 6,863,986 80,128 171,669 9,638,887 No. 30,227 Tons. 115,567 1,72,043 193,167 5,529 1,637,921 1,757,921
Trent Valley Canal.	Tons.  173,668  52,151  225,819  No.  85,291  Tons.  21  23  17  24  17  24  17  27  277  277
St. Peter's Canal.	Tons. 26,923 68,637 05,560 No. Tons. 1,383 1,261 1,383 1,261 1,026 5,468
Rideau Canal.	Tons.  143,546 622,640 189,940 No. 22,640 176 8 95 1,332 1,332 1,232 1,232 1,232 1,232 1,232 1,232
Ottawa Canals.	Tons.  110,571  110,571  10,561  225,780  No.  14,557  Tons.  2 2 2 2 2 2 495 495 495 495 229
Murray Canal.	Tons.  172,601 2,434 31,646 600 207,281 No. 23,771 Tons. 200 24 24 1,228
Chambly Canal.	Tons.  49,121 2,014 2,014 2,014 354,943 No. 3,597 Tons. 17 476 420 420 420 420 420 1,000 1,000 1,000
St. Lawaence Canals.	Tons.  1,144,197 376,501 1,040,083 133,766 2,700,547  No. 94,594 30,607 10,151 5,504 30,890 145 183 6,783 7708,022 13,310
Welland Canal.	Tons.  857,362 635,977 134,875 14,663,171 No. 6,153 11,72 127,402 32,088 23,088 23,209 21,628 23,209 21,628 23,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423 33,423
AITICLES.	Class No. 1.  Canadian vessels, steam United States vessels, steam Canadian vessels, sail United States vessels, sail  Total, elass No. 1.  Class No. 2.  Passengers  Class No. 2.  Class No. 2.  Barley.  Earley.  Hay, pressed.  Hay, pressed.  Hay, pressed.  Flour.  Hay, pressed.  Reas.  Oats.  Potatoes.  Pot

c	ECC	ION.	ΔI	DAD	DFR	No	20a
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SESSIONA	AL PA	APER No. 20a		
	2,419,201	3,682 680 39,159 375 40 40,874 80,311 1,036 14,393 24,518 276,883	482,186	668 330 55,454 644 1,353 197 3,790 2,83
2 67 12	1,157	19 472 472 556 556 35 35 35 11 11 11 11 14 11	2,569	4,936 41,225 2,583 2,096 1,965 1,870 1,965 1,870 1,965 1,870 1,965 1,870 1,965 1,870 1,965 1,870 1,965 1,870 1,965 1,870 1,985 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980 1,980
26 182 6 10	15,546	3 1,096 1,096 177 27 28 85 166 69 69 49 49 49 49 49 49 49 49 49 49 49 49 49	4,160	149 4,653 240 15 202 423 130 140
36 164 1.697	6,110	371 1,309 1,309 21,421 126 147 328 87 11,399 568 535 535 535 535 635 635 635 635 635 635	36,757	6,603 24,922 272 272 272 4 1,000 235 138 138 133,225
118 2,464	7,246	14 210 43,545 6 58 142 1 67 1 1	46,703	10,080 19,667 163,877 38 37,750 3,750 1,50 1,090 1,901 1,901
1	1,767	15 1,416 806 2340 170 538 150 279 279 279 279 388 388 358 358 365 365 365 365 365 365 365 365 365 365	8,514	11.13.1 17.48.80.380.380.
257.28	10,232	25. 26. 28. 28. 28. 28. 28. 28. 28. 28. 28. 28	20,907	302,384 60,517 738 70 285 364,396
35 1,049 26 5,518	867,937	140 10,775 1,725 49,952 887 2,2381 5,598 5,717 35,010 4,679 4,679 40,768 5,038	283,173	86,511 58,576 84 84 200 200 28,882 1,719 1,446
898	1,008,960	7,008 1,748 4,335 325 441 1,683 26,643 4,856 4,7290 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,082 1,	265,161	5,389 4,293 43,690 478 12,820 3,572 3,572 3,1820 107
Dressed meats. Pork and products. Sheep. Wool All other agricultural products, animal.	Total, class No. 3	Agricultural implements. Bricks. Generat and lime. Clay and sauld. Crockery and carthenware. Furniture. Glays all kinds. I all other. Nails. Oil, in barrels. Paint. Salt. Salt. Stell Stell Whisky and all other spirits. Whisky and all other spirits.	Total, class No. 4	Eloats. Firewood, in vessels Pulpwood. Lounber, sawn, in vessels I kailway tres, in vessels Masts, spars and telegraph poles, in rafts Square timbor, in vessels. Shingles. Saw logs. Cheek woods. Total, class No. 5.

Table 5—Statement of Traffic on the undermentioned Canals during the Season of Navigation in 1908—Concluded.

Sault	Canal.	Toms.	338,749 2,051,360	8,855	7,385,103	10,470	9,795,110	12,759,216
Trent	Valuey Canal.	Toms.	3.3			12,432	12,587	81,690
St. Peter's	Camal.	Tons.	626 40,865		24:1	4,602	46,357	72,015
Rideau	Canal.	Toms.	9,358	77	611	C1	13,548	89,640
Ottawa	Canal.	Tons.	87 57		តន		88	258,527
Murray	Canal.	Tons.	397 14,430		15	175	15,017	25,901
Chambly	Canal.	Toms.	95,336		7,533	4,627	107,741	503,276
St.	Canal.	Tous.	389,163 266,775		1,006	21,036	677,970	2,009,102
Welland	Canal	Tons.	172,523 144,398		8,974	23,760	358,685	1,703,453
	ARTICLES.	Cluss No. 6.	Coal, hard	Copper ore	Iron Other	Stone, all kinds	Total, class No. 6	Grand total

Department of Railways and Canals, Ottawa, April 15, 1908.

RICHARD DEVLIN, Compiler of Canal Statistics.

# SUPPLEMENTARY APPENDIX A.—Continued.

TABLE G.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during the Season of Navigation ended 31st December, 1908,

SESSIONAL PAPER No. 20a

Sault Ste. Marie Canal,	Tons. 9,638,887	30, 227 Tons.	668 330 56,098 1,353 1,353 1,353 1,353 1,353 1,400 197	62,719	21 21
Trent Valley Canals.	Tons. 225,819 No.	85,291 Tons.	1,936 41,225 4,679 10,286 11,286 13,835 2,67	65,377	2772
St. Peter's Canal.	Tons. 95,560 No.	Toms.	119 4,653 15 240 130 423 423 202 202 140	5,952	331-2   3
Ridean Canal.	Tons. 189,940 No.	22,640 Toms.	6,603 24,922 40 40 372 138 235 1,004 11	33,225	61 :83 :   38
Ottawa Canals.	Tons. * 225,780 No.	14,557 Tons.	19,680 19,667 163,877 6,901 8 3,900 19	204,490	289 26 118 118 523
Murray Canal.	Tons. 207,281 No.	23,771 Tous.	153 48 47 77 24 28 880	603	x   x
Chambly Canal.	Tons. 354,993	3,597 Tons.	302,384 302,384 60,517 738 70 70	364,396	201 109 109 109
St.Lawrence Canals.	Tons. 2,700,547 No.	94,594 Tous,	372 86,511 58,660 200 200 31,114 1,446	180,022	263 3 493 66 7 7 7 86
Welland Canal.	Tons, 1,663,171 No.	6,153 Tons.	5,369 4,293 43,690 478 3,572 12,820 10,700	70,647	
ARTICLES.	Vessels of all kinds	Passengers  Forest—Produce of Wood.	Floats. Firewood Lulpwood Lumber, sawed Masts, spars, &c. Railway ties. Saw logs. Shingles. Timber, square. Other woods.	Total	Cattle. Hogs. Horses. Sheep. Total

## SUPPLEMENTARY APPENDIX A.—Continued.

Table 6.—Summary Statement of Traffic on the undermentioned Canals, &c.—Continued

				9-10 EDWARD VII., A. 1910
Sault Ste. Marie Canal.	Tons.	4	4	6,045 115,567 193,167 5,529 156,370 172,043 1,772,043 1,777,221 2,419,142 2,419,142 40
Trent Valley Canals.	Tons.	3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	59	114 23 172 172 173 173 174 19 472 19 472 19 19 19 19 19 19 19 19 19 19 19 19 19
St. Peter's Canal.	Tons.	286 182	221	1,026 10 1,383 1,261 484 3,566 5,468 1,335 1,096 1,096 27
Rideau Canal.	Tons.	12 36 164 1.697	1,900	468 176 8 95 186 1,332 4,45 47 4 4,099 1,232 4,099 1,239 1,309 1,309 1,309 1,239 1,309 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,239 1,2
Ottawa Canals.	Tons.	1 5 3 2 2,464	2,475	2,327 495 495 496 4,242 14 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16
Murray Canal.	Tons.	1 1 297	305	1,228 200 24 1,452 1,462 1,416 2,416 2,416 1,70
Chambly Canal.	Tons.	0600084	888	1,000 17 17 1,000 1,512 1,54 4,20 9 1,28 1,28 1,28 1,28 1,28 1,28 1,28 1,28
St. Lawrence Canals.	Tons.	35 1,049 5,518	6,604	13,310 27,483 26,134 10,151 10,151 30,890 145 145 145 145 145 145 145 145 145 145
Welland Canal.	Tons.	868	966	175 31,175 23,209 23,209 21,628 33,423 40 6,667 6,667 732,131 1,007,935 1,708 1,748 4,335 4,335
ARTICLES.	Produce of Animals.	Hides and leather Dressed meats. Pork and pork products Wool Agricultural products not enumerated, animal.	Total	Agricultural Products.  Agricultural products not enumerated, vegetable Barley. Buckwheat. Com. Hay, pressed. Meals, all kinds. Oats. Pease. Potatoes. Rye. Flax seed. Wheat. Total.  Agricultural implements. Bricks. Cement and water lime. Crockery and earthenware.

### SESSIONAL PAPER No. 20a

119 40,874 80,311 1,036 20 20 24,518	190,535	338,749 2,651,300 40 53 7,394,401 14,393 10,170 276,883 10,086,814
22 22 11 11	1,152	84 66 12,432 1,411 14,004
85 166 166 133 433 439 37	2,046	17 636 40,865 2,072 2,072 2,672 4,602 1,677 1,677 50,543
328 87 1,399 568 555 535 54 113 118	6,518	21, 421 9,358 3,757 12 18 419 2,560 6,312 43,859
142 67 5	504	43,545 23 24 24 41 46,293 46,293
539 102 132 150 279 279 265 265 358	4,478	800 397 14,430 15 30 175 3,206 175 3,206 175 25,901
20 869 869 183 183 45	2,619	9,630 95,336 175 7,603 4,627 8,466 126,034
5,696 22,998 22,998 5,313 35,010 7,010 5,038 40,768	135,081	49,952 389,163 266,775 4679 21,026 93,536 826,177 2,009,102
3,414 9,683 26,043 4,856 47,290 1,082 3,866 17,095	126,892	325 172,523 144,398 18,004 23,760 137,515 496,983 1,708,453
Glass of all kinds.  Iron, pig and bloom.  In all other.  Nails  Coli a Paint.  The Paint.	Total	Clay, lime and sand Coal, hard. Coke Fish Ores, all kinds. Stone, all kinds. Stone, all kinds. Total Total Total Total Totals (passengers and tonnage of vessels not included.

Table 7 (No. 1).—General Statement showing the Quantity of each Article transported on the Welland Canal during the Season of Navigation in 1908.

Origin of Cargo.	U. States. Canadian.	55	23,594	4, 335 325 325 4, 401	9-10 EDWA	24,946 24,946 4,196 7,630 275 4,853
Origin o	U. States.		7,577 1,748 847.1	168,122 144,398 127,402	13.13	24 105 1,097 4,778 1,400 21,353
Total Tons.		175	31,172 31,172 1,748	4,335 325 172,523 144,398 127,402	23,209 23,209 1 3,444	39 26,043 8,874 9,030 21,628 4,856
*\$1	Down.	101	31,172 1,748	325 3,783 144,398 127,402	23,187	1,097 1,097 2,389 21,628
Tons.	Up.	न्त्र १=	7,002	4,335		9,578 24,946 6,585 9,630 4,014
From United States to Canadian Ports.	Down.		3,546 1,748	3,783 144,398 27,572	3,517	1,069 2,389 3,4
United Can	Up.			5,988		2,389
From United States to United States Ports.	Down.		5,148	0638,666	<del>1</del> 69,71	17
From United St to United St	Up.			158,354		\$\frac{1}{2}\$ \text{\$\frac{1}{2}\$}\$ \text{\$\frac{1}{2}\$}\$ \text{\$\frac{1}{2}\$}\$ \text{\$\frac{1}{2}\$}\$
From Canadian to United States Ports,	Down.					
Er Cam United Po	Up.		9 . :	1,43	1,146	
From Canadian to Canadian Ports.	Down.	101	20,478	325	1,976	242
Er Can Can Po	Up	#2	2,000	4,335	358 358 22 1 1 2,298	9,278 24,556 4,196 7,630
Articles.		Agricultural products not enumerated, vegetable Agricultural products not enumerated,	animal Agricultural implements. Burleys	Buckwheat Cament and water lime Clay, lime and sand Coal, hard  soft.  soft.  Corn.	Cattle Crockery and earthenware Fish Fish Funiture Glass, all kinds	Horses. Hides and leather. Iron, pig and bloom. Iron ore. Other ores. Meal, all kinds Dressed meats.

SESS	1018	NAL PA	PER	No.	20a		UANA	L SI	ATIS	110	is	
31,735 30,230		1,081	7,976	6,098	3,215 479,340	64,359	$\begin{array}{c} 1,860 \\ 4,293 \\ 16,787 \end{array}$	:	318	4,300	105	776,245
2,C70 16,588	40	868 1 6,653	15,784	10,997	252,791	73,156	3,509	:		8,520	61	927,208
33,423	40	868 1,082 6,667	23,760 23,760	17,095	3,866	137,515	5,369 4,293 43,690	:	478 318 3 579	12,820	107	1,703,453
33,423 46,933	4	868 54 6,667	7,932	10,997	1,516	5,110	3,719		478	12,820		1,292,493
357		1,028	15,828	6,098	2,350 1,380	132,405	1,650 4,293 3,401		260		107	410,960
$\frac{1,084}{16,487}$		678	280 456	1,911	879 252,455	2,499	5,332	:		8,520		495,736
	: :							:				8,377
2,070	40	190		9,086	24,651	1,857	3,509	:	478			209,518
7.5			15,328		189	63,781		:			2	239,136
					1,892		13,386	:				15,278
500		262		250	1,380	18,258	1,650 4,293 2,644	:	377.6	4,010	20	35,370
30,239		53	7,476	: :	637	754	210	:	28	4,300		571,961
265		992	500	5,848	1,555	50,366	757		096	064	55	128,077
Oats Oil, in barrels.			Salt. Stone, all kinds.	Steel	Sugar Whisky and all other spirits Wheat.	All other goods and merchandise not pumerated.	els	Masts, spars and telegraph poles, in	Railway ties, in vessels Sawlogs	Simples, in vessels	: :	Total freight

APPENDIX A.—Continued.

Table 7 (No. 2) --General Statement showing the Quantity of each Through Article transported on the Welland Canal, &c.--Com.

							9-10 E	OWARD '	VII., A. 1910
f Cargo.	Canadian.	175	. 51	4,335 325 4,401	428	1,998	3,444 15 15 24,946 4,196		
Origin of Cargo.	United States.		7,578	= ====		21,211	:	21,353 31,353 3,070	
Total Tons.		175	31,1		127,402	23,209		21,628 4,628 33,423	1, 232 1, 082 1, 082 6, 667 32, 088 429
	Down.	101	31,172	325	127,402	23,187	24 105 1,097 2,389	33,423	40,355 40,868 868 54,088 32,088 429
Tons.	Up.	7.	2,006	4,335	141	22	3,444 15 15 9,578 6,585	9,030	1,028
From United States to Canadian Ports.	Down.		3,546	-	27,572	3,517	105 1,069 2,389	: : [	67.8 6,651 10,271
Fr United t Cany Po	Up.			5,988			6		
From United States to United States Ports,	Down.	:	7,148		99,830	17,694	21	21,353	
From United St to United St Ports.	Up.			158,351				1,400	
From Canadian to United States Ports.	Down.	:							
Fr Cana United Po	Up.		9	1,431	0.2		1,146 300 390		262
From Canadian to Canadian Ports,	Down.	101	20,478	325	· · · · · · · · · · · · · · · · · · ·	1,9		842 842 30,289	53 53 21,817 149
Prom Canadia to Canadia Ports.	Up.	TT L~	7,000	4,335	358	22.	2,298 15 9,278 24,556	3,976	700
Articles.		Agricultural products not enumerated, vegetable	Agricultural implements. Barley Bricks	Cement and water lime. Clay, lime and sand Coal, lard.	Corn. Crockery and earthenware	Flour Furniture	Glass, all kinds Hides and leather. Fron, pig and bloom. I all other Iron ore	Other ore Meal, all kinds Nails Outs	Pease Pork and products. Paint Rye Rye Flaxseed Salt.

SESSION	IAL P	APER	No.	20a
600 6,098 3,215 479,010	64,359 1,860 4,293	16,787	105	768,221
15,784 10,997 651 252,791			:	926,208
16,384 17,095 3,866 731,801	137,515 5,369 4,293	43,690	12,820	1,695,429
1,056 10,997 1,516 730,421	5,110	40,289	12,820	1,285,229
15,328 6,098 2,350 1,380	132,405 1,650 4,293	3,401	701	410,200
456 1,911 879 252,455	2,499	5,332	8,520	495,736
				8,377
9,086	1,857	21,571		209,518
15,328	63,781			239,136
1,892		13,386		15,278
250 606 1,380	18,258 1,650 4,293	2,644	2,576	35,370
600 637 451,423	754 210		4,300	564,697
5,848	50,366		996	127,317
Stone, all kinds. Steel. Whisky and all other spirits.	All other goods and merchandisc not enumerated.  Firewood, in rafts.	Lunbord Lumber, sawn, in vessels Railway ties in vessels	Shingles Timber, square, in vessels. Other woods.	'Total through freight

Table 7 (No. 3).—General Statement showing the Quantity of each Way Article transported on the Welland Canal during the Season of Navigation in 1908.

Articles.	From Canadian to Canadian Ports,	anadian o n Ports.	Tons.	ns.	Total Tons.
	Ωb.	<b>Доми.</b>	Up.	Down.	
Sotne, all kinds Wheat. Saw logs	500	6,876 330 58	500	6,876 330 58	7,376 330 318
Total way freight	760	7,264	760	7,264	8,024

Table 7 (No. 4),—General Statement showing the Quantity of each Article transported on the St. Lawrence Canals during the Scasson of Navigation in 1908.

Total Tons.	U. States   Canadian.	13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 13,310 14,100 14,100 14,100 15,310 15,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16,310 16
Toms,	Up. Down.	9,377 9,3933 979 131 306 8,981 850 1,667 6,391 183,272 88,503 1,686 1,386 805 805 805 805 1,002 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038
From United States to Canadian Ports.	Up. Down.	3,592 3,592 1,617 42 1,617 64,804 420 840 840 858 858 858 1,200
From United States to United States	Up. Down.	#24
From Canadian United States Ports.	Up. Down.	2,403 38 2,403 8 2,016 8 1,307 1,307
From Canadian to Canadian Ports.	p. Down.	9,377 3,933 979 4,349 131 9 306 2,839 8,981 20 850 1,629 1,629 1,137 1,629 1,164 1,371 6,646 1,371 6,646 1,371 5,639 1,385 1,386 1,386 1,386 1,386 1,386 1,386 1,386 1,386 1,386 1,386 1,386 1,386 2,54 1,002 490 2,002 2,002 1,002 490 1,002 490 1,0
Fro Articles.	Up	Agricultural products not enumerated, vegetable animal.  Agricultural products not enumerated, animal.  Agricultural implements.  Barley Barle

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2,235 1,235 5,561	416,630	1,356 1,454 1,448 216,496 3,517 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,513 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,614 1,61	742,251
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8318 1150 1128 128 128 128 128 128 128 128 128 150 150 150 150 150 150 150 150 150 150	580,984	3,47.2	584,456
2,235	405, 136	1,930 440 440 440 111,720 6,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,575 7,57	583,308
898	8,635		8,635
	1,927		1,327
38.	753		753
	198		198
523 523 1600 1,000 1,000 18,553 86,511 21,846 1,569 1,569 53	140,162		140,162
8.8.3 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5 1.16.5	152,859	22,388 10,014 28,051 27,951 574,906 20,901 1,511 156 156 156 157 157 157 157 157 157 157 157 157 157	839,913
818 818 818 1,407 120 120 120 120 120 120 120 120	431,434	3,472	434,906
Pease Potatoes. Potatoes. Port and pork products. Paint Rye. Salt seed Stone all kinds. Steep Steet Whiskey and all other spirits. Wheat. All other goods and merchaudise not enumerated. Firewood, in vessels. Pulpwood. Lumber, savnt, in vessels. Railway ties, in vessels. Shingles. Timber, square, in vessels. Timber, square, in vessels.	Total freight Articles having passed the Welland Canal —	Barley Corn Oats Rye. Wheat Flax seed Flour Meals, all kinds Bricks Iron, all kinds Nails Oils Pork and pork products Salt Whiskey and all other spirits. Merchandise Coal. Stone, all kinds	Grand total, freight

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No. (A) 5.--General Statement showing the quantity of each Through Article transported on the St. Lawrence Canals during the Season of Navigation in 1908.

f Cargo.	Canadian.	3,877	3,169	2,085				9-10	1,966 13,112 13,112	ARD 262,4		A. 1910 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700 1,700
Origin of Cargo.	United States.				328,536	968				8	2,138	154
Total Tons.		3,877	3,103 3 1,964	2,085	630 329,989 100,015	1,036	39 250 1,686	5,132	1,966	4,296	1,916 3,264	3,1,2
B.S.	Down.	3,365	3,145 3 1,964	231	328,528 81,009	1,036	20,1		395	90	1,916 125 125	170 117 3,106
Toms	Up.	512	*7	1,854	1,461 $19,006$	738	10 11 392	4,747	1,902	4,199	3,139	5 54 1,682
From United States to Canadian Ports,	Down.			231	324,475			: :				154
Fr United to Ca	Up.	:										
From United States to United States Ports.	Down.											
Fr United to Unite Po	Up.	•						:				
From Canadian United States Ports.	Down.	:										
Cans to Unite Po	Up.	:		38	911	26	: : :	2,016	1.307	317	2,488	523
From Canadian to Canadian Ports.	Down.	3,365			4,053 16,587	1,036	21 27		395		1,310 125 45	16 110 871
Fr Can to Car Po	Up.	512		1,854	020 550 19,006	149	395	2,731	1,092 11,410 1,000	3,882	651	1,159
Articles.		Agricultural products not enumerated, vegetable	ents		Coal, hard soft.	Crockery and earthenware.	Flour Furniture			inds	Oil, in barrels. Pease	ducts

### SESSIONAL PAPER No. 20a

SESSIONAL PAPER IN	0. 2	ua — — — — — — — — — — — — — — — — — — —
27, 570 3,502 3,202 14,060 65,337 84,411 23,498 1,569 1,569 1,563 1,685 1,085	289,271	22,962 28,081 470,221 19,424 1,511 28,28 20,303 20,303 3,472 856,962
328	415,330	1,356 10,454 10,454 216,405 8,076 3,517 1,543 524 9,699 9,699 1,272 1,272 1,272
27, 570 3, 202 14,000 65, 665 84, 411 23, 498 1, 569 1, 563 1, 685 1, 685 1, 685	704,601	24,318 10,454 28,608 6,602 6,865,626 27,500 5,750 1,543 8,33 30,002 5,219 6,21,056 1,272 1,272 1,272 1,272 1,272 1,272 1,272 1,272 1,272 1,273
32 322 478 13,824 7,284 1,300	450,756	24,318 10,454 \$5,081 6,626 686,626 27,500 1,543 1,543 30,002 83,002 1,056 1,056 2,126 38,603 1,315,682
303 27,248 2,724 27,248 176 58,381 23,494 1,569 1,569 1,085 1,085	253,845	3,472
1,119	392,685	1,980 44 111,720 6,6896 8,517 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518 1,518
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1,000 1,000 1,000 18,549 20,087 1,569 1,569 1,075	50,396	188,06
32 322 478 13,824 6,165 4	58,063	22,388 20,014 22,011 22,011 22,004 20,004 20,004 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20,303 20
246 27,088 1,724 1,724 176 39,832 84,411 3,407	203,449	3.472
Salt. Steel. Steel. Wheat All other goods and merchandise not enumerated. Pulpwood Lumber, sawn, in vessels Railway ties, in vessels Shingles Timber, square, in vessels. Other woods.	Total through freight	Barley Com Com Com Rye. Rye. Wheat Floar Floar Meal, all kinds Bricks Lion, all other Ons Pork and pork products Shalt Whiskey and all other sprits Merellandise Con Stone, all kinds Grand (ot ul, freight.

Table 7 (No. 6).—General Statement showing the Quantity of each Way Article transported on the St. Lawrence Canals during the Season of Navigation in 1908.

			9-10 EDWARD VII., A. 1910
	f Cargo,	Canadian.	2,349 1,349 1,201 1,201 1,508 1,4078 1,4078 1,4078 1,4078 1,4078 1,4078 1,509 1,4078 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509 1,509
-	Origin of Cargo.	United States.	5.234 16,278 848 1,260 1,260
	Total Tons.		9,433 2,349 1,201 1,508 1,508 1,609 1,609 1,609 1,609 1,019 1,333 1,019 1,018 1,018 1,018 1,018 1,018 1,018 1,018 1,018
	ź	Down.	568 6 895 200 200 1,1394 12,489 12,968 12,968 12,968 12,968 12,968 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194 1,194
	Tons	Up.	8,865 131 133 306 1,485 42,885 1,486 1,586 1,176 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177 1,177
	From United States to anadian Ports.	Down.	11,53 38.8 8.40
	From United States to Canadian Ports.	Up.	3,592 1,617 420
	d Sed Sed Sed Sed	Down.	
		Up.	33
	From Canadian to United States Ports.	Боwп.	1990
	Fr Canac United Po	Up.	1,4492
	From Canadian to Canadian Ports.	Down.	2568 885 885 885 280 280 1,646 1,646 251 251 251 254 254 254 254 254 254 254 254 254 254
	Er Canadië	αľ	8,865 955 131 306 7,127 1,850 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1,256 1
	Artioles,		Agricultural products not enumerated, vegetable Agricultural products not enumerated, animal Agricultural implements Barley Barley Barley Bricks and sand Coal Soft Con Soft Con Cottle Con Cattle Con Fish

SESS	IONAL	PAPER	No. 20a

SESSIONAL PAPER No. 20a									
543 75 178 178 301 121 121	3,925 19,589 18,198 13,198 7,396	20,515	35,078 84 84	ī	150 879 879 28,882 361	405,034			
1,201	991	6,233				31,069			
1,744 100 178 178 301 303 121	3,925 19,754 13,198 1,398 7,396	25,745	372 2,100 35,078 84	51	150 879 879 879 361	436,103			
15 33 33 15 15 15 15 15 15 15 15 15 15 15 15 15	407 19,379 3,051 4,272	6,123		2	35,882 28,882 200	108,964			
1,671 85 85 145 264 248 248 120	3,518 375 375 10,147 722 3,124	19,622	372 2,100 34,456	_	150 844 161	327,139			
						12,745			
1,200		896				8,635			
	120	712,1			.53	1,233			
		736				753			
						190			
		7	2,100			5,355			
•	19,374 23 3,051 5,851 4,272	4,906	622 84	<sub>5</sub> 0		94,796			
255 255 254 254 120 120		21	32,697	-	150 844 161	312,396			
Oil, in barrels. Oil cake. Pease. Potatoes. Point and pork products Paint. Rye.	Sale. Stone, all kinds Sheep. Sheep. Sheep. Sheep. Nucleits, beer, &c.	All other goods and merchandise not enumerated.	Fire wood, in vessels. Pulpwood. Lumber, sawn, in vessels. Masks, spars and telegraph poles, in rafts.	Railway ties, in vessels.	Shingles. Timber, square, in vessels. Other woods.	Total way freight			

APPENDIX A-Continued.

Table 7.—(No. 7.)—General Statement showing the Quantity of each Article transported on the Ottawa Canals, during the Season of Navigation in 1908.

				9-10	EDWARD	VII., A. 1	1910
Origin of Cargo.	Canadian.						
Origin o	United States.						
Total Tons.		2,464 144	43,545 23 23 24 24 24	229 6 16 16 588	2,327 2,6 150	67 80 80 80 80	498
ns.	Down.	2,464	43,545 23 24 24 24 24	229 6 16 16 58	2,327 26 150 1	67 8 8 8 9	498
Tons.	Up.						
From United States to Canadian Ports.	Down.				*		
Fr United Cans Po	Up.						
From United States to United States Ports.	Down.						
The Chritec	Up.						
From Canadian to United States	Down.						
Cans United Po	Up.						
From Canadian to Canadian Ports.	Down.	2,464	43,545 23 23 24 24 24	229 6 1 16 58 58	2,327 26 150 1	27 27 27 27	495
Fr Can: Can: Po	Up.						
Articles,		Agricultural products not enumerated, vegetable. "animals. Agricultural implements. Barley. Bricks.	Buckwheat Cemont and water-lime. Clay, lime and sand Coal, hard.  " soft Con Soft	Cattle. Crockery and earthenware Fish Flour. Funture	Hay, pressed. Hogs. Horses. Hides and leat.er. Iron, pig and bloom.	" all other. Other ores. Meal, all kinds.	Nails. Oats.

SESSIONAL	. PAPER I	No. 20a				
		* * * * * * * * * * * * * * * * * * *				
825	118		2,659 10,080 19,667	163,877	38 6,901 8 150 3,750 19	258,527
825	118		2,655 7,980 19,667	163,693	881 6,881 100 3,750 190	256,169
			2,100	184	20	2,358
				691		691
				28,855		28,855
828	118		2,655 7,980 19,667	134,147	38 6,881 8 100 3,750	226,623
			2,100	184	20. 20.	2,358
Oil, in barrels. Oil cake. Pense. Potatoos Port	Frye. Flaxseed. Sale. Stone, all kinds.	Whisky and all other spirits. Wheat. Wool. All other goods and merchandise not.	enumerated Floats Firewood in vessels.	Lumber, sawn, in vessels  Masts, spars and telegraph poles, in	Railway ties, in vessels. Sawlogs. Shingles. Timber, square, in vessels. Other woods.	Total freight

Table 7 (No. 4.)—General Statement showing the Quantity of each Article transported on the Chambly Canal during the Season of Navigation in 1908.

						9-10	EDWAR	D VII., A	4. 1910
	Cargo.	Canada.	1,000	126 17 47	17: 17: 18: 18: 18: 18: 18: 18: 18: 18: 18: 18	: : : : : : : : : : : : : : : : : : : :	7,812 11,812 61	<u> </u>	362 <sub>20</sub>
	Origin of Cargo.	United States.	:	682	170 9,098 95,324 172			0.000 t	
	Total Tons.		1,000	126 17 17 729	9,630 95,336 175 43		7,812 10,812 10,100	2 8 8 8 E	25.05.05.05.05.05.05.05.05.05.05.05.05.05
	vi.	Бомп.	929	682	95,098 95,334 174	<u> </u>	26 6,513 59	1-22 : T (	7,473
	Tons,	Up.	7.1	126 17 17			39 11,299 12,29	** 31 33 33 33 33 33 33 33 33 33 33 33 33	3583
	From United States to Canadian Ports.	Down.	:		95,098 95,334 172			078	7,473
	Tunite	d D							
	From United States to United States Ports.	Down.							
	United United	d'h							
	From Canadian to United States Ports.	Божи,							
	Can Can United	Up.					1,299		
2	From Canadian to Canadian Ports,	Down.	927	<u></u>	: : : : : : : : : : : : : : : : : : : :	<u> </u>	26 6,513 59	:	1
	Fr Cana Cana Por	Up.	17	126 126 17 47	171 532 532 1 1 43		99	* 3 2 8 ;	3623
	Articles,		Agricultural products not enumerated, Vegetables	Agricultural products not enumerated, Animal. Agricultural Implements. Barley. Bricks.	Suckwheet, and Cement and water line. Clay, lime and sand Coal, hard.  Soft	Coke Cattle Chokery and earthenware Fish	Fuculture. Glass, all kinds Hay, pressed Hors.	Horses Hides and leather fron, pig and bloom	Fron ore Ores, all other Meal, all kinds Dressed meats.

SESSI	IONAL	PAPER	No. 20a
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83 420 183	621 620 620	192 176 176 57 80 80	3,074 402 302,384 60,517	738	285
		4,451	5,392		123,602
83 420 183	128 6 6 62	4,627 192 192 57 80 9 9	8,466 402 302,384 60,517	738	286
420	41	4,491	6,814	738	265
83	87.8	136 136 136 136 136 136 136	1,652 330 302,384 60,517	70	368,934
		4, 451	5,392		123,612
			590 302,384 60,456		364,774
420	914	57	1,422	738	265
83	878 662	192 192 136 136 30 9 9	1,062	255	20 4,160
Nails Oats Oil, in barrels.	Pense. Pork Pork Pork Pork Pork Pork Pork Pork	Plax seed. Salt Stone, all kinds. Sheel. Whisky, and all other spirits Wheat.	All other goods and inerchandiss not enumerated. Floats. Fire wood, in vessels. Pulpwood. Lumber, sawn, in vessels.	Masts, spars and telegraph poles, in rafts. Railway ties in vessels Saw logs. Slingles.	Timber, square, in vessels Other woods

Table 7.—(No. 9.) General Statement showing the Quantity of each Article transported on the Rideau Canal during the Season of Navigation in 1908.

			9-10 EDWARD VII., A   ଓ ୪,୮୧୫% ଜଗ୍ୟର୍ଷ ଅଧ୍ୟର୍ଷ ଅଧ୍ୟର୍ଷ ଅଧ୍ୟର	
	Origin of Charge.	Canadian.	468 1,697 371 1,309 8 8 8 8,21 2,421 1,20 1,20 1,20 1,20 1,20 1,20 1,20 1,	45 36 568
	Origin of	United States.	3,087	
	Total Tons.		468 1,697 3711 1,309 1,358 3,757 3,757 1,26 1,186 1,332 1,332 1,332 1,339 1,339 1,339	45 36 568
	25.	Down.	337 1,462 198 1108 110 110 120 120 120 120 120 120 120 120	884
	Tons.	Up.	235 173 173 173 12,380 12,380 177 177 177 177 177 177 177 177 177 17	15 16 525
	From United States to Canadian Ports.	Down.	9,041 3.033 1.2	
	F Unite Can	$U_{\rm p}$		
	From United States to United States Ports.	Dowe.		
		Up.		
	From Canadian to United States Ports.	Down.		
	Fr Can t United Po	Up.		
	From Canadian to Canadian Ports,	Down.	8 41 1 8 9 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8 8 <del>8</del> 8
	Fr Cans Cans Po Po	Up.	131 235 1,148 1,148 12,380 253 707 1,225 1,225 1,225 1,078	15
	Articles.		Agricultural products not enumerated, vegetable.  Agricultural products not enumerated, animal Agricultural implements. Barley Broks Buckwheat Cement and water-lime Cement and water-lime Cook, hard oos, hard Cook Flish Flour Flish Flour Flish Hay pressed Hogs. Hags all kinds Hay pressed Hogs. Hogs. Hogs. Hogs. Hogs. Hoge and loather Fron, pig and bloom.  " all other " ore.	Meal, all kinds Dressed meats. Nails.

474 532 532 54 4 79 164 134	2,560	118 603 1,232	6,312	6,603	24,922	372 372 138 235 1 000	77 519	(1,01)
							19 191	
535 54 54 70 70 1164	2,560	118 603 1,232		6,603	24,922	2772 138 235 100	ă	
861 161 2 4 6 8 31	406	1,209	2,610	1,047	16,558	70 P3	01 00.00	770,01
######################################	2,154	113 141 141 141	3,702	5,556	8,364	272 272 185 186 4 4	1 1	11,000
					666		808 61	006,21
				: :				:
					4,051			4,051
					1,998			1,995
25 101 102 121 121	406	162 ,209	2,610	1,047	12,285	2 23 2	: :   : 2   £	51,715
8 21 33 · 21 - 20		: "	:	:	:		:	
371 45 45 135 135 122	2,154	113 441 23	3,702	5,556	6,366	272 272 185 185 4	1,00	29,070
Oats Oil, in barrels. Oil cake. Pease. 20 Portatoes Portatoes Popra and pork products	9 myser Na Flaxseed. Salt. Stone, all kinds	Sheep Steel Whisky and all other spirits Wheat	All other goods and merchandise not enumerated.	Floats Frrewood, in vessels	Pulpwood	Mass, spars and telegraph poles in rafts. Ralway tics, in vessels. Shubges. Shingles. Timber, square, in vessels.	Other woods	Total freight

Table 7.—(No. 11.)—General Statement showing the Quantity of each Article transported on the St. Peters Canal during the Season of Navigation in 1908.

		9-10 EDWARD VII., A. 1910
Origin of Cargo.	Canada.	
Or Car	United States.	
Total	Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Suga Sugar Suga Sugar Sugar Sugar Sugar Sugar Sugar Sugar Sugar Suga Sugar Sugar Sugar Sugar Sugar Suga S Sugar Suga S Sugar Sugar S	1,026 10 10 10 10 10 10 10 10 10 10 10 10 10
ns.	Down.	1,002 1,002 155 40,755 484 1,884 1,484 1,28 2,3 2,3 2,3 2,44 2,44 2,44 2,44 2,44
Tons.	Up.	1,026 10 10 10 56 666 626 628 110 37 27 123 83 1,338 1,338 1,238 31 31 44 44 44
From United States to Canadian ports.	Down.	
From Stat Cans Po	Up.	
From United States to United States ports.	Down.	
From Stat United Po	Up.	
From Canada to United States ports.	Down.	
From Un States	Up.	
From Canadian to Canadian ports.	Down.	1,002 1,002 1,884 4,555 1,884 4,555 1,35 1,35 1,35 1,35 1,35 1,35 1,35
From Can po	Up.	1,026 10 10 10 10 10 10 10 10 10 10 10 10 10
Articles.		Agricultural products not enumerated, vegetable.  Agricultural products not enumerated, animal.  Agricultural implements Barley Bricks. Bricks. Bricks. Burkwheat. Commerated Goal, hard Goal, hard Goal, hard Goal, soft Goal, soft Grockery and earthenware. Firm and sand earthenware. Firm and earthenware. Firm a

SESSIONAL PAPER No. 20a												
26 69 3,566 433	5,468 182 49	4,602	37	1,677	149	15 240 130 130 423 423	140	72,015				
24	36	4,602		137	1119	100	75	49,595				
3,542 3,642 368	5,432 182 49	9	37	1,540	30	150 140 80 80 823 833	115	22,420				
654	98	500,		137		2 20	35					
90.00	.000	4 .	1-					0 49,595				
3,542	5,432	370		1,5	4,462	12 15 15 15 15 15 15 15 15 15 15 15 15 15		22,420				
Meats, dressed Nails Oats Ool; in barrels	Perse. Poratoes Pork and pork products Paint. Rags.	Physe Plaxweed Salt Stone, all kinds. Sheep.	Whisky and all other spirits. Wheat. Wool.	All other goods and merchandise not enumerated	Firewood, in vessels. Pulpwood Jumber, sawn, in vessels.	Matte, spars, and delegraph poles Railway ties, in vessels Saw logs Shingles	Timber, square, in vessels	Total freight				

APPENDIX A—Continued.

Table 7.—(No. 11.) -General Statement showing the Quantity of each Article Transported on the Trent Valley Canals during the Season of Navigation in 1908.

		9-10 EDWARD	VII., A. 1910
Origin of Cargo.	Canadian.		
Origin o	United States.		
Total	rons.	14	
ns.	Down.	:00	18 or
Tons.	Up.	4 1 2 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1
From United States to Canadian ports.	Down.		
From Stat Cans	Up.		
From United States to United States ports.	Down.		
From Stat United	Up.		
From Canadian to United States ports.	Down.		
From Canadia to United States ports.	Up.		
From Canadian Canadian Ports.	Down.		30
From C t Cama por	Up.	13 13 13 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	10 3 3 1 10 10 10 11 11 11 11 11 11 11 11 11 1
Articles.		Agricultural products not enumerated, Argicultural products not enumerated, animal. Agricultural implements. Baricultural implements. Bricks. Bricks. Brones. Brones. Brones. Consultand water lime Clay, lime and sand Com Soft Com Fish Fish Fish Fish Fish Finn Finn Finn Finn Finn Finn Finn Fin	Hogs Horses Hides and leather Fron, pig and bloom " all other Iron ore. Other ores.

SESSIONAL PAPER No. 20a											
2	64	11 6 12,432	11 416	1,411 4,936 41,225	2,583	10,286 1,965 1,870 237	81,690				
- 60		11,645		3,822 38,036	1,721	10,061 100 125 1,590 210	69,850				
18	64	787	988	964 1,114 3,189	862	225 49 1,840 280 57	11,840				
- 600 - 600		11,645	182	3,822 38,036	1,721	10,061 100 125 1,590 210	69,850				
181	172	11	398	964 1,114 3,189	862 575	225 49 1,840 280 57	11,840				
Meats, dressed Nails. Oats Oil, in barrels.	Pease Potatoes. Pork Paint.	Rye. Flaxseed. Salt. Stone. Sheep.	Steel Whisky and all other spirits. Wheat. Wool	All other goods and merchandise not enumerated. Floats. Firewood in vessels	Lunber, sawn, in vessels.  Inniber, sam, rafts.  Masts, spars, and telegraph poles, in rafts.	Railway ties, in vessels. Sawlogs Shingles Timber, square, in vessels. Other woods.	Total freight				

Table 7.—(No. 12.)—General Statement showing the Quantity of each Article transported on the Murray Canal during the Season of Navigation in 1908.

				9-10 EDV	VARD \	/II., A. 1910
Origin of Cargo.	Canadian.	1,227 297 13 200	1,416	240	170	7 102 432 15
Ori	United States.	H :31	397			
Total Tons.		1,228 297 15 200	1,416 800 397 14,430	240	170 339	8 7 102 432 15
v.	Down.	544 162 13 200	113,400	134	285	276
Tons.	Up.	684	1,030	106	101 254	35 156 156
From Prom United States to Canadian Ports.	Down.	2	397			
Unite Can P	Up.					
From United States United States Ports.	Down.					
F Unite Unite P	Up.					
From Canachan to United States Ports.	Down.	çı				
Fr Cam United Po	Up.					
From Canadian to Canadian Ports.	Down.	541 1162 111 2000	508		284	67 276
Can Can Pr	Up.	683	1,375	106	254	35 156 156
Articles.			Buckwheat. Cement and water lime Clay, line and sand. Coal, hard soft.	Ooke Cattle Crockery and earthenware Fish Flour	Furniture Glass, all kinds. Hay, pressed Hozs	Horses Hides and leather Iron, pig and bloom. " all other Iron ore. Other ores

SESS	IONAL I	PAPER	No. 20a
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SE	SS	ION	AL F	PAPE	K No.	20a								
:	150	672	24	265	 	175	358 512	3,194		133	48	24	380	12,595
														13,306
	150	279	24	265	30	175	358 512	3,206		133	48 17	24	380	25,901
	08	203	12	131	100	175	323 388	1,729						18,692
::	70	92 76		134	200		35 124	1,477		133	48 17	234	380	7,209
								12						13,306
									: :					
		. 5.3												9
				: :				G2			25	16	330	492
	80	200	15	131	10	175	323 388 888 888	1,716						5,380
: :	0.2	92	12	134	200		124	1,408		133	23 17	ω : :		6,717
Meal, all kinds	Nails	Oil, in barrels. Oil cake	Pease. Potatoes	Pork. Paint Rye		" all kinds.	Steel Spirits, beer, &c. Wheat	Wool All other goods and merchandise not enumerated Floats	: :	Lumber, sawn, in vessels.	Masts, spars and telegraph poles Railway ties, in vessels. Sawlogs.	Shingles Timber, square, in vessels	Other woods	Total freight

9-10 EDWARD VII., A. 1910

### APPENDIX A-Concluded.

Table 7.—(No. 13.)—General Statement showing the Quantity of each Article transported on the Sault Ste. Marie Canal during the Scason of Navigation in 1908.

Origin of Cargo.	Canadian.	838	3,682 37,984 680	30,338	940		611	- 27 च	24,221 54,429 104,762 121 533
Origin o	U. States. Canadian	5,707	77,583	8,821 338,749 2,050,674		100,058			16,653 25,852 7,280,341 8,734
Total Tons.		6,045	3,682 115,567 680	39,159 375 338,749 2,051,360	07	40 53 193,167	119	ু কালা কালা	40,874 80,311 7,385,103 8,855 533
ns.	Down.	6,005	115,567	5,800 5,800 58,350		193,030			13,287 4,577 7,362,351 8,855
Tons.	Up.	40	3,682	39,159 332,949 1,993,010		40	119	া ক ট	27,587 75,734 22,752
From United States Canadian Ports.	Down.		* * * * * * * * * * * * * * * * * * *	5,800		4,815		· · · · · · · · · · · · · · · · · · ·	45,133
United t Cani Po	Up.			580 90,577 826,393					3,366 6,350 22,752
From United States United States Ports.	Down.	5,707	79,535	34,950		104,298			13,287 224 7,185,745 8,855
Fr United United Po	Up.			9,401 237,186 1,130,984					20,910
From Canadian Canited States Ports.	Down.		4,504						10,050
Prom Canadia to United St	Up.	:		270		200			545
From Sanadian to Sanadian Ports.	Down.	298	31,528	375		53 83,917			3,723
From Canadian to Canadian Ports.	Up.	40	3,682	28,908 5,186 35,633		94 .8	119	014	47,929
Articles.		Agricultural products not enunerated, vegetable. Agricultural products not enunerated,	Agricultural implements Barley Barley Barley	Cement and line Clay and sand Coal, hard  soft.	Coke	Grookery and earthenware Fish Figh Figh Figh Figure	Glass, all kinds Hny, pressed Hors	Horses. Hides and leather.	Iron, pig and bloom.  all other. Copper ore. Other ore.

### SESSIONAL PAPER No. 20a

SE	.55101	VAL F	APER	140. 20	Ja						
1,059	1,036 137,487		81	54,489 7,986 68	18,825	1,273,065	224,093 668	330 39,567 19	1,353		2,092,231
4,440	18,883		13,186	137,554 6,407 10,402	5,693	484,156	52,790	15,887	3,790		10,666,985
5,529	1,036 156,370		13,800	172,043 14,393 10,470	24,518	1,757,221	2/	55, 154 641	1,353	261	9,943,369 12,759,216 10,666,985
5,529	154,546		13,200	172,043	<b>9</b> €	1,757,221	21,372	330 46,686 5	133		9,943,369
:	1,036 1,824		702	14,293	24,438		255,511 584	8,768	1,353	197	2,815,847
50	648		728			136,340	683				218,226
:				521	300		3,628	821			955,288
4,526	22,702		12,458	138,954		367,082	11,661	14,347	3,790		8,008,121
:				6,121	5,393		43,182	217			230,333 1,464,421 8,008,121
:	4,053			2,88	: :	180,683		28,145	7		1
:				1,551			15,106	113			01-6,71
953	127,143		: : : : : : : : : : : : : : : : : : :	30,205	80	1,073,116	670°6		119		378,198 1,486,689
	1,036		20	6,100	18,745	Ř :	193,295	7,617	1,353	761	378,198
Meal, all kinds	Dressed meat Nails Oats	Oil, in barrels. Oil cake. Pease	Polatoes, Pork and pork products Paint Rye,	Flax seed Salt. Stone, all kinds.	Steel	Whisky and all oblief spirits	Wood All other goods and merchandise not enumerated Ploats	Fire wood, in vessels. Lamber, sawn, in vessels.	Masts, sparsand telegraph poles, in rafts Railway ties, in vessels San logs. Shingles.	Timber, square, in vessels	Total freight

9-10 EDWARD VII., A. 1910

Table 8.—Statement showing the Classified Tonnage of all kinds of

### WELLAND

C.	1 3"	A 1	D.T	A	3,7
U.	1.1	А.	w	А	2

Class. Steam	Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
2 200 " 249 3 150 " 199 4 100 " 149 5 50 " 99 6 Under 50	H	80 4 6 5 7 73 175	74,719 880 965 620 470 988 78,642	1 2 3 4 5 6	250 to 1,226 tons	14 4 6 6 7 14 	6,251 870 900 600 435 174 9,230

### ST. LAWRENCE

2 200 " 240 " 4 895 2 200 " 3 150 " 199 " 10 1,670 3 150 " 4 100 " 149 " 9 995 4 100 " 5 50 " 99 " 20 1,430 5 0 Under 50 " 173 2,162 6 Under	11 149 11 96 11,615 11 99 11 45 3,585
----------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------

### RIDEAU, OTTAWA

2 3 4 5	250 to 678 tons. 200 " 249 "	$\begin{array}{c} \dots \\ 3 \\ 6 \\ 20 \end{array}$		2 3 4 5	250 to — tons	$\begin{array}{c} 2 \\ 46 \\ 43 \\ 14 \end{array}$	410 7,424 5,230
	Total	291	6,256		Total	153	15,809

### SESSIONAL PAPER No. 20a

Vessels passed through the Canals during the Season of Navigation in 1908.

### CANAL.

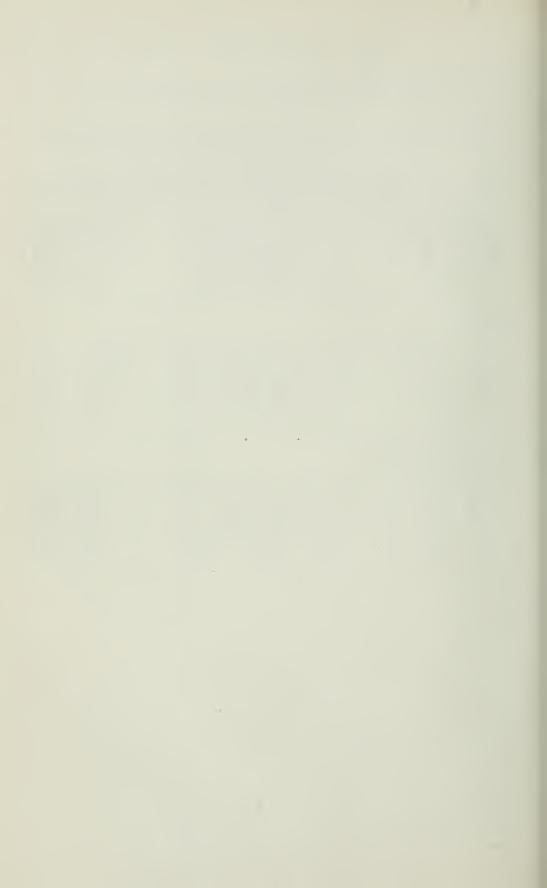
T	T 200	rm r	n	Q'T	4.73	ES.
ι.	J.N.	W N C		21	AI	116.5

Class.	Steam Vessels.	No.	Tonnage.	Class.	Sailing Vessels.	No.	Tonnage.
1 2 3 4 5 6	250 to 1,673 tons 200 " 249 " " " " " " " " " " " " " " " " " " "	5 17 50		2 3 4 5 6	250 to 970 tons. 200 " 249 " 150 " 199 " 100 " 149 " 100 " 149 " 100 " 149 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 " 100 "	$ \begin{array}{c c}  & 9 \\  & 2 \\  & 1 \\  & 2 \\  & 4 \\  & 18 \end{array} $	6,818 460 100 150 36 7,564

### CANALS.

### AND CHAMBLY CANALS.

4 5	250 to — tons	2 205 4 2 145 5 36 477 6	250 to — tons	1,435 45,870 15,090 160
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### APPENDIX B.

### DOMINION CA ALS.

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	
Lake St. Louis and River St. Lawrence	
2. Soulanges canal	
Lake St. Francis and River St. Lawrence	
3. Cornwall canal	
River St. Lawrence	
4. Farran's Point canal	
River St. Lawrence	10
5. Rapide Plat canal	33
River St. Lawrence	4
6. Galops canal	$7\frac{1}{3}$
River St. Lawrence and Lake Ontario	236
7. Welland canal	263
Lake Erie, Detroit river, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie canal	14
Lake Superior to Port Arthur	266
Total	$1,223\frac{7}{12}$
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 the 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 Eric 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.

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	
Depth of water at two locks	18 "
on sills. Sat three locks	
Average width of new canal	

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
Number of locks guard	1
Dimensions of locks	280 feet by 45 feet.
Total rise of lockage	
Depth of water on sills	15 "
Breadth of canal at bottom	
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.

344
347
397
000
statute miles.
feet by 75 feet.
feet.
"
"
«

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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 323 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	
" opened	1847
Enlargement commenced	1897
" completed	1900
Length of canal	
Number of locks	
New lock	15 feet
Old lock	
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	
Enlargement commenced	
" completed	
Length of canal	
Number of locks	
Dimensions of locks	ifeet.
Total rise in lockage	
Depth of water on sills	
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 10½ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

### GALOPS CANAL.

First commenced, 9 feet	1844
Opened	1846
Enlargement commenced	1888
" completed	1903
Length of canal	73 miles.
Number of locks	3
Dimensions of locks. one of which is a guard lock.	2-270 by 45.
Dimensions of locks. 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 4½ miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

# MURRAY CANAL.

Construction begun	1882
Completed	
Length between eastern and western pier heads	
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 27½ miles	263 miles
Pairs of guard-gates (formerly 3)	2
New Land   lift 26	25
Number of locks { lift	1
Length of canal	
( 1 lock 200 x 45	
Dimensions $\left\{ \begin{array}{c} 1 \text{ lock } 200 \text{ x } 45 \\ 1 \text{ lock } 200 \text{ x } 45 \\ 1 \text{ (tidal) } 230 \text{ x } 45 \\ 24 \text{ locks } 150 \text{ x } 45 \end{array} \right\}$	270 feet x 45 feet.
	0000 6
Total rise or lockage 3263 feet 3263 feet	326¾ feet.
Depth of water on sills 101 "	14 "
Construction commenced, 10 feet 3 inches	1824
" Completed	
Enlargement commenced, 14 feet	
" completed	1887
$20a - 7\frac{1}{8}$	

### 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 261 feet.			
Total lockage from the canal at Welland down to	100 by 202 feet.			
River Welland	10 feet.			
Depth of water on sills	9 feet 10 inches.			
GRAND RIVER FEEDER.				
Length of canal	21 miles. 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	1 <sup>3</sup> miles.			
Number of locks	1			
Dimensions of locks	185 feet by 45 feet.			
Total rise or lockage	$7\frac{1}{2}$ 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,  $11\frac{3}{4}$  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 chan-

nel, 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 by 3 inches.
Total rise or lockage	18 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. 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 245\subseteq 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.	Intermediate Distance.	Total Distance, from Montreal.
The Lachine canal From Lachine to Ste. Anne's lock Ste. Anne's lock and piers Ste. Anne's lock to Carillon canal The Carillon canal The Carillon to Grenville canal The Grenville canal From the Grenville canal to entrance of Rideau navigation Rideau navigation ending at Kingston	15	Miles.  23 23 50 51 57 63 119 245

### STE. ANNE'S LOCK.

Construction commenced	14.
" completed	16
Rebuilt of wood	33
" in masonry 184	43.
Old Lock. New Lock	
Length of canal ½ mile. ½ mi	le.
Number of locks 1	
Dimensions of locks 190 x 45 feet. 200 x 45 feet.	et.
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	9
" completed 183	3
Enlargement commenced 187	1
" completed	7
Length of canal	¾ mile.
Number of locks	2
	0 x 45 feet.
	6 feet.
Depth of water on sills	9 "
Breadth of canal at bottom	0 "
Breadth of canal at water surface	0 "
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.
	25 according
Number of locks going from Ottawa to Kingston.	14 descending.
Total lockage	at high water.
Dimensions of locks	134 x 33 feet.
Depth of water on sills	
Navigation depth through the several reaches	
	( 60 foot in corth
Breadth of canal reaches at bottom	54 feet in rock.
Breadth of canal at surface of water	

### 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 "
Drouble of sound at soundary of makes	40 " in rock.
Breadth of canal at surface of water	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 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 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 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 \$1 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.	Intermediate Distance.	Total Distances.
	Miles.	Miles.
Sorel to St. Ours lock.	14	14
St. Ours lock to Chambly canal	32	46 58
Chambly canal	12 23	81
Chambly canal to boundary line Boundary line to Champlain canal. Champlain canal to junction with Erie canal	111	192
Boundary line to Champlain 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	½ 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 commend	ced	1831	
	d		
			miles.
Dimensions of locks:-			
Guard lock, No.	1 at St. Johns	122	feet.)
	2	124	" From 22½ to
	3, 4, 5, 6	118	
	7, 8, 9 combined	125	
	age	74	
	ls	7	"
	bottom	36	<i>"</i>
	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 stetches ,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

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	$19\frac{1}{2}$	
Percy landing to Heeley's Falls dam	_	$14\frac{1}{2}$
Heeley's Falls dam to Peterborough	$51\frac{3}{4}$	_
Peterborough to Lakefield		9
Lakefield to a point across Balsam lake	61	_
	$132\frac{1}{4}$	$32\frac{1}{2}$

Total distance, Bay of Quinté to a point across Balsam lake... From Sturgeon point on Sturgeon lake, 483 miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog......

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, 91 miles from Peterborough, the dam at the head of the Nine Mile rapids of the River Otonabee maintains navigation on Lake Katchewannoe up to

Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchemannoe 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 21 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 onefourth of a mile long.

At Bobcaygeon, 153 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	$134' \times 33'$	x 5′ 0″	to '	7' 6''	depth water	on mitre sill.
1	"	Lindsay	$134' \ge 33'$	$\ge 5'0''$	to	7' 6"	"	"
1		Bobcaygeon						"
1	"	Buckhorn	$134' \ge 33'$	$\ge 5'0''$	to	9' 0"	66	"
1		Lovesick					"	"
2	26	Burleigh	$134' \ge 33'$	$\ge 6'\ 0''$	to	8' 0"	"	"
1	66	Young's point.	134' x 33'	x 5' 0"	to 1	4' 0"	66	"
1		Peterborough .						"
1	66	Hastings	134' x 33'	$\ge 7'~0''$	to 1	0' 6"	"	"
1	"	Chisholms						"

# ST. PETER'S CANAL, CAPE BRETON.

Construction commenced	
" completed	
Enlargement begun	
" completed	1881
Length of canal	
Breadth at water line	
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
" completed
Length of canal
Number of locks 9
Dimensions of locks
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
66	completed	1780

### SPLIT ROCK CANAL.

Construction	commenced.								 	 		1779
"	completed								 	 		1780

### CASCADE POINT CANAL.

Construction	commenced.		 	 	 	. ,	 	 1782
44	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.

Two canals were also constructed off Burlington Bay, Ontario. They were:-

### BURLINGTON BAY CANAL.

commenced	
DESJARDINS CANAL.	

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was 7½ feet.

# ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES.

### FROM STRAITS OF BELLE-ILE TO PORT ARTHUR, AT HEAD OF LAKE SUPERIOR BY WATER.

			Statu	te Miles.
From	То	Sections of Navigation.	Inter- mediate.	Total to Straits of Belle-Ile.
Father Point. Rimouski. Bic. Isle-Verte (opp. Saguenay). Quebec. Three Rivers. Montreal. Lachine. Cascade Point Coteau Landing. Cornwall. Dickinson's Landing Farran Point. Upper end Croyle's Island. Williamsburg Rapide Plat Point Iroquois Village. Presqu-Ile Point Cardinal. Galops Rapids Prescott. Kingston Port Dalhousie. Port Colborne Amherstburg. Windsor. Foot of St. Mary's Island. Sault-Ste. Marie. Head of Sault Ste. Marie. Port Arthur Lake Sheba Lake Shebandowan to Nort North-west Angle to Winni	Father Point. Rimouski Bic Isle Verte Quebec. Three Rivers Montreal Lachine Cascade Point. Coteau Landing. Cornwall Dickinson's Landing Farran's Point. Upper end of Croyle's Island Williamsburg or Morrisburg. Rapide Plat. Point Iroquois Village. Upper end Presqu'lle. Point Cardinal, Edwardsburg. Head of Galops Rapids Prescott. Kingston. Port Dalhousie Port Colborne. Amherstburg Windsor Foot of St. Mary's Island Sarnia. Foot of St. Joseph Island.	River St Lawrence  " to tide-water. Lachine Canal. Lake St. Louis. Soulanges Canal. Lake St. Louis. Cornwall Canal. River St. Lawrence. Farran's Point. River St. Lawrence. Rapide Plat Canal. River St. Lawrence. Point Iroquois Canal Junction Canal. Galops Canal. River St. Lawrence.  Lake Ontario. Welland Canal Lake Erie River Detroit. Lake St. Clair. River St. Marie Sault Ste. Marie Lake Superior.	240 201 202 6 12 39 126 74 86 81 14 30 111 5 2 2 7 3 4 4 4 2 2 5 2 7 3 3 2 7 3 3 2 7 6 4 4 4 2 3 3 2 7 6 4 4 4 2 3 3 2 7 8 6 6 4 5 3 3 2 7 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	240 441 643 649 661 700 826 990 986 1,009 1,021 1,053 1,065 1,070 1,093 1,095 1,095 1,097 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105 1,105

Of the 2.259\(^3\) miles from the Straits of Belle-Ile to the head of Lake Superior, 73\(^1\) miles are artificial navigation, and 2.188\(^3\) open navigation.

Straits of Belle-Ile to Liverpool, 1,942 geographical or 2,234 statute miles.

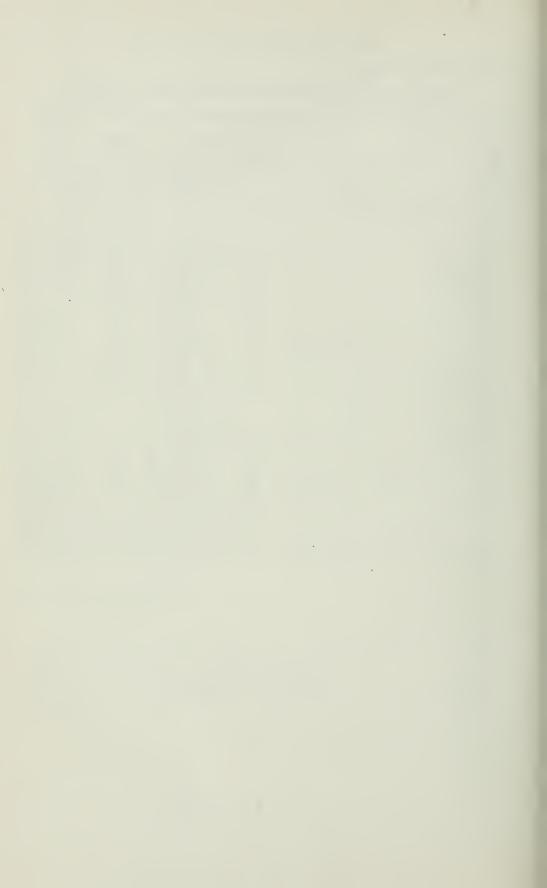
The total fall from Lake Superior to tide-water is about 600 feet.

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.

# Table of distances of Stations between the cities of Ottawa and Kingston.

Station.	Name of Station.	Distances from	L	ocks.		Dams		th of Arti- ial Canal at th Station miles.
No. of		Ottawa.	No.	Lift at Low water.	No.	Length.	Height.	80 0 0
1 2 3 4 5 6 7 8 9 10 11 12 13	Ottawa.  Hartwell's Hogsback. Black Rapids. Long Island Burritt's. Nicholson Clowes Merrickville. Maitland Edmunds. Old Slys Smith's Falls.	Miles.  0  414 555 915 435 444 463 55 5916 6014	8 2 1 3 1 2 1 3 1 1 2 4	Rise. Ft. In. 82 0 22 0 13 6 10 0 27 0 10 6 15 2 10 0 25 0 4 9 10 10 15 6 33 9	3 1 1 1 1 1 1 1 1 1 2	$ \begin{array}{c} \text{Feet.} \\ 230 \\ 1,320 \\ 1,616 \\ 100 \\ 320 \\ 300 \\ 850 \\ 240 \\ 500 \\ 481 \\ 150 \\ 270 \\ 343 \\ 250 \\ 600 \end{array} $	Feet.  13 33 14 28 60 12 68 14 9 16 6 8 8 8 20 24	4·00 0·13 0·13 1·50 0·50 0·05 0·33 0·13 0·06 0·25 0·13
14 15	First Rapids or Poonamalie Narrows  Total rise at low water	64 <sup>2</sup> 83 <sup>1</sup> / <sub>4</sub>	1 1	$\begin{array}{c c} 7 & 9 \\ 4 & 0 \\ \hline 292 & 3 \end{array}$	1 1	260 600	5 9	1:25
16 17 18 19 20 21 22 23	Isthmus. Chaffey. Davis. Jones' Falls Brewer's Upper Mills. " Lower Mills. Kingston Mills. Kingston	$ \begin{array}{c c} 108\frac{1}{4} \\ 110 \\ 120\frac{1}{4} \end{array} $	1 1 1 1 4 2 1 4	Fall 4 0 12 6 9 0 60 0 19 0 14 2 46 8	1 1 1 1 1 1	300 300 200 290 6,042	15 60 20 12 14	1·25 0·13 0·06 0·25 1·75 4·25 0·25
	Total fall at low water  Total		47	165 4	24	15,472		16:46



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" Way	, ,	11			73
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11 11	Through	11			76
11 (1	Way	11			78
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# RAILWAY STATISTICS

OF THE

# DOMINION OF CANADA

FOR THE

YEAR ENDED JUNE 30

1909

(From sworn Returns furnished by the several Railway Companies)

# M. J. BUTLER

Deputy Minister and Chief Engineer of the Department of Railways and Canals

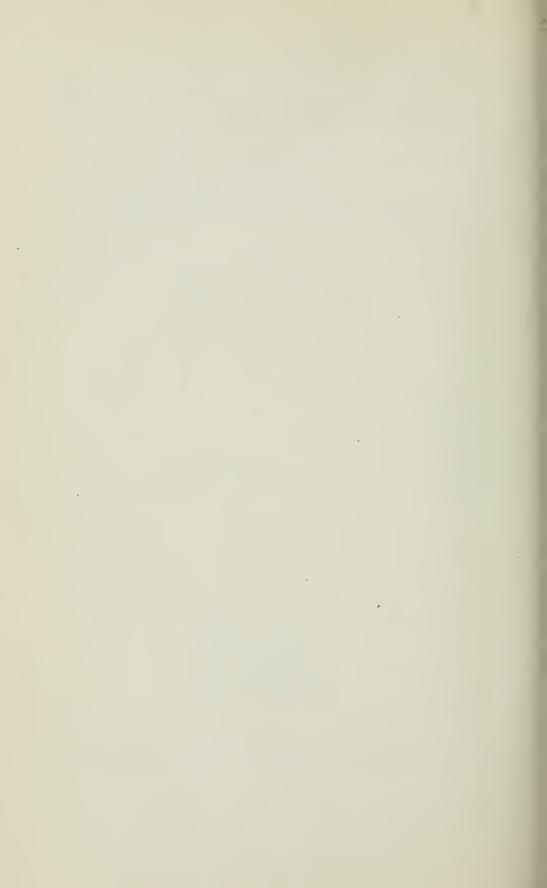
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# OTTAWA

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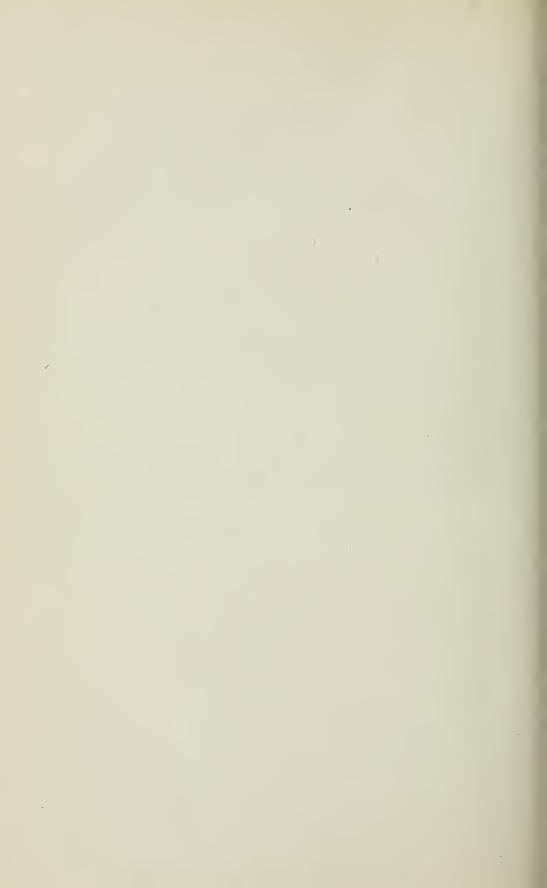
To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., &c., 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, 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 for the year ended June 30, 1909.

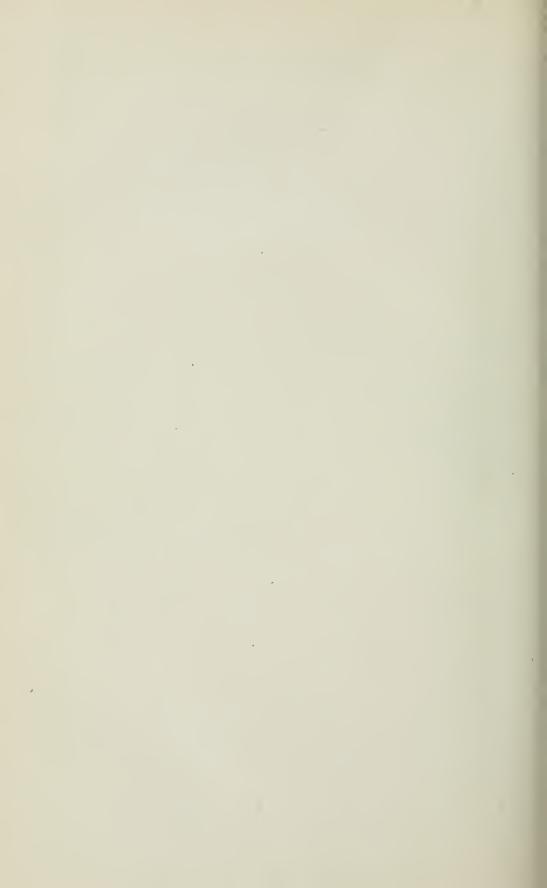
This is the third report compiled from the new schedules which were put into force on July 1, 1906.

I have the honour to be, sir,

Your obedient servant,

M. J. BUTLER,

Deputy Minister of Railways and Canals.



# Office of the Comptroller of Statistics,

Ottawa, November 5, 1909.

M. J. BUTLER, Esq., C.M.G.,

Deputy Minister of Railways and Canals.

Sir,—I have the honour to submit herewith the return of Railway Statistics for the year ended June 30, 1909.

As you are aware, a new system of railway accounting was introduced in 1907. The method and forms which had previously obtained were in that year discarded. They had become obsolete. In their place was substituted the schedules and classifications upon which the subjoined statistics are based.

The advantages of the present plan are obvious. Under the system in force from 1875 to 1907 reporting railways were permitted to classify their accounts as they thought best, and the result was an utter absence of uniformity. Not only were comparisons made impracticable as between railways, but the figures relating to Canada could not safely be compared with those of any other country. This was a serious drawback. Under the new order all railways are required to keep their accounts in accordance with prescribed classifications, and it happens that these definitions are identical with those in use throughout the United States. Thus, not only may sound comparisons be made as between railways in the Dominion, but also as between the results of railway operation in Canada and the United States. Other countries have not yet made the same degree of progress with respect to railway statistics; but a steady approach toward uniformity is taking place in at least Europe and Australia.

During the year 1909 several changes of more or less importance were deemed expedient in the classifications, chiefly with respect to operating expenses. The application of these did not, however, cause serious inconvenience. Nearly all the larger railways in Canada have lines extending into the United States, and upwards of twenty American railways are operated in the Dominion. For this reason, apart from the merits of the changes in themselves, it is at all times desirable that the basis of reporting should be the same on both sides of the boundary. At the present time the forms and classifications operative in Canada are precisely like those of the Interstate Commerce Commission at Washington, with but one relatively important exception. It has not been deemed proper on this side of the line to make a reduction from operating expenses on account of depreciation.

The railways did not all observe the time limit. That limit had been placed at 31st August, so as to have Railway Statistics completed as soon as possible after the annual assembling of Parliament. The returns, however, reached Ottawa earlier than in any preceding year, and this co-operative attitude of the railways has been a distinct help in the laborious process of tabulation. While there was not a single delinquent, it is deeply regretted that the returns of the Schomberg and Aurora Railway Company and the Kettle River Valley Railway Company were so meagre as to be of no practical value. In the latter case an incompetent accountant, who was dismissed later in the year, left a defective and useless record of operations for nine months of his tenure in office. In the former case, it would seem that the available statistics kept by the Company had reference to not more than a few elementary items.

The derelictions of the reporting railways to which allusion has just been made, joined to the trying and indefensible delays caused by a few others, suggest the imperative need of imposing in future the penalty provided in the Railway Act.

You will observe with satisfaction the expansion and betterment in statistical data made possible by the system which has been in effect for the past three years. In 1907

the foundation may be said to have been laid; in 1908 a commencement was made on the superstructure; this year the new edifice will be seen to be taking definite shape. Analytical comparisons are now possible which in the past could not even have been attempted. The scope of inquiry has also been widened. For example, in this report will be found information with respect to employees, highway crossings and accidents at highway crossings, which had not previously been available.

### MILEAGE.

The mileage of railways in actual operation increased 1,138 during the year 1909, as compared with 514 miles in 1908. This does not include the trackage of the new transcontinental railway, of which 675 was open for traffic during the year, although officially returned as being still under construction. It is not possible to say how many miles of line were "under construction" in the Dominion on 30th June last. The term is wholly relative. From information received, however, it is estimated that at least 3,300 miles were in process of being built on the date indicated.

Following is the history of railway mileage in Canada since 1835:-

	24		
Year,	Miles	Year,	Miles
rear.	in operation.	rear.	in operatio
	operation.		operatio
			+
35	0	1872	2,8
36	16	1873	3,8
37	16	1874	4,3
38	16	1875	4,8
39	16	1876	5,2
4041	16 16	1877	5,7 6,2
42	16	1878 1879	6,8
43	16	1880	7,1
14	16	1881	7,3
45	16	1882	8,6
46	16	1883.	9,8
47	54	1884	10,2
48	$5\hat{4}$	1885	10,7
49	54	1886	11,7
50	66	1887	12,1
51	159	1888	12,5
52	205	1889	12,5
53	506	1890	13,1
54	764	1891	13,8
55	877	1892	14,5
$56.\ldots$	1,414	1893	15,0
57	1,444	1894	15,6
58	1,863	1895	15,9
59	1,994	1896	16,2
60	2,065	1897	16,5
61	2,146	1898	16,8
62	2,189	1899	17,2
63	2,189	1900	17,6
64	2,189	1901	18,1
65	2,240	1902	18,7
66	2,278	1903	18,9 19,4
68	2,278 2,270	1904	$\frac{19,4}{20,4}$
69	$\frac{2,270}{2,524}$	1905	21,3
70	2,524	1907	22,4
71	2,695	1908	22,9
	2,000	1909	24,1

The distribution of railway mileage, with the increase for the year, by provinces, is as follows:—

		Increase.
Ontario	8,229.11	$296 \cdot 21$
Quebec	3,662.94	89 • 29
Manitoba	3,205.30	94.39
Saskatchewan	2,631.34	550.04
Alberta	1,321.52	
British Columbia	1,795.94	$63 \cdot 11$
New Brunswick		37.89
Nova Scotia	1,350.53	6.48
Prince Edward Island		1.83
Yukon	90.91	

It may be explained that in the province of Alberta considerable railway building has been in progress during the past two years, but it was all returned as being still under construction on June 30.

Of cognate importance is the increase in second track and yard and siding trackage. The facts are as follow:—

-	1908.	1909.	Increase. miles.
Second track.  Yard and siding tracks	1,211	1,464	253
	4,546	4,761	215

This growth of second track and yard and siding track has a direct bearing on transportation facilities. Adding together the first, second and yard and siding tracks a total of 30,330 miles is obtained. With the exception of less than 100 miles all tracks in the Dominion are laid with steel rails.

It is instructive to compare the railway mileage of Canada with that of other countries. Following are the figures:—

Countries.	Miles.	Miles of line per 100 sq. miles.	Inhabitants per mile of line.
United States. Germany. Austro-Hungary. Great Britain and Ireland France. Russia Italy. Belgium. Netherlands Switzerland Spain. Portugal. Denmark. Norway. Sweden Roumania. Turkey Mexico. Brazil Argentine Republic Japan British India. New Zealand. Victoria. New South Wales Canada.	229,300 35,652 25,618 23,063 29,293 35,214 10,203 4,657 2,214 2,698 9,103 1,639 2,134 1,584 8,180 1,995 1,952 13,053 10,600 12,776 5,012 28,982 2,519 3,428 3,472 24,104	$\begin{array}{c} 6\cdot 4 \\ 17\cdot 1 \\ 9\cdot 8 \\ 19\cdot 0 \\ 14\cdot 2 \\ 1\cdot 8 \\ 9\cdot 2 \\ 40\cdot 9 \\ 15\cdot 0 \\ 16\cdot 9 \\ 4\cdot 7 \\ 4\cdot 5 \\ 14\cdot 3 \\ 1\cdot 3 \\ 4\cdot 7 \\ 3\cdot 2 \\ 1\cdot 8 \\ 1\cdot 6 \\ 0\cdot 32 \\ 1\cdot 1 \\ 3\cdot 1 \\ 1\cdot 4 \\ 2\cdot 4 \\ 3\cdot 9 \\ 1\cdot 1 \\ 0\cdot 6 \\ \end{array}$	365 1,587 1,584 1,912 1,333 2,941 3,119 1,428 2,703 1,234 1,960 3,333 1,149 1,408 629 2,941 5,000 1,123 1,408 353 9,091 10,000 330 350 440 300

The above statistics, which in each case are the latest available, show that the Dominion of Canada has the largest railway mileage in proportion to population of any country in the world, while in relation to area it has the smallest.

# RAILWAY CAPITAL.

During the year \$69,186,403 was added to the total capital liability of railways in Canada. An analysis of this account will be found in Table No. 4. The facts, summarized, are as follow:—

19 0 0000			
	1908.	1909.	Increase.
	s	8	\$
StocksFunded debt	607,425,349 631,869,664	647,534,647 $660,946,769$	40,109,298 29,077,105
Total	1,239,295,013	1,308,481,416	69,186,403

The capital obligation arising out of these stock and bond issues amounts to \$54,285 per mile of line. But that result is quite misleading, since, before such a calculation can properly be made, certain facts have to be taken into account. For example, the above total of \$1,308,481,416 includes the stock and bond liability of the Grand Trunk Pacific, while the mileage of that line is not embraced in the total of 24,104 miles forming the divisor. On the other hand, the mileage of government owned lines in Canada forms a part of the 24,104, against which there is not any issue of either stock or bonds. Therefore, in dealing primarily with corporation railways the capital liability of the Grand Trunk Pacific must be eliminated, along with the mileage of government owned lines. This process reduces the money side of the equation to \$1,222,089,976 and the mileage to 21,965. On this basis the result is \$55,638, which correctly represents the stock and bond liability of Canadian corporate railways per mile. In analytical form the capital obligation may be set down as follows:—

Per mile—stocks.	\$28,3	345
" "—bonds.	\$27,2	293
Total	\$55,6	338

The funded debt of corporate railways was, on 30th June last, made up as follows:-

Bonds	8,436,282 7.892.882
Total	

It should perhaps be mentioned that the Great Northern of the United States has constructed eight lines in the western provinces of Canada, aggregating 527 miles, in respect of which a capital liability of but \$11,110,600 has thus far been returned. It is obvious that this situation has the effect of diluting the capital obligation per mile for the time being.

There remains the consideration of government owned and operated lines, as to which the mileage and capital cost up to 30th June last were:—

Railway.	Mileage.	Capital cost.	Cost per Mile.
Intercolonial Prince Edward Island Temiskaming and Northern Ontario. New Brunswick Coal and Railway.	1,447 269 265 58	\$ 88,006,989 7,707,259 13,867,015 1,964,640	\$ 60,820 28,651 52,329 33,873
Total	2,039	111,545,903	

Reference to the return earned by the railways of Canada upon capital will be found under the head of 'Earnings and Operating Expenses.'

It was announced in Railway Statistics for 1908 that an effort would be made during 1909 to revise the capital statement of Canadian railways. Serious obstacles were interposed, however, and it was not found practicable to complete the task. The inquiry was carried to the point of establishing a basis for the reporting of capital liability in 1910, and it is confidently expected the revision will then be brought to a satisfactory issue.

The object of this revision will be to eliminate dead and duplicate liability, of which the aggregate is very considerable—probably exceeding \$200,000,000. The striking out of this relatively large sum will not involve any reflection upon the corporations to be affected thereby. These railways have simply been making their returns in the form prescribed by the department, and the inaccuracy which has arisen has been due to the system rather than to any intention to misrepresent. In part it came about from ignorance of the facts at this end.

A concrete illustration will make the matter clear. The Canadian Pacific took over some years ago the Columbia & Western, attached to which was a stock and bond liability, as per Table 4 of the annexed report, of \$6,691,000. The certificates were acquired by the Canadian Pacific and placed in the vault of that company. To pay for them the purchasing corporation issued Canadian Pacific stock and bonds. It is of no consequence what was the amount of that issue. The fact of importance to bear in mind is that the stock and bond issue of the Columbia & Western lying in the vault of the Canadian Pacific cannot properly be regarded as being alive. The liability which actually exists is involved in the stock and bonds which the Canadian Pacific issued to acquire the stock and bonds of the Columbia & Western, and it is obvious that the department in publishing the original capital obligation of the Columbia & Western, plus that of the Canadian Pacific, has swollen the account to the exact extent of the duplication.

The effect of publishing, year after year, this practically extinct liability would be to mislead any one who might turn to Railway Statistics for accurate information with regard to the earning power of Canadian railways. That is to say, the return of interest, shown by dividing the aggregate capital into the net earnings, would be considerably smaller than it should be. It would be minimized to the precise extent of the inflation created by dead liability. This situation is not, however, peculiar to Canada. It exists in all countries where the controlling interest in lines has changed hands, or where the transfer of operating rights has taken place in any considerable degree. In the United States, for example, the same process of elimination which it is proposed shall be applied next year to Canadian railways is now going on. In both instances the end in view is to present the actual facts with respect to live railway obligations.

# AID TO RAILWAYS.

The subsidies paid to railways during the year 1909 amounted to \$3,291,601, made up as follows:-

By the Dominion	\$2,500,612
By the provinces. By municipalities.	397,111 393.878
Total	

Following is a statement of aid to railways since 1876:-

Year,	Domini	on.	Provinces		Municipa	alities.	
	0				2		
	\$	cts.	8	cts.	8	(	ets.
876	*18,564,	352 37	4,203,24	0 43	5,426	,505	70
877	16,235,	185 33	4,338,49	8 02	5,689		
878	26,438,	914 96	14,292,00	2 29	7,224	,578 (	63
879	26,438,	914 96	14,593,00	1 91	7,450	,978	63
880	32,761,		17,639,20			,944	
881	37,629,	207 33	a16,676,26			,944 (	
882	37,731,		17,044,62		8,809		
883	49,548,		18,342,10			,552	
884	†78,123,		19,836,05			,556	
885	92,762,		19,137,71		12,472		
886 887	87,426,		19,338,67		12,599		
888	91,228,		21,204,99		12,812 13,144		
889	c90,644,		23,342,75 24,036,30		13,461		
890	91,888, 93,889,		25,086,28		13,709		
891	96,529,		25,731 96		13,817		
892	97,601,		26,997,43		13,981		
893	100,422,		28,229,35		14,017		
894	102,087,		29,368,69		14,178		
895	103,451,		29,727,51		14,180		
896	101,961,		30,055,94		14,494		
897	102,458,		31,171,34		15,520		
898	103,878,		31,495,55	5 48	15,660	,667	99
899	107,030,	639 24	31,656,72	5 57	17,740	,668	59
900	107,760,	795 70	31,310,17	0 06	15,884		
901	110,225,		32,395,52		16,310		
902	112,324,		33,145,32		16,465		
903	113,791,		32,809,72		16,551		
904	115,875,		34,496,91		17,157		
905	117,145,		40,415,63		17,198		
906	118,474,		43,278,02		17,125		
907	128,827,		b35,123 13		17,346		
908	133,049,		35,191,41		17,430		
909	135,549,	987 71	35,588,52	6 15	17,824	,823	OU

<sup>\*</sup>Included loan \$2,311,666.67 to Northern Railway; not reported after this year.
†Included loan \$29,880,912. to C. P. Railway; not reported later.

«Eastern Extension \$1,284,495.76 now included in I. C. Railway.
‡Incorrect total of \$2,394,000 shown to the North Shore Railway.

aDecrease of \$1,044,000 by N. B. Government to St. John and Maine Railway.

bThis amount does not include the cost of the Temiscanning and Northern Ontario Railway.
\$10,370,549) as formerly.

SESSIONAL PAPER No. 20b

S.	
province	
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statement	
following :	
The	

		eds	: 3	0 43	200	10	63	0.53	1 29			66	2 5	5 6		56	200	2 68		22.0	207 7	2 6	15	3 2	80.2	32	89	75	78	61	20	133	200	0.3
	Totals.	<b>9</b> €	• (	4,203,240	070,40	290,40	970,280	338,81	8,890,524	9,496,146	10,958,099	027,989	017, 672	579, 701	18, 961, 353	831,73	052,872	647, 193	23,464,507	968,74	007,74	97 262 190	767 956	130,415	285,300	296,643	3.18,274	570,194	724,633	304,304	047,018	35,024	72,740	(69,864
			:	4, 4	# C	1.	1	\ \ \ \	ŝ	G G	10,	12,	14,	50,00	200	0.01	21,	22,	23,	20.00	200	510	0 0 0	000	000	000	30.	30,0	31,7	32,00	33,0	34,5	35,7	36, 1
	ba.	cts.		:	:				:		:		220 000	38				00 069	22 98	61 77	77 10	77 10	61 77	61 77	61 77	37 02	88 02	22 19	87 02	87 02		87 02		887 02
	Manitoba.	€9	•									• (	386,250	1,030,0	1,031,0	2,380,6	2,390,6	2,390,6	2,623,2	2,625,561	0,629,2	0,020,0	0,040,0	9,043,0	0,780,0	2,796,8	2,796,8	2,864,0	2,872,8	2,872,8	2,872,8	2,872,887	2,872,8	2,878,8
	unbia.	cts.	:	:	:	:			:	:	:	:	:	200 00					200 00	00 00						500 000								
and the same	New Brunswick.   British Columbia.	€												27 6	37,500	37,50	37,50	37,50	37,50	37,50	37,50	97,500	57,00	27.75	27.75	37 56	37,50	37,500	37,500	37,500	121,135		780,200	
	wiek.	cts.		0000								5 00	00 2				5 18	5 71	1 81	181	000	100	17	17.0	77	7.7	77	7.7	7 71	1 71	7 71	7 71	6 71	6 71
	Bruns	69		2,090,000	163,00	730,00	754,000	754,00	763,66	763,66	3,180,465	466, 16	475, 16	000, 100	4,240,050	4, 280, 965	311,38	365,35	425,28	4,432,481	153,80	155,78	102,07	4,499,010	200,04	590,04	742,03	4,5.12,939	569,93	180, 93	4,585,537	316,23	4,707,486	807,486
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	otia.	cts.	:	:			750 00				601 00	00 10	01 00	05 es	76 13	00 00 07 87	65 S	04 77	44 55	44 55	47 10	17 10	01 2	17 10	10 10	07 77	17 10	20 00	5 35	12 75			00 75	
	Nova Scotia.	<b>₩</b>			• 1	SIX,	010,7	2000	823.3	823.3	1,578,6	1,628,6	1,628,6	1,653,9	1,654,776	1,010,1	2,002,1	2,009,4	2,121,9	2,125,344	2,158,8	2,208,8	2,258,8	2,505,0	2,504,0	5,5001,0	0,000,0	2,420,40	4,858.8	3,991	4,425,267	6,274,4	6,324,400	6,336,788
		cts.		000							5 91	0 41	1.41	181	41	14.0		92 0	83	5 38	8 00	500 2	100	200	2 10	33	100			99	16	91 (	91 (	5 52
	Quebec	<b>59</b>		228,521	336,821	1,192,01	1,192,013	1,578,44	1,600,99	2,116,540	2,186,12	2,428,23	2,705,714	3,276,07	4,708,31	4,704,10 6,106,20	6,237,86	7,583,06	7,864,56	9,345,115	9,984,348	10,072,94	10,859,48	11,100,33	11,206,833	11,517,500	11,090,469	11,000,00	19, 163, 285	19, 950, 98	12,304,470	12,304,470	12,304,470	12,328,196
ı		cts.	:	43							0.5	F 52	52	52	22.5	200	200	1.4.			24	24	633	50	9 2	000	0 0	80	0.00	47				03
	Ontario.	<i>\$</i> €		1,884,719	1,838,677	2,229,638	2,049,038	3,183,037	3,702,537	3,792,611	4,012,908	4,504,98	5,083,088	5,984,007	5,984,007	0,934,007	6,069,565	6,171,181	6,391,932	6,402,738	6,747,685	6,932,388	7,119,065	7,200,003	7,281,128	7,400,992	0.000,000	0,532,017	S 512,578	8,569,504	8,737,722	8, 739, 796	8,783,296	9,038,296
1			:	:	:	:	:					:	:	:	:	:				:	-	 :	:	:	:	:	:	:						
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	Year.	1	•									:																						
			1875.	1876	877	878.	678		882	883	88.1	1885	SS6	887	22.2	999	100	20%	893	S0.1	895		897		. 1992							. 200	806	.606

MUNICIPALIFIES.

The contributions of municipalities, by provinces, have been as follow.

Year.	Ontario.	. Quebec.	Nova Scotia.	New Brunswick,	British Columbia.	Manifola.	Northwest Territories,	Total
	. S. C.B.	.⇔ cls.	<u>.</u> .	±€		00 Z	00 E	96 E
875	620	513,000 00						4,415,120 13
876	4,660,505 70 4,748,299 31			999				5,384,005 70 5,696,799 31
878.	5,085,434 01	1,323,144 62	175,000 00	293,500 00				6,877,078 63
880	300		000	200				8,310,914 63
881	5,988,300 01	1,864,144 62	000	293,500 00				8,395,941 63
X X X X X X X X X X X X X X X X X X X	6,673,300 01	2, 125, 144, 62	250,000 00	203,500,00				9,080,944 63
XX	7,178,411.32	2, 150, 144 62	000	296,500 00				9,875,055 94
1885	8,027,805 81	2, 195, 144 62	000	296,500 00				11,034,450 43
2000	8,027,805 81	2,255,986 62	250,000,00	296,500 00	27 500 00	480,600 00		11,310,892 43
	8,055,305,81	2,495,144 62	9	296,500 00	37,500 00	900		
	8,055,305 81		000	296,500 00		009		11,699,724 43
	8,085,305 81	2,626,318 62	00	296,500 00	37,500 00	009		22.1
201	8, 120, 305 81	2,641,418 62	200		000	000		11,007,009 43
1505	10, 289, 453, 37	2,840,718 62		336,500,00		400,600,00		14, 139, 243 99
	10,391,607 37	2,840,718 62	5.5		500	900		14,374,610 99
895	10,393,683 37	2,840,718 62	35		37,500 00	009		14,376,686 99
1896.	553	2,840,718 62	277,685 00	336,500 00	37,500 00	000		14,463,756 99
760	11,030,00% 01	2,000,715,02 9,865,718,69			27,500,00	490,600,00		15,002,507,00
1899	1.01	2,865,718 62	585		37,500 00	200	261	16,005,429,28
	1691	2,865,718 62	370,559 17		37,500 00	009	261	16, 173, 303 45
		2,042,929 62	559		37,500 00	490,600 00	261	
	3	3,118,519 20	559		37,500 00	009	261	
	0 !	3,118,519 20		336,500 00	37,500 00	490,600 00	561	16,651 044 46
1904 1905	12,862,147,80	3, 125, 727 17	2002		97,500,00	200	192	17,346,634,36
	000				169 069 60		100	17,420,030,00
1907	197		808	200	171 952 50	909	561	17, 601, 945, 77
:	12,983,079 24	536	808	200	052	009	22,261 20	17,637,827 21
	175	0 107 506 00	401 000 101		41717	0000	100	

It will be observed that the totals in the foregoing analyses of aid given by the provinces and municipalities do not absolutely agree with those in the initial table on a preceding page. This result was quite unavoidable. In the years prior to 1906 the railways were not given very definite instructions with respect to the preparation of their statistical returns. In this lack of system it is not surprising that there should have been a good deal of carelessness shown by reporting roads. The supervision at this end was lax at times. Changes of ownership and the destruction of records by fire have made it impracticable to locate the errors which have thus crept into the figures as given above. They are not, however, relatively large or serious.

An analysis of the financial aid given to railways discloses the following facts:-

Dominion,	
Cash subsidies Loans Paid to Quebec Government Cost of lines handed over to C. P. R.	15,576,533 33 5,160,053 83
Total	\$135,549,987 71
Provinces.	
Cash subsidies Loans Subscriptions to shares	2,750,030 00
Total	\$35,588,526 15
MUNICIPALITIES,	
Cash subsidies Loans Subscriptions to shares.	2,404,498 62
Total	\$17,824,823 60

It would be misleading to assume that the above statements represent all that has been done by the Dominion and the several provinces in aid of railway construction. The Dominion, for example, is building the eastern section of the Transcontinental Railway between Moncton and Winnipeg, the western division of which is known as the Grand Trunk Pacific, on which the expenditure up to June 30 was \$33,301,342.15.

The guarantees are also substantial, as the following statements will show:-

### DOMINION.

1. The Canadian Northern Railway, Cap. 7, 3 Edward VII (1903). The guarantee is for the principal, £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. 2, 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  $3\frac{1}{2}$  per cent per annum for fifty years from 20th July, 1908: interest

payable half-yearly; date of guarantee, 21st October, 1908.

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 £5,200,000, of which £3,200,000 was issued in September, 1905, and the balance in October, 1909.

### ONTARIO.

Canadian Northern.—Guarantee of interest on bonds representing \$7,860,000.

### QUEBEC.

Guarantee of bonds of the Montreal and Western to the extent of \$812,000.

### NEW BRUNSWICK.

Interest on the bonds of the New Brunswick Coal and Railway, amounting to \$700,000, is guaranteed.

### NOVA SCOTIA.

Halifax and South Western.—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.

### MANITOBA.

Canadian Northern.—Main line and branches, \$11,854,287; Winnipeg terminals and union station, \$3,000,000; Ontario division from Rainy River to Fort William, \$5,745,587.

### 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 Slocan.—Guarantee of principal and interest on bonds aggregating \$647,072 for 25 years at 4 per cent.

### ALBERTA.

Canadian Northern. Interest on bonds, amounting to \$3,640,000, guaranteed.

### SASKATCHEWAN.

The guarantees of this province are for \$13,000 per mile to the following lines of rail-way:—

Grand Trunk Pacific Railway.—A line from a point on the western division of the Grand Trunk Pacific Railway in the vicinity of township 22, range 6, west second meridian to Yorkton, a distance of about 40 miles.

Grand Trunk Pacific Railway.—A line from a point on the western division of the Grand Trunk Pacific Railway between the 108th and 109th degrees of longitude to Battleford, a distance of about 49 miles.

Grand Trunk Pacific Railway.—A line from a point on the western division of the Grand Trunk Pacific Railway in the vicinity of township 22, range 6, west second meridian to Regina, a distance of about 110 miles.

Canadian Northern Railway.—A line from a point on the Canadian Northern Railway in or near Maryfield, thence in a generally south-westerly and westerly direction to or near range 17, west second meridian, a distance of about 135 miles.

Canadian Northern Railway.—A line from a point on the main line of the Canadian Northern Railway in or near Dalmeny, thence in a generally northerly and north-easterly direction for a distance of 40 miles or thereabouts.

Canadian Northern Railway.—A line from a point on the Canadian Northern Railway in or near North Battleford, thence in a generally northwesterly direction for a distance of 50 miles or thereabouts.

The amount involved in the foregoing guarantees is \$5,512,000.

### LAND GRANTS.

The land subsidies granted by the Dominion, and earned up to June 30, were as follow:—

	Acres.
Alberta Railway and Irrigation Co. (formerly Northwest Coal and Navigation Co Calgary and Edmonton Railway Co. (form point on C. P. R. to Hudson Bay), Canadian Northern Railway Co. (formerly Lake Manitoba and Canal Co.). Canadian Pacific Railway Co. (main line). C. P. R. Pipestone Extension, Souris Branch. C. P. R., Souris Branch. C. P. R., Souris Branch. Great Northwest Central Railway Co. (formerly Northwest Central Railway Co.). Manitoba and Northwestern Railway Co Manitoba Southwestern Colonization Railway. Manitoba and Southeastern Railway Co	1,114,368 1,888,448 3,422,528 18,206,986 200,320 1,408,704 320,000 1,501,376 1,396,800 680,320 1,625,344 98,880
Total	31,864,074

Some of the provinces have also given land grants. A statement of Dominion and provincial aid of that character gives the following result:—

	Acres.
By the Dominion	31,864,074
By the Province of Quebec	13,324,950
By the Province of British Columbia	8,119,221
By the Province of New Brunswick	
By the Province of Nova Scotia	100,000
Total	55,116,017

### PUBLIC SERVICE OF RAILWAYS.

The railways of Canada carried 32,683,309 passengers and 66,842,258 tons of freight in 1909, a decrease of 1,361,683 in the number of passengers, and an increase of 3,771,091 in the freight tonnage, as compared with 1908.

In only four preceding years since 1875 did a decline in passenger traffic occur—1880,

1885, 1895 and 1901.

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Following is a statement of passenger and freight traffic for the past 35 years:-

Year.	Passengers earried.	Tons of Freight, 2,000 lbs.	• Year.	Passengers carried.	Tons of Freight, 2,000 lbs.
1875. 1876. 1877. 1878. 1879. 1880. 1881. 1882. 1883. 1884. 1885. 1886. 1887. 1888. 1889. 1889.	11,416,791 12,151,105	5,670,837 6,331,757 6,859,796 7,883,472 8,348,810 9,938,858 12,065,323 13,575,787 13,266,255 13,712,269 14,659,271 15,670,460 16,356,335 17,172,759 17,928,626 20,787,469 21,753,021	1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909	13,533,414 13,618,027 14,462,498 13,987,580 14,810,407 16,171,338 18,444,049 19,133,365 21,500,175 18,385,722 20,679,974 22,148,742 23,640,765 25,288,723 27,989,782 32,137,319 34,044,992 32,683,309	28,785,903 31,211,753 35,946,183 36,999,371 42,376,527 47,373,417 48,097,519

### PASSENGER TRAFFIC.

The number of passengers carried one mile was 2,033,001,225, as compared with 2,081,960,864 in 1908—a decrease for the year of 48,959,639.

The number of passengers carried one mile per mile of road was 84,342. This was an actual decrease in the density of passenger traffic of 6,312, as compared with the preceding year.

There was also a decrease in the passengers carried per mile of line. The number in 1909 was 1,355, as compared with 1,482 in 1908—a falling off to the extent of 127.

The average receipts per passenger per mile were 1.921 cents, or within .001 of the rate established by the figures for 1908.

The total passenger revenue for 1909 was \$39,073,488.84. This may be strictly regarded as the aggregate of ticket sales. The earnings from passenger service, which include the receipts from mails and express, baggage, &c., amounted to \$45,282,326.27. An analysis of these accounts will be found in Table No. 7.

The mileage of revenue passenger trains was 32,295,730, and of mixed trains 7,061,580—an increase of 345,381 in the former and 850,773 in the latter. These facts make it obvious that, while there was a decline in the number of passengers carried and in the revenue from ticket sales, the train service provided by the railways of the Dominion was actually increased.

The average number of passengers in each train was 51, a decline of 3 as compared with

The average passenger journey was 62 miles, or one mile more than for the preceding year.

The sum of the foregoing fact is, that, while the railways had an increased passenger train mileage in 1909 over 1908, they carried fewer passengers, in the aggregate, fewer passengers per train, and earned less money from ticket sales. Taking into account the total earnings from the running of passenger trains—that is, from ticket sales, mails and express, baggage, &c.—which amounted to \$45,282,326.27 in 1909 as compared with \$46,854,158.97 in 1908, there was a decrease in the gross earnings per passenger train mile of .077 cent. The figures in that regard are as follow:—

Earnings per passenger train mile	1908. 1909.				 			\$1 ·2 1 ·1	227 150
							-		
Decrease								•(	777

In other words, if the earning power per passenger train mile in 1909 had been equal to the rate in 1908 the railways would have had an increase of \$3,031,612 in the aggregate revenue from passenger service. The revenue per passenger in 1909 was, however, \$1.195 as against \$1.174 in 1908.

Summarizing the data in relation to passenger traffic the results for three years are as follow:—

	1907.	1908.	1909.
Miles of railway.  Number of passengers.  Passengers carried one mile.  Passengers carried one mile per mile of line.  Passengers carried per mile of line.  Average passenger journey (miles).  Average number of passengers per train.  Passenger train mileage.  Mixed train mileage.  Earnings from ticket sales.  Earnings from ticket sales.  Earnings from passenger service.  Average receipts per passenger.  Average receipts per passenger per mile (cents).	$\begin{array}{c} 22,452\\ 32,137,319\\ 2,049,549,813\\ 90,921\\ 1,431\\ 64\\ 56\\ 30,220,461\\ 5,971,414\\ \$39,184,437\\ \$45,730,652\\ \$1\cdot219\\ 1\cdot911\\ \end{array}$	34,044,992 2,081,960,864 90,654	32,683,309 2,033,001,225 84,342 1,335 62 51 32,295,730

### FREIGHT TRAFFIC.

The carrying of 66,842,258 tons of freight in 1909 represented an increase of 3,771,091 tons over 1908; or 5.9 per cent.

The number of tons hauled one mile was 13,160,567,550, as against 12,961,512,519 in 1908—an increase of 199,055,031.

The number of tons hauled one mile per mile of line, representing the density of freight traffic, was 545,991, which, owing to an increase of 1,138 in mileage during the year without a corresponding development of new business, was a decrease of 18,383 as compared with 1908.

The average receipts per ton per mile, which may be taken as the statistical freight rate for all the railways of the Dominion in common, was '727 cent—a gain of .004 on the rate for 1908.

The revenue from freight was \$95,714,783.41, as against \$93,746,655.45 in 1908, showing a gain of \$1,968,127.96.

The mileage of revenue freight trains was 40,304,900, as against 40,476,370 the pre-

ceding year—a reduction of 171,470. The mixed train mileage was 7,061,580.

The mileage of loaded freight cars was 775,543,414, and of empty freight cars 281,175,615. These figures represent an expansion of 26,618,594 in loaded freight car mileage over 1908, and a shrinkage of 3,768,914 in the mileage of empty freight cars. The mileage of caboose cars, of which a record was not taken in previous years, was 37,644,038. Adding together the car mileage of all classes a total of 1,094,363,067 is had.

The average haul of freight in 1909 was 197 miles, as against 206 miles in 1908.

The average number of tons per freight train was 278, or precisely the same figure as in 1908.

The average number of loaded cars per freight train was 16.37, as compared with 16.04 in the year preceding.

The average number of tons per loaded freight car was 16.98. In 1908 the average

load per car was 17:33; so that there was a falling off for the year 1909 of :35 ton.

The conclusions to be drawn from the facts disclosed in the four preceding paragraphs are, that, as compared with 1908, there was in 1909 a shortening of the haul by 9 miles, coupled with a slight reduction in the average load per car, which conditions, however, were met by a corresponding increase in the average number of loaded cars per train; so that the average train load remained unaltered.

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For convenience to the eye, the statistical facts given above are placed in tabular form as follows:—

	1907.	1908.	1909,
Tons hauled Tons hauled one mile Tons hauled one mile per mile of line Average haul, miles. Freight train mileage Mixed train mileage Revenue from freight Average tons per train Average cars per train Average tons per car Average receipts per ton per mile, cent.	63,866,135 11,687,711,830, 518,486	$\begin{array}{c} 63,071,167 \\ 12,961,512,519 \\ 564,378 \\ 206 \\ 40,476,370 \\ 6,210,807 \\ \$93,746,655 \\ 278 \\ 16\cdot04 \\ 17\cdot33 \\ \cdot723 \\ \end{array}$	66,842,258 13,160,567,550 545,991 197 40,304,906 7,061,580 895,714,783 278 16.37 16.98 .727

The commodities which entered into the freight business of the railways for 1907, 1908 and 1909 were as follow:—

	1907.	1908.	I909.
•			
	Tons.	Tons.	Tons.
Products of agriculture—			
Grain	5,776,731	5,270,935	6,837,506
Flour	1,402,386	1,565,008	1,758,894
Other mill products	654,179	836,877 643,695	1,156,071
Hay Tobacco	\$03,918 10,042	23,235	861,265 26,462
Cotton	22,164	70,203	122,300
Fruit and vegetables	562,716	803,777	845,930
Other products of agriculture	289,525	183,237	354,835
Products of animals—	,	•	<b>'</b>
Live stock	1,118,141	1,156,772	1,206,221
Dressed meats	400,900	455,580	554,984
Other packing house products	463,647	444,841	436,529
Poultry game and fish	128,432	151,100	175,081
Wool	23,472	33,318	37,236 202,968
Hides and leatherOther products of animals	154,157 180,517	141,341 89,407	194,468
Products of mines—	150,517	00,401	134, 100
Anthracite coal	1,635,628	3,735,141	4,600,514
Bituminous coal	11,805,060	12,320,584	11,647,728
Coke	547,303	845,702	1,061,829
Ores	2,209,860	2,953,353	3,147,487
Stone, sand, &c	2,083,336	2,538,333	3,096,416
Other products of mines.	178,985	243,054	377,087
Products of forest	7 740 477	10 217 541	7,759,393
LumberOther products of forests	7,542,475 2,687,160	10,317,541 2,594,685	3,835,614
Manufactures—	2,007,100	2,004,000	0,000,011
Petroleum and other oils	270,810	390,331	464,953
Sugar	232,620	451,641	701,319
Naval stores	1,674	3,742	22,509
Iron, pig and bloom	304,136	583,948	593,950
Iron and steel rails	190,380	628,988	446,678
Castings and machinery	231,159	858,914	897,849
Bar and sheet metal	87,958	353,802	337,866 1,789,994
Cement brick and lime Agricultural implements	1,393,792	1,421,678 281,834	306,724
Wagons, carriages, tools, &c	223,664 42,129	96,197	119,463
Wines, liquors and beers	191,576	209,912	238,808
Household goods and furniture	256,208	269,299	301,401
Other manufactures	4,448,535	1,105,433	1,681,078
Merchandise	2,309,084	2,008,267	2,393,285 6,234,372
Miscellaneous.		6,935,135	

The above classified items aggregate 66,830,019 tons, which is within a few thousand tons of the gross tonnage for the year. Of that amount 36,075,101 tons originated on the reporting roads, and 30,754,918 tons were received from connecting lines.

Separated into classes the following totals are given:-

	1907.	1908.	1909.	
	Tons.	Tons.	Tons.	
Products of agriculture. Products of animals. Products of mines. Products of forests. Manufactures. Merchandise. Miscellaneous.	9,521,661 2,469,266 18,460,172 10,229,635 7,974,641 2,309,084 5,533,426	9,396,967 2,472,359 22,636,227 12,912,226 6,655,719 2,008,067 6,938,135	11,963,263 2,807,487 23,931,061 11,595,007 7,902,592 2,393,285 6,234,372	
Totals	56,497,885	63,019,900	66,830,019	

It is both interesting and instructive to observe the relationship which each of these classes bears to the whole volume of freight traffic. Expressed in percentages the facts are as follow:—

	1907.	1908.	1909.
Products of agriculture Products of animals. Products of mines. Products of forests. Manufactures. Merchandise Miscellaneous	16 · 85	14·91	17·91
	4 · 37	3·92	4·21
	32 · 68	35·92	35·81
	18 · 11	20·49	17·35
	14 · 11	10·56	11·82
	4 · 08	3·18	3·58
	9 · 79	11·02	9·32

It will be seen that the first four classes, which might be regarded as commanding low rates, because transported in large bulk, made up 75.28 per cent of the total.

# EARNINGS AND OPERATING EXPENSES.

The aggregate earnings of railways for the year 1909 were \$145,056,336.19—a decrease of \$1,861,977.42 as compared with 1908.

The operating expenses were \$104,600,084.43, or \$2,704,058.08 less than for the pre-

ceding year.

The following is a statement of earnings and operating expenses since 1875:—

Year,	Earnings.	Operating expenses.	Percentage o operating expenses to earnings.
	\$	\$	
1875	19,470,539 19,358,084 18,742,053 20,520,078 19,925,066 23,561,447 27,987,508 29,027,789 33,244,586 33,421,705 32,227,469 33,389,381 38,841,609 42,159,152 42,149,615 46,843,826 48,192,099 51,685,768 52,042,396 49,552,528 46,785,486 50,545,569 52,353,276 59,715,105 62,243,784 70,740,270 72,898,749 83,666,503 96,064,526 100,219,436 106,467,198	15,775,532 15,802,721 15,290,091 16,100,102 16,188,282 16,840,705 20,121,418 22,390,768 24,691,667 25,595,341 24,117,582 27,624,683 30,652,046 31,038,045 32,913,350 34,960,449 36,488,228 36,616,033 35,218,432 32,749,668 35,042,654 35,168,665 39,137,549 40,706,217 47,699,798 50,368,726 57,343,592 67,481,523 74,563,176	81·1 81·8 81·1 78·4 81·2 71·0 71·9 77·1 74·3 76·5 74·5 72·4 71·1 72·7 73·6 70·2 72·5 70·3 71·7 69·9 69·3 67·1 65·3 67·4 68·3 70·2 74·4 77·2 77·4 77·4 77·4 77·5 77·5 77·5 77·5 77·5
906. 907. 908. 909.	125,322,865 146,738,214 146,918,314 145,056,336	87,129,434 103,748,672 107,304,143 104,600,084	$   \begin{array}{r}       69.5 \\       70.7 \\       73.0 \\       72.1   \end{array} $

### EARNINGS.

The net revenue for 1909 was \$40,456,251.76, showing a betterment of \$842,080.66 as against 1908.

Net earnings for 1909 were equal to \$1,678.40 per mile of railway. This was \$46.50 less than the result for 1908, showing that railway mileage had increased at a more rapid rate than had net earnings. In other words, the new mileage had not in 1909 attained to the normal earning power of the older mileage, and to that extent represented a diluting agency.

The net earnings of \$40,456,251.76 represented 3.09 per cent on a capitalization of \$1,308,481,416. If, however, the same net earnings are applied to the capital liability of the railways which created them, and account is not taken of the obligations of those corpor-

ations which failed to make ends meet, the return rises to 3 93 per cent. Thirty-six railways, out of a total of 87, had a deficit in 1909. In fact, the same 36 lines have for years been apparently operated at a loss—a condition which will be dealt with next year in connection with the revision of capital liability. An examination of the facts in relation to the railways which carried at least 70 per cent of the whole traffic of the Dominion in 1909 will show that, so far as those lines are concerned, a substantial return on investment was earned. The net earnings as above indicated represent the remainder after all deficits have been deducted, which, as has been said, involves a considerable dilution.

The gross revenue for 1909, considered in relation to its various sources, gives the following results:—

	\$ cts.	Per cent.
Passenger service Freight service Station and train privileges, &c Telegraphs, rents and other sources	45,282,326 27 96,685,076 23 493,895 13 2,595,038 56	66 · 65 · 35
Total	145,056,336 19	

The significance of the foregoing proportions will be better understood in the light of the relationship which earnings from freight and passenger services bear to total earnings in other countries. The following examples may be given:—

	Freight.	Passengers.	All other.
United States. Great Britain. Germany France. Switzerland. Canada.	$65 \cdot 22$	21 ·81 41 ·94 27 ·20 44 ·51 43 ·02 31 ·21	7.75 $7.71$ $7.58$ $1.85$ $4.35$ $2.14$

It is not practicable, owing to several changes in the method of accounting, to make a comparison with the corresponding items of revenue in preceding years. The following items, however, are comparable:—

	1907.		1907. 1903.		1909.	
	\$	cts.	s	ets.	\$	cts.
Passeng_r service. Freight service	47,730.652 94,995,087	29 81	46,854,1 93,746,6	158 97 355 45	45,282,3 96,685,0	26 27 76 23

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Following is an analysis of the carnings from passenger service:-

	1907.	1908.	1909.
	\$ ets.	\$ ets.	\$ cts.
Passengers. Mails. Express. Other sources.	$\begin{array}{c} 39,184,437 \ 64 \\ 1,626,704 \ 64 \\ 3,277,695 \ 09 \\ 1,641,814 \ 92 \end{array}$	39,992,503 11 1,670,120 90 3,486,300 63 1,705,234 33	39,073,488 84 1,723,180 97 3,561,170 96 924,485 50
Total	45,730,652 29	48,854,158 97	45,282,326 27

It will be observed, as has already been pointed out, that the receipts from passengers show a decline for the year. On the other hand, mails and express reveal an increase. The falling off in other sources of passenger revenue is in part accounted for by a change in the classification, which transferred some of the items to outside operations.

The gross earnings per mile of railway were \$6,017.93 as compared with \$6,397.21 in 1908.

The net earnings were \$1,678.40 per mile of line, a decrease from the preceding year of \$46.50.

The average revenue per passenger was \$1.195, representing a gain of .020 over 1908.

The average receipts per ton of freight were \$1.432, a falling off to the extent of .054 as against the preceding year.

The earnings per passenger train mile were \$1.150. In 1908 the average was \$1.228. The loss of .078 is accounted for by a decrease in the revenue from passenger train service, and an increase in the passenger train mileage.

The earnings per freight train mile were \$2.041. For 1908 the figures were \$2.008.

The earnings per train mile, for all trains, amounted to \$1.816, as against \$1.868 in 1908.

The earnings from all sources other than freight and passenger service were equal to 2.14 per cent of the whole. The proportion of freight, passenger and other earnings to total earnings was as follows:—

	1907.	1908.	1909.
Freight service. Passenger service. All other.	64 · 73	63 ·S1	66 · 65
	31 · 16	31 ·S9	31 · 21
	4 · 11	4 ·30	2 · 14

It is instructive to know that in the United States the ratio of freight earnings is higher than in Canada, while the passenger earnings are lower, the percentages being 70.44 and 21.81 respectively. On the other hand, in Great Britain passenger service represents 41.94 per cent of the whole, and freight service 50.35.

It is not practicable to carry the comparison of earning powers in Canada back beyond 1907, for the reason that a different classification of accounts prevailed prior to that year.

On the basis of accounting which was then in vogue the following table, having reference to the years from 1875 to 1906, has some measure of value:—

Year.	Passengers.	Per cent.	Freight.	Per cent.	Mail and Express.	Per cent.	Other Sources.	Per cent.	Total.
	8		8		\$		s		8
1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906	6,410,934 6,254,866 6,458,493 6,386,325 6,459,598 7,076,339 8,223,254 10,018,477 10,538,119 11,204,036 10,261,691 11,867,597 12,744,636, 13,242,708 13,731,768 14,286,408 14,788,465 15,087,299 15,452,420 13,311,440 13,747,773 13,929,384 15,622,311 15,929,583 18,581,452 19,396,302 22,600,090 24,862,109 26,901,831 28,950,649 33,392,188	32·25 34·46 31·12 32·41 30·03 29·34 34·51 31·69 33·70 30·55 30·22 31·41 29·64 28·61 29·12 31·18 28·42 27·19 26·48 26·16 25·59 26·26 26·60 27·01 25·88 26·84 27·29	12,073,570 12,211,158 11,351,264 13,129,191 12,509,093 15,506,935 18,666,982 17,729,945 21,320,208 20,763,243 19,962,058 21,183,967 24,581,047 26,410,084 29,921,788 30,548,645 26,671,049 29,921,788 30,548,645 32,935,028 29,982,482 29,545,490 32,368,082 33,522,102 38,508,175 40,101,036 45,643,699 46,665,103 45,643,699 46,665,103 53,089,448 64,673,919 68,203,320 [81,433,115	62 · 00 63 · 08 60 · 40 63 · 98 62 · 77 65 · 81 66 · 69 61 · 07 64 · 13 62 · 12 61 · 94 63 · 44 63 · 44 63 · 28 63 · 28 64 · 03 64 · 03 64 · 03 64 · 03 64 · 01 64 · 52 64 · 01 64 · 53 64 · 03 64 · 03	3,961,769	$\frac{4.02}{3.07}$	1,730,096 2,033,069 2,278,106 2,852,613 3,370,483 3,502,632 3,731,885 3,806,437 4,716,823 4,612,022 5,342,459	4·35 4·77 5·41 4·95 5·12 4·54 4·91 4·61 5·01	19,470,539 19,358,084 18,742,053 20,520,078 19,925,066 23,561,447 27,987,508 29,027,789 33,244,586 33,421,705 32,227,469 33,389,381 38,841,609 42,159,152 42,149,615 46,843,826 48,192,099 51,685,768 52,042,396 49,552,528 46,785,486 50,545,569 52,353,276 59,715,105 62,243,784 70,740,270 72,808,749 83,666,503 96,064,526 100,219,436 106,467,198 125,322,865

#### OPERATING EXPENSES.

The operating expenses for 1909 amounted to \$104,600,084.43, a decrease, as compared with 1908, of \$2,704,058.08.

The proportion of operating expenses to gross earnings was 72.11. This was .93 less than in 1908.

The distribution of operating expenses was as follows:-

	1908.	Per cent.	1909.	Per cent.
Way and structures. Equipment. Traffic expenses. Transportation. General expenses.	\$ 20,778,609 78 20,273,625 95 62,486,270 59 3,765,636 19	19·37 18·89 58·23 3·51	\$ 21,153,274 46 21,510,303 59 3,798,824 57 54,284,587 41 3,853,094 40	20 22 20 ·56 3 ·63 51 ·89 3 ·70

The above percentages show clearly that, whereas the operating expenses were reduced very considerably during the year, the economies did not apply to the up-keep of physical features. The proportion of outlay on maintenance of way and structures, and maintenance of equipment, was in both instances higher than for 1908. The saving effected, therefore, had reference almost wholly to the cost of conducting transportation, as will be made clear later.

It is not possible to make a comparison of the various divisions of operating expenses for 1909 with those of 1907 and 1908, for the reason that during the past year the division of traffic expenses was created. The items classified under that head, however, have been taken almost entirely from transportation. Maintenance of way and structures and maintenance of equipment were left undisturbed; so that a comparison with respect to those classes may be made with accuracy. Following are the facts for the years 1907, 1908 and 1909:—

	1907.	1908.	1909.
Way and structures. Equipment. Traffic. Transportation. General expenses.	20.88	19·37 18·89 58·23 3·51	20 · 22 20 · 56 3 · 63 51 · 89 3 · 70

The comparison of dollars and cents in this connection is not so effective; yet it has its direct value. The results for the three years are as follows:—

	1907		1908	3.	190	99.
Way and structures Equipment. Traffic expenses. Transportation General expenses.	\$ 20,887,0 21,666,3 57,325,5 3,869,6	73 08  43 26	\$ 20,778,6 20,273,6 62,486,2 3,765,6	325 95  270 59	\$ 21,153, 21,510, 3,798, 54,284, 3,853,	303 59 824 57 587 41

It was deemed expedient to elaborate operating expenses very considerably for 1909, in pursuance of the revision of accounting practice which had been foreshadowed in 1908. The multiplication of items and subdividing of accounts has, for the time being, made it difficult, in some cases impossible, to carry out close comparisons; but ample compensation for this interruption will be had in the detailed information afforded by the new classification.

A complete analysis of operating expenses for 1909 yields the following details: —

		T)
	4.00.0004	Per
	Amount.	aon t
		cent.
	S ets.	
Maintenance of Way and Structures-		
Superintendence	759,240 98	.72
Ballast	198,796 80	-19
Ties	2,678,384 80	2.56
Rails	1,343,471 77	1.28
Other track material	1,084,342 40	1.03
Roadway and track	8,469,429 03	8.09
Removal of snow and ice	1,139,937 37	1.08
Tunnels	18,413 27	.01
Bridges, trestles and culverts  Over and under grade crossings	1,603,291 03 37,179 87	1 · 53 · 03
Grade crossings, fences, &c	528,111 60	.49
Snow fences and sheds	91,538 47	.08
Signals and interlocking plants	131,419 79	.12
Telegraph and telephone lines	246,934 48	.23
Electric power transmission	4,646 36	.00
Buildings, fixtures and grounds	2,241,319 79	2.14
Docks and wharfs	187,879 64	.17
Roadway tools and supplies	238,798 60	.21
Injuries to persons	42,563 21	.04
Stationery and printing	40,519 73	.04
Other expenses	25,741 90	.02
Maintaining joint tracks, yards, &c., net balance	32,984 57	.03
Superintendence	497,292 54	.47
Steam locomotives, repairs	9,427,704 22	9.01
" " renewals	411,781 23	.04
Electric locomotives, repairs	11,060 55	.01
Passenger train cars, "	2,595,472 23	2.48
renewals	158,959 43	.15
Freight " repairs	5,893,635 61	5.63
" renewals	879,717 84	.84
Work equipment, repairs	454,543 08	.43
" renewals	87,618 41	.08
Floating equipment, repairs	44,111 84	.04
Shop machinery and tools	761,738 82	.73
Power plant equipment	7,119 51	.00
Injuries to persons	33,614 04 64,883 49	·03 ·06
Other expenses.	121,201 13	.11
Maintaining joint equipment at terminals—Cr	4,298 56	.00
Equipment loaned and borrowed—Dr	60,653 23	.05
Traffic expenses—	ai 4	00
Superintendence	789,829 20	.75
Outside agencies	1,630,331 55	1.55
Advertising	698,539 25	.66
Traffic associations	74,397 04	-07
Fast freight lines	303,285 09	.29
Industrial and immigration bureaus	18,856 06 278,799 24	.02
Stationery and printing	4 707 14	.26
Other expenses.  Transportation Expenses—	4,787 14	.00
Superintendence	1,258,246 56	1.20
Despatching trains	794,148 07	.76
Station employees	7,144,573 81	6.83
Weighing and car service association	46,049 36	.04
Coal and ore docks	19,909 99	.01
Station supplies and expenses	798,021 05	.76
Yardmasters and their clerks	374,334 16	.35
Yard conductors and brakemen	1,533,070 52	1.46
Yard, switch and signal tenders	183,210,94	.17
Yard supplies and expenses	71,682 94	.06
Yard enginemen.  Engine house expenses—yard.	1,144,827 42	1.09
Fuel for yard locomotives.	337,421 60 1,433,354 45	·32 1·37
Water for yard locomotives	80,869.73	.07
Lubricants for yard locomotives.	31, 159, 05	-03
Lubricants for yard locomotives Other supplies for yard locomotives	31,159 05 34,274 79	.03
Operating joint yards, &c., balan e-Dr	424,953 72	.40

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	. Amount.	Per cent.
	8 cts.	
Transportation Expenses—		
Motormen	10,599 40	-01
Road enginemen	6,305,369 08	6.02
Engine house expenses—road	2,075,177 82	1.98
Fuel for road locomotives	16,111,095 45	15.40
Water for road locomotives	746,594 70	.71
Lubricants for road locomotives	245,976 65	.23
Other supplies	287,462 54	.27
Operating power plant	28,515 15	.02
Road trainmen	6,584,565 63	6.29
Train supplies and expenses	2,201,549 18	2.10
Interlockers, block and other signals—operation of	223,370 27	.21
Crossing flagmen and gatemen	117,726 84	·11
Drawbridge operation	37,313 04	.03
Clearing wreeks	330,212 24	·31
Telegraph and telephone—operation	216,322 74	·20
Operating floating equipment	331,446 35	.31
Express service	6,532 66	.00
Stationery and printing	479,151 53	.46
Other expenses	238,914 58	.21
Loss and damage—freight	1,004,774 74	.96
" baggage	21,973 64	.02
Damage to property	163,483 71	.15
" stock on right of way	59,626 02	.05
Injuries to persons	657,011 14	.63
Operating joint tracks—Dr	76,728 69	.07
General Expenses—	720, 000, 00	0.7
Salaries and expenses of general offices	739,028 29 1,126,730 58	.07
cierks and attendants		1 ·06 ·21
General office supplies and expenses	$227,096 50 \\ 480,924 76$	.46
Law expenses	593,060 31	-56
Insurance	29,941 71	·02
Relief department expenses	188,282 26	.18
Pensions	152,910 01	.14
Stationery and printing	296,749 50	.27
Other expenses	18,370 48	.02
General administration joint tracks, &c.—Dr	10,010 48	-02
1		

The foregoing details of operating expenses are so much more numerous than in previous years as to make a complete comparrison by items impracticable. Selecting what may be regarded as the principal accounts, which remain unchanged, and for convenience using only percentages, the following facts will be instructive:—

Ties.       2 35       2 05       2 56         Repairs and renewals of locomotives.       8 45       7 48       9 44         " passenger cars.       2 61       2 54       2 6         " freight cars.       7 32       6 40       6 46         " work cars.       -15       57       55         Shop machinery and tools.       7 78       72       77         Fuel for locomotives.       15 99       16 54       16 77         Water supply for locomotives.       69       61       67         Station employees.       5 95       6 30       68         " supplies.       71       71       76         Advertising.       47       53       60         Outside agencies.       1 24       1 40       1 50         Stationery and printing.       90       95       95         Loss and damage.       94       1 15       1 15         Injuries to persons       67       70       65         Clearing wrecks.       45       35       35       35				
Ties.       2 35       2 05       2 56         Repairs and renewals of locomotives.       8 45       7 48       9 44         " passenger cars.       2 61       2 54       2 6         " freight cars.       7 32       6 40       6 46         " work cars.       -15       57       55         Shop machinery and tools.       7 78       72       77         Fuel for locomotives.       15 99       16 54       16 77         Water supply for locomotives.       69       71       77         Station employees.       5 95       6 30       68         " supplies.       71       71       76         Advertising.       47       53       60         Outside agencies.       1 24       1 40       1 50         Stationery and printing.       90       95       95         Loss and damage.       94       1 15       1 11         Injuries to persons       67       70       65         Clearing wrecks.       45       35       35       35		1907.	1908.	1909.
Ties.       2 35       2 05       2 56         Repairs and renewals of locomotives.       8 45       7 48       9 44         " passenger cars.       2 61       2 54       2 6         " freight cars.       7 32       6 40       6 46         " work cars.       -15       57       55         Shop machinery and tools.       7 78       72       77         Fuel for locomotives.       15 99       16 54       16 77         Water supply for locomotives.       69       71       77         Station employees.       5 95       6 30       68         " supplies.       71       71       76         Advertising.       47       53       60         Outside agencies.       1 24       1 40       1 50         Stationery and printing.       90       95       95         Loss and damage.       94       1 15       1 11         Injuries to persons       67       70       65         Clearing wrecks.       45       35       35       35		- 100		
Repairs and renewals of locomotives.       8.45       7.48       9.40         " passenger cars.       2.61       2.54       2.66         " freight cars.       7.32       6.40       6.40         " work cars.       -15       .57       .55         Shop machinery and tools.       7.78       .72       .72         Fuel for locomotives.       15.99       16.54       16.77         Water supply for locomotives       69       .71       .77         Station employees.       5.95       6.30       6.83         " supplies.       .71       .71       .77         Advertising.       .71       .71       .77         Outside agencies.       1.24       1.40       1.56         Stationery and printing.       .90       .95       .95         Loss and damage.       .94       1.15       1.15         Injuries to persons.       .67       .70       .63         Clearing wrecks.       .45       .35       .31	Rails	1.27	1 .49	1.28
" passenger cars. 2 · 61 2 · 54 2 · 66 " freight cars. 7 · 32 6 · 40 · 6 · 40 " work cars. 15 · 57 · 55 Shop machinery and tools. 7 · 78 · 72 · 75 Fuel for locomotives. 15 · 99 16 · 54 16 · 77 Water supply for locomotives 69 · 71 · 75 Station employees. 5 · 95 · 6 · 30 · 6 · 85 " supplies. 7 · 71 · 71 · 71 · 77 Advertising. 47 · 53 · 66 Outside agencies. 1 · 24 1 · 40 1 · 55 Stationery and printing. 90 · 95 · 95 Loss and damage 94 1 · 15 1 · 11 Injuries to persons 67 · 70 · 63 Clearing wrecks. 45 · 35 · 33	Ties	2.35	2.05	2.56
" freight cars"       7 32       6 40       6 44         " work cars       -15       57       55         Shop machinery and tools       7 78       72       75         Fuel for locomotives       15 99       16 54       16 77         Water supply for locomotives       69       71       75         Station employees       5 95       6 30       68         " supplies       71       71       76         Advertising       47       53       66         Outside agencies       1 24       1 40       1 56         Stationery and printing       90       95       95         Loss and damage       94       1 15       1 19         Injuries to persons       67       70       65         Clearing wrecks       45       35       35	Repairs and renewals of locomotives	8.45	7 -48	9.40
## Triggit cars	" passenger cars	2.61	2.54	2.63
" work cars.         -15         -57         -55           Shop machinery and tools.         7-78         72         77           Fuel for locomotives.         15-99         16-54         16-77           Water supply for locomotives.         -69         71         -77           Station employees.         5-95         6-30         6-85           " supplies.         -71         71         76           Advertising.         47         53         66           Outside agencies.         1-24         1-40         1-56           Stationery and printing.         90         -95         -98           Loss and damage         -94         1-15         1-16           Injuries to persons.         67         70         66           Clearing wrecks.         -45         -35         -31	" freight cars	7 -32	6 - 40 -	6.46
Fuel for locomotives.       15.99       16.54       16.77         Water supply for locomotives.       69       71       75         Station employees.       5.95       6.30       6.8         supplies.       71       71       71       76         Advertising.       47       53       66         Outside agencies.       1.24       1.40       1.5       5tationery and printing.       90       95       95         Loss and damage       94       1.15       1.15       1.11       1.11       1.11       1.12       1.12       1.12       1.12       1.13       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15       1.15			-57	.52
Water supply for locomotives       69       71       79         Station employees.       5.95       6.30       6.86         " supplies.       71       71       71         Advertising.       47       53       66         Outside agencies.       1.24       1.40       1.56         Stationery and printing.       90       .95       .98         Loss and damage.       .94       1.75       1.15       1.15         Injuries to persons.       67       70       66         Clearing wrecks.       -45       -35       -35	Shop machinery and tools	F .78	.72	.73
Station employees.       5.95       6.30       6.85         " supplies.       .71       .71       .76         Advertising.       .47       .53       .66         Outside agencies.       1.24       1.40       1.56         Stationery and printing.       .90       .95       .98         Loss and damage.       .94       1.15       1.15         Injuries to persons.       .67       .70       .65         Clearing wrecks.       .45       .35       .31		15.99	16.54	16.77
" supplies.     71     71     76       Advertising.     47     53     66       Outside agencies.     1 · 24     1 · 40     1 · 55       Stationery and printing.     90     95     -95       Loss and damage     94     1 · 15     1 · 15       Injuries to persons     67     70     65       Clearing wrecks     -45     35     -31	Water supply for locomotives	.69	.71	.79
Advertising       47       53       66         Outside agencies       1 · 24       1 · 40       1 · 50         Stationery and printing       90       95       -95         Loss and damage       94       1 · 15       1 · 15         Injuries to persons       67       70       -65         Clearing wrecks       -45       -35       -31				6.83
Outside agencies.       1 · 24       1 · 40       1 · 56         Stationery and printing.       90       95       95         Loss and damage.       94       1 · 15       1 · 15         Injuries to persons.       67       70       66         Clearing wrecks.       -45       -35       -31				.76
Stationery and printing.       -90       -95       -98         Loss and damage.       -94       1-15       1-15         Injuries to persons.       -67       -70       -63         Clearing wrecks.       -45       -35       -31				-66
Loss and damage       .94       1 · 15       1 · 15         Injuries to persons       .67       .70       .63         Clearing wrecks       .45       .35       .31	Outside agencies	1 .24	1.40	1.56
Injuries to persons.       .67       .70       .63         Clearing wrecks.       .45       .35       .31				-95
Clearing wrecks45 ·35 ·31				1.19
				.63
				.31
Train supplies and expenses	Train supplies and expenses	1 97	2.00	$2 \cdot 10$

The above statement leaves over 47 per cent of the operating expenses for 1909 unaccounted for; but the comparison could not with safety be carried further. In order, however, that the situation may be viewed for 1907, 1908 and 1909 within the limitations applicable to those years the following table from railway statistics for 1908 is repeated:—

	1907.	Per	1908.	Per
	1307.	cent.	E the walk	cent.
_				
Maintainance of wave and atmeetures	\$ cts.		\$ cts.	
Maintainance of ways and structures—  Repairs of roadway	11,160,086 67	11.79	10,640,542 68	9 . 93
Renewals of rails	1,205,088 24 2,230,575 56	1.27 $2.35$	1,604,594 76 2,204,083 47	$1.49 \\ 2.05$
Renewals of ties	1,408,552 02	1 .48	1,400,703 45	1.37
" fences.crossings. &c	481,129 18	·50 2·26	519,671 89 2,690,915 90	2.51
" buildings, &c docks and wharfs	2,144,109 98 103,280 37	10	167,017 45	.16
telegraph	103,280 37 265,183 58	•28	294,301 15	·27
Stationery and printing Other expenses	30,599 20 78,663 70	·03 ·08	43,924 32 1,122,793 11	1.05
Maintenance of epuipment—				-0
Superintendence	591,196 0S 7,999,802 52	·62 S·45	621,032 61 8,008,613 01	-58 7.48
" passenger cars	2,473,908 84	2.61	2,723,846 82	2.54
freight cars	6,933,574 61 146,148 39	7·32 ·15	6,855,843 98 608,109 17	6 · 40 · 57
work cars	33,221 35	.03	52,181 21	.05
" shop machinery and	738,833 13	.78	779,160 38	.72
Stationery and printing		.07	77,384 68	.07
Other expenses	74,466 22 815,751 04	.86	523,535 96	.49
Conducting transportation— Superintendence	1,611,297 91	1.70	1,956,260 03	1.83
Engine and roundhouse men	7,814,573 02	8.25	9.471.240 671	8.84
Fuel for locomotives	15,137,504 48 656,730 03	15.99	17,718,468 24 764,790 58	16·54 ·71
Oil, tallow and waste for locomotive:	409,397 18	.43	383,670 36	.36
Other supplies for locomotives	195,970 04 6,228,136 56	6.58	313,146 02 8,155,855 59	·29 7·61
Train supplies and expenses.	1.873,515 88	1.97	2,136,581 33	2.00
Switchmen, flagmen, &c	2,013,294 16	2.12	1,690,242 28	1 ·58 1 ·64
Telegraph expenses	2,562,478 44 5,634,176 10	$2.70 \ 5.95$	1,757,495 05 6,748,608 03	6.30
Station supplies	5,634,176 10 671,972 51 114,516 96	.71	765,240 87 319,186 77 1,467,775 90 115,250 52	.71 .30
Switching charges—balance	1.156,891 46	1.12 $1.22$	1.467,775 90	1.31
Hire of equipment—balance	106,008 61	·11	115,250 52	.10
Loss and damage Injuries to persons	892,937 26 642 248 43	·94 ·67	1,232,518 70 758,011 23	$1.15 \\ \cdot 70$
Clearing wrecks	642,248 43 426,784 63 918,769 17	.45	372.627.40	•35
Operating marine equipment	918,769 17 451,673 54	·97	1,138,272 64 571,387 92 1,500,272 23	1 · 06 • 53
AdvertisingOutside agencies	1,180,134 05	1.24	1,500,272 23	1.40
Commissions	77,509 43	·08 ·19	365,588 35 171,887 17	·34 ·16
Stock yards and elevators	185,304 78° 542,199 81	.19	1,333,401 74	1 . 24
Rents for buildings, &c	202,031 61	.21	135,834 45	.12
Stationery and printingOther expenses	603,426 93 236,885 82	·63 ·25	740 · 851 59 295,729 67	·69 ·28
General expenses—				
Salaries of general officers	723,956 74	·76 ·97	775,732 94 1,085,738 37	$\begin{array}{c} \cdot 72 \\ 1 \cdot 01 \end{array}$
General office expenses and supplies	918,157 19 195,204 97 509,547 71	26	237 .571 05	.22
Insurance	509,547 71 396,383 18	·53 ·41	615,638 68	·58
Law expenses	163,863 19	.17	445,076 69 161,271 64	.15
Other expenses	265,972 77	.28	386,499 27	.36

It is regrettable that the value of the above figures for purposes of comparison has to some extent been sacrificed by the new classification of operating expenses; but, as has been said, it is obvious the loss in that regard will be more than offset by the usefulness of the additional information which will hereafter be available.

The operating expenses represented \$4,339.53 per mile of line, as compared with \$4,672.30 in 1908.

The cost of running a train one mile in 1909, using the mileage of all trains as a basic factor, was \$1,309, a decrease of .055 as against 1908.

For the ten years period between 1900 and 1909 the cost of running a train one mile has been as follows:—

1900																,	 									80	3
1901																										9.	1
1902						, .																		]	1 .	02	è
1903								 					 				 							1	1 .	11	l
1904																											
1905.													 				 					. ,			1 .	.2:	j
1906													 											1	1 .	.19	į
1907.																											
1908											 														1 .	.36	į
1909		 			 			 					 				 							1	1 .	30	į

It will be observed that the cost of operation per train mile has increased 51.5 per cent since 1900. On the other hand, as has been shown on a preceding page, the earnings per train mile have increased but 41.7 per cent within the same time.

Summarizing, for convenient comparison, some of the foregoing facts, the results are as follow:—

	1907.	1908.	1909.
	8	8	\$
Gross earnings. Net earnings Gross earnings per mile. Net earnings per mile. Earnings per passenger  per ton.  passenger train mile.  freight train mile.  train mile, all trains. Operating expenses.  per mile Cost of running trains one mile.	146,738,214 42,989,537 6,535 64 1,914 73 1 ·219 1 ·472 1 ·263 2 ·069 1 ·875 103.748,672 4,620 90 1 ·381	146,918,313 39,614,171 6,397 21 1,724 90 1 1.175 1 .486 1 .228 2 .008 1 .791 107,304,143 4,672 30 1 .364	145,056,336 40,456,251 6,017 89 1,678 40 1,195 1,432 1,150 2,041 1,816 104,600,084 4,339 53 1,309

#### EQUIPMENT.

In the numbers of locomotives and cars there were increases during 1909. The facts for the past three years are as follows:—

	1907.	1908.	1909.
Locomotives	3,504	3,872	3,969
Freight cars	107,407	115,709	117,779
Passenger cars	3,642	4,026	4,192

In addition to the foregoing, there were 65 locomotives and 9,345 cars under lease. There were also 7,859, cars returned as being in the company's service. The latter consisted of 88 officers' and pay cars, 2,608 gravel cars, 117 derrick cars, 1,750 cabooses and 3,296 other cars. Cars of all classes made up a total of 129,830.

The 3,969 locomotives were assigned to the following services:—

<del></del>	1907.	1908.	1909.
Passenger	964	1,122	1,056 2,539
Freight. Switching.	2,206 334	2,392 358	2,539 374

The available motive power for 1909 was equivalent to 165 locomotives for every 1,000 miles of line. On that basis these figures indicate a decrease of 4 locomotives, as compared with 1908. This reduction was probably due to the fact that the new mileage had not been brought up to the standard of the older lines in respect of equipment. The returns show that the average tractive power of locomotives has been steadily rising for years; so that it may be safely assumed the 97 locomotives added during the year represented a hauling capacity sufficient to compensate for the loss of motive power per thousand miles as expressed in numbers of engines.

During the year 166 cars were added to the passenger service of the Dominion. The classification of equipment under this head for the past three years was as follows:—

	1907.	1908.	1909.
First class. Second class. Combination Emigrant Dining. Parlour. Sleeping Baggage, express and postal. Other.	1,300 472 405 272 105 63 212 782 31	1,493 487 422 303 114 63 236 873 35	1,560 471 429 317 127 60 261 926 41
Total	3,642	4,026	4,192

The passenger car supply for 1909 was equivalent to 174 cars for every 1,000 miles of railway.

To the available freight car supply there were added 2,070 cars during the year, bringing the total up to 117,779. The following comparative statement will show the division of freight equipment by classes:—

	1907.	1908.	1909.
Box. Flat. Stock. Coal. Tank. Refrigerator. Other.	68,149 20,477 4,817 10,358 132 1,917 1,557	72,863 21,759 5,047 11,616 197 2,423 1,804	74,477 21,188 5,518 11,721 197 2,466 2,212
Total	107,407	115,709	117,779

The freight equipment for 1909 represented an average of 4,887 cars per 1,000 miles of line, a falling off to the extent of 152 as compared with the preceding year. There were increases in all classes; but the additions did not keep pace with the expanding mileage.

An analysis of the capacity of the above mentioned classes of ears yields the following facts:—

	. 190	)7.	190	08.	19	09.
	Number	Capacity, in tons.	Number.	Capacity. in tons.	Number.	Capacity. in tons.
BoxFlatStockCoalTankRefrigeratorOther	66,934 20,118 4,731 10,060 132 1,745 1,820	1,848,980 535,167 122,550 291,638 2,632 48,745 59,200	72,862 21,781 5,047 11,616 197 2,423 1,941	2,048,227 592,496 133,578 362,233 4,000 69,000 67,410	74,479 21,220 5,561 11,721 197 2,465 2,273	2,130,145 584,455 150,800 379,981 4,012 71,085 64,835
	105,540	2,908,903	115,867	3,277,394	117,916	3,385,313

It will be observed that the increase in the carrying capacity of all freight cars, as against 1908 was 107,919 tons.

The aggregate car supply for 1909 was equal to one car for every 567 tons of freight hauled. The tonnage per car in 1908 was 545.

The average carrying capacity of the 117,916 cars in freight service was 28.70 tons, a gain of .42 over the preceding year. As compared with 1907 the betterment was 1.14 tons, showing an appreciable advance towards heavier and larger cars.

There were 122,102 cars fitted with train brakes, and 125,069 with automatic couplers.

## TRAIN, CAR AND LOCOMOTIVE MILEAGE.

The total revenue train mileage for 1909 was 79,662,216, an increase of 1,024,690 over 1908,

There were also 190,812 special train miles, and 3,521,894 non-revenue train mileage. The division of train mileage for the past three years gives the following results:—

		-	1
	1907.	1908.	1909.
Passenger trains	30,220,461	31,950,349	32,295,730
Freight trains	38,923,890	40,476,370	40,304,906
Mixed trains	5,971,414	6,210,807	7,061,580
Total	75,115,765	78,637,526	79,662,216

The proportion which each class of train mileage has borne to the total, during the above three year period, is as follows:—

	1907.	1908.	1909.
Passenger trains	40.23	40.63	40.54
Freight trains	51.81	51 -47	50.59
Mixed trains	7 .90	7.90	8.87

Following is a statement of train and locomotive mileage since 1875:—

	Passenger	Freight	Mixed	Total Train	Engine
Year.	70.	(D. )			, and the second
	Trains.	Trains.	Trains.	Mileage.	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 1880	6,987,919 7,312,168	6,510,636	7,068,450	20,731,689	24,735,862
1881	8,298,957	10,775,380 15,163,634	4,157,292 $2,099,487$	22,427,449 27,301,306	26,575,969
1882	15,074,891	15,638,013	2,357,393	27,846,411	34,265,003 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	11,859,684	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	47,708,138
1890	14,362,870	22,428,249	5,058,210	41,849,329	49,512,630
1891	14,987,647	23,592,370	4,819,161	43,399,178	56,950,343
1982	15,237,093	24,399,014 $23,220,761$	4,812,361 5,305,214	44,448,468 44,385,953	56,994,253 57,587,382
1893 1894	15,859,978 $16,542,860$	21,423,496	5,803,214	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 1905	23,502,876	28,278,310 $34,372,998$	9,530,816 6,133,098	61,312,002 65,934,114	80,508,064 84,335,732
1906	25,428,018 $28,071,648$	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
	,,	,		1	

The mileage of loaded freight cars in 1909 was 775,543,414, an increase of 26,618,594 over 1908.

Empty car mileage was 281,175,615, a decrease of 3,768,914 as compared with the preceding year.

The mileage of caboose cars amounted to 37,644,038, which, added to the foregoing items, brought the total car mileage up to 1,094,363,067.

As has been pointed out on a preceding page, the average number of loaded ears per train in 1909 was 16.37, and the average load per car 16.98 tons. The average freight train load consisted of 278 tons.

The earnings per freight train mile and per ton of freight hauled are shown in the following table:—

Year.	Freight Earnings.	Freight Train Mileage.	Number of Tons Carried.	Earnings per Freight Train Mile.	Average Earnings per Ton Carried.
	\$	Mileage.	Tons.	\$ cts.	\$ cts
1875. 1876. 1876. 18876. 18877. 1878. 1879. 1880. 1881. 1882. 1883. 1884. 1885. 1886. 1887. 1889. 1899. 1891. 1892. 1893. 1894. 1895. 1898. 1899. 1900. 1901. 1902. 1903. 1904. 1904. 1905. 1906. 1907. 1908.	12,073,570 12,211,158 11,321,264 13,129,191 12,509,035 15,506,935 18,666,982 17,729,945 21,320,208 20,763,243 19,962,058 21,183,967 24,581,047 26,410,084 26,671,049 29,921,788 30,584,645 33,230,121 32,935,082 29,982,482 29,545,490 32,368,082 33,522,102 38,508,175	12,473,825 12,266,167 13,178,833 13,444,120 13,579,086 14,932,672 17,263,121 18,013,406 27,074,761 19,965,225 21,112,234 21,096,684 22,537,719 25,415,152 25,918,897 27,486,459 28,411,531 29,211,375 28,525,975 27,227,169 25,329,614 28,653,957 28,542,877 31,382,790 32,121,829 34,255,773 33,233,922 34,625,820 34,625,820 34,625,820 38,287,215 30,809,126 40,506,096 44,651,834 44,895,304 46,687,136	5,670,837 6,331,757 6,859,796 7,883,472 8,348,810 9,938,858 12,065,323 13,575,787 13,266,255 13,712,269 14,659,271 15,670,460 16,356,335 17,172,759 17,928,626 20,787,469 21,753,021 22,189,929 20,721,116 21,524,421 24,266,825 25,360,331 28,785,903 31,211,753 35,946,183 36,999,371 42,376,527 47,373,417 48,097,519 50,893,957 57,966,713 63,866,135 63,071,167 66,842,258	.988 .995 .859 .977 .921 1 .038 1 .081 .984 .787 1 .039 .946 1 .004 1 .091 1 .039 1 .029 1 .089 1 .075 1 .138 1 .155 1 .101 1 .166 1 .130 1 .174 1 .227 1 .248 1 .332 1 .363 1 .559 1 .648 1 .711 1 .684 1 .711 1 .684 1 .711 1 .684 2 .116 2 .008	2 · 129 1 · 928 1 · 650 1 · 665 1 · 498 1 · 560 1 · 547 1 · 305 1 · 607 1 · 514 1 · 371 1 · 351 1 · 502 1 · 537 1 · 487 1 · 439 1 · 404 1 · 340 1 · 269 1 · 261 1 · 273 1 · 331 1 · 344 1 · 340 1 · 244 1 · 340 1 · 405 1 · 445 1 · 446 1 · 446 1 · 472 1 · 438

The locomotive mileage for the year was 97,865,325. In 1908 it was 100,622,241. For the years 1907, 1908 and 1909 the locomotive mileage by classes of locomotives was as follows:—

Class of Locomotive.	1907.	1908.	1909.
Freight. Passenger. Mixed. Switching. Construction.  Total.		42,291,082 30,504,171 7,410,971 14,941,179 5,474,838	43,280,549 32,282,534 7,237,422 14,832,834 231,986 97,865,325

In 1909 the mileage given above under the head of 'construction' was returned as 'special,' and obviously had reference to special trains. The mileage of locomotives attached to work trains seems to have been omitted during the past year.

### CONSUMPTION OF FUEL BY LOCOMOTIVES.

In 1909 locomotives consumed 6,832,108 tons of fuel, consisting of 6,799,148 tons of bituminous coal, 9,675 tons of anthracite coal, 2,188 cords of hard wood and 43,658 cords of soft wood.

Comparing the consumption of fuel for the past three years, the result is as follows:—

Year.	Tons.	Cost.
1907	5,608,954	15,137,504
1908.	5,970,791	17,718,468
1909.	6,832,108	17,544,449

The cost of fuel in 1909 represented \$16,111,095 for road locomotives and \$1,433,354 for yard locomotives.

. In 1909 the fuel consumption by classes of locomotives, the engine mileage and the amount of fuel consumed per 100 miles were as follows:—

Class of Locomotive.	Co.	AL.	Woo	<b>D</b> D.	Total.	Wile De
Class of Docomotive.	Anthracite.	Bituminous.	Hard.	Soft.	Total.	Miles Run.
Freight. Passenger. Mixed. Switching. Special. Total.	Tons.  4,534 2,600 2,314 227 9,675	1,824,836 406,963 740,944	Cords.  1,138 595 364 91	2,566 5,492 52		43,280,549 32,282,534 7,237,422 14,832,834 231,986

Note.—One and a half cords hard wood equals one ton of coal. Two cords soft wood equals one ton of coal.

For the three year period the fuel consumed by the various classes of locomotives was as follows:—

Class of Locomotive.	1907.	1908.	1909.
	Tons.	Tons.	Tons.
Freight Passenger. Mixed Switching Construction.	3,194,510 1,331,178 303,549 557,576 223,141	3,318,283 1,446,919 350,921 598,092 256,576	3,833,010 1,834,700 410,800 743,977 9,621
Total	5,608,954	5,970,791	6,832,108

The fuel consumed by each class of locomotive per 100 miles run, and the cost, are given in the following statement:—

Class of Locomotives.	Fuel const	umed per 10	0 miles.	Cost of 1	Fuel per 100	miles.
erass of hotomotives.	1907.	1908.	1909.	1907.	1908.	1909.
	Tons.	Tons.	Tons.	s	s	8
Freight. Passenger. Mixed. Switching. Construction.	$7 \cdot 29$ $4 \cdot 57$ $4 \cdot 05$ $3 \cdot 76$ $4 \cdot 54$	7 · S4 4 · 74 4 · 73 4 · 00 4 · 69	8·85 5·68 5·67 5·01 4·14	$ \begin{array}{c c} 19.61 \\ 12.29 \\ 10.89 \\ 10.11 \\ 12.21 \end{array} $	23 · 20 14 · 03 14 · 00 11 · 84 13 · 88	$\begin{array}{c} 22.65 \\ 14.54 \\ 14.51 \\ 12.82 \\ 10.59 \end{array}$

To make the above calculation clear, it should be stated that the average cost of fuel per ton was \$2.69 in 1907, \$2.96 in 1908 and \$2.56 in 1909.

### ACCIDENTS.

There were 478 persons killed and 1,404 injured by the railways of Canada in 1909. These figures represent an increase over 1908 of 29 in the number killed and a decrease of 943 in the number injured.

There were also 27 persons killed and 782 injured in railway service from causes other than the movement of trains, locomotives or cars. The final aggregate would therefore be 505 killed and 2,186 injured.

The accidents during 1907, 1908 and 1909 affected the following classes of persons:—

		Killed.			Injured.	
	1907.	1908.	1909.	1907.	1908.	1909.
Passengers. Employees. Trespassers. Non-trespassers. Postal clerks, expressmen, &c Other persons.	70 249 195 70 3 11	28 224 156 22 16 3	36 182 190 67	352 1,126 125 88 7 454	345 1,793 120 59 3 27	281 . 897 . 95 . 89 . 25 . 17
Total	598	449	478	2,152	2,347	1,404

Taking the same three year period, the causes of accidents to passengers were reported to have been as follows:—

Causes.		KILLED.		Injured.			
Oadsos.	1907.	1908.	1909.	1907.	1908.	1909.	
Collisions	26 21	2 8	6	93 127 3	SS 131	83 99	
Parting of trains. Falling from trains, &c	2 10 4	6 6	11 14 1	36 38 7	20 50	11 57	
" stations" other points	3	3 2 1	1 2	3 1 44	5 1 49	5 1 25	
Total	70	28	36	352	345	281	

The returns for 1909 show that one passenger in every 907,869 was killed, and one in every 116,311 injured.

Accidents to employees were assigned to the following causes:-

Causes.		Killed.		Injured,			
causes.	1907.	1908.	1909.	1907.	1908,	1909.	
Coupling or uncoupling. Collisions. Derailments. Parting of trains. Locomotives or cars breaking down. Falling from trains or cars. Jumping on or off. Struck by trains, &c. Overhead obstructions. Other causes.	34 46 12 2 1 32 7 85 2 28	20 25 15 1 1 32 8 81 3 16	18 40 15 1 28 9 53 18	141 135 56 16 6 186 66 130 13 377	183 80 60 11 16 185 108 116 14 340	125 86 65 9 6 142 95 88 11 270	
Total	/ 249	224	182	1,126	1,113	897	

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The above accidents were distributed among the following classes of employees:-

Employees.		Killed.		Injured.			
	1907.	1908.	1909.	1907.	1908.	1909.	
Trainmen. Trackmen. Switch tenders, watchmen, &c. Stationmen. Shopmen. Telegraph employees. Other employees.	28	109 36 11 4 11 2 51	113 37 3 2 7	791 104 47 3 16 3 167	790 307 40 66 2S4 4 312	693 71 27 10 16 3 77	
Total	249	224	182	1,121	1,793	897	

The above figures show that of the 19,443 trainmen employed in 1909, one in every 172 was killed and one in every 28 injured.

By another standard of reckoning the hazard, it transpired that in 1909 one trainman was killed for every 737,831 miles trains were run, and one injured for every 120,310 miles. For the purposes of this calculation the mileage of trains, revenue and non-revenue, was used.

The accidents to employees from causes other than the movement of trains were distributed among the following classes:—Stationmen, 5 killed and 32 injured; shopmen, 5 killed and 269 injured; trackmen, 9 killed and 248 injured; other employees, 8 killed and 233 injured.

During 1909 there were 76 persons killed and 72 injured at highway crossings. The inquiry which was begun in 1908, as to relative number of accidents occurring at urban and rural crossings, was continued in 1909. Following is the result:—

, Highway Crossings,	Kıl	LED.	Injured,		
	1908.	1909.	1908.	1909.	
Urban	30	33	35	41	
Rural	21	43	33	31	
Total	51	76	68	72	

By reference to a succeeding division of the report it will be seen that in 1909 there were 1,767 unprotected urban crossings in the Dominion, and 15,426 unprotected rural crossings. Assuming that all the accidents took place at unprotected crossings, it will be seen that one person was killed for every 359 and one injured for every 497 of such rural intersections; while one person was killed for every 54, and one injured for every 43, unprotected urban crossings. The deduction suggested from these facts is that the hazard bears a more or less direct relationship to the extent to which any particular crossing is used.

It would appear to be an unwarranted assumption that so called protected crossings absolutely prevent loss of life or the infliction of injury, particularly at congested points in large centres. Out of 30 persons killed in 1908 at urban crossings, 10 lost their lives at protected intersections. In 1907 the number was 21. In 1909 the returns show 22. In other

words, in 1909, of the 33 fatal accidents at urban crossings, 70 per cent occurred at crossings having some form of protection. The accidents in such cases befall pedestrians who, in defiance of the lowered gates, seek to cross the tracks or pass under or over cars.

Following is a summary of facts in relation to railway accidents since 1888:-

	Passengers. Employees.		От	Others.		OTAL.	Passengers.			
Years.	Killed	Injured.	Killed	Injured.	Killed	Injured.	Killed	Injured.	One killed in every	One injured in every
1888. 1889. 1890. 1891. 1892. 1893. 1894. 1895. 1896. 1897. 1898. 1890. 1900. 1901. 1902. 1903. 1904. 1905. 1906. 1907. 1908.	20 37 11 13 14 11 12 9 11 7 5 20 7 16 19 53 25 35 16 70 28 36	70 103 52 105 43 57 64 47 70 72 119 131 134 177 258 232 244 231 352 345 281	107 89 83 65 110 72 67 51 46 76 98 119 123 118 146 192 206 139 249 224 182	619 637 682 582 582 697 331 521 489 446 579 862 882 941 970 930 956 214 920 893 1,125 1,113	104 84 124 118 109 133 132 127 104 130 167 145 195 183 165 181 178 227 206 197 260	86 135 101 131 120 107 122 111 158 163 184 245 213 221 239 259 193 241 220 209 226	213 210 218 193 233 216 211 211 213 270 284 325 317 330 420 395 468 361 587 449 478	775 875 835 818 879 708 694 658 619 807 1,097 1,185 1,317 1,317 1,317 1,317 1,317 1,328 1,453 705 1,365 1,698 2,347 1,404	534,931 328,408 1,165,569 1,017,120 966,672 1,238,002 1,205,208 1,554,175 1,346,400 2,310,191 3,688,809 956,668 3,071,453 1,149,108 1,088,419 417,900 945,630 722,535 1,749,361 459,104 1,215,893 907,869	152,837 117,971 246,562 125,929 314,730 238,912 225,976 297,608 238,877 231,019 256,167 160,784 164,123 137,207 116,836 85,848 101,899 103,642 121,168 91,299 98,681 116,311

Details by railways will be found in Table No. 16.

#### HIGHWAY CROSSINGS.

An effort was made last year, to obtain from the railways specific information with regard to the number of protected highway crossings in the Dominion. The word 'guarded' was used, and in several instances it was misunderstood to include a crossing having cattleguards. The data collected was thus rendered valueless. For 1909, the inquiry was given three aspects: first, the number of protected highway crossings; second, how protected; and third whether the protected crossing was urban or rural as to location.

The returns were complete, and they disclosed the following facts:-

	Urban.	Rural.	Total.
Protected crossings. Unprotected crossings. Total.	587 1,767 2,354		1,079 17,193 18,272

It will be seen that 3.09 per cent of rural, and 24.93 of urban, crossings were protected. The term 'urban' is here applied to cities and towns. Villages are classified as rural.

As to the means by which protection was afforded, the following summary gives the facts in that regard.:—

How Protected.	Rural.	Urban.
By gates. By overhead bridges. By subways. By bells. By watchmen.	34 190 213 39 16	133 110 166 77 101
Total	492	587

The inquiry as to highway crossings will be continued, and the information thus gathered will accurately show to what extent the menace from this source is being reduced by the adoption of protective measures.

### RAILWAY EMPLOYEES.

There were 125,195 employees in the service of Canadian railways on June 30, 1909, as compared with 106,404 on the same date 1908. This gain of 18,791 brought the figures for 1909 ahead of the record for 1907, by 1,183.

Salaries and wages amounted to \$63,216,662.08, or equal to 69.43 per cent of the total operating expenses.

Following is a statement showing the number of employees by classes for the years 1907, 1908 and 1909:—

	1907.	1908.	1909.
General officers Other officers General office clerks Station agents Other stationmen Enginemen Firemen Conductors Other trainmen Machinists Carpenters Other shopmen Section foremen Other trackmen Switch tenders, &c Telegraph operators Employees—floating equipment All other employees	336 461 4,214 2,536 11,829 4,351 4,760 2,911 8,261 2,486 3,215 12,579 3,903 30,614 2,364 2,364 2,987 5,426 20,779	318 526 4,795 2,522 8,908 3,868 4,206 2,719 7,507 2,759 3,190 11,873 4,017 20,068 1,849 2,686 7,273 17,320	328 574 5,967 2,624 10,739 4,104 4,330 2,831 8,178 3,294 3,377 13,858 4,216 28,401 1,624 2,899 9,324 18,527
Total	124,012	106,404	125,195

The above numbers for 1909, were equal to 5.19 employees per mile of line, as compared with 4.63 for 1908.

For the first time an analysis of salaries and wages has been made, showing the average daily compensation by classes:—

<del></del>	1907.	1908.	1909.
	\$	8	8
General officers		11 59	11 73
Other officers	4 11	4 63	4 59
General office clerks		1 81	1 81
Station agents	1 91	2 04	2 09
Other stationmen	1 56	1 71	1 65
Enginemen	3 89	4 53	4 13 2 52
Firemen	2 42	2 50	3 31
Conductors	3 20 1 92	3 30	2 13
Other trainmen	1 92 2 41	2 68	2 89
Machinists		2 19	2 23
Carpenters		2 16	2 33
Other shopmen	_ 11 1	2 25	2 15
Other trackmen		$\tilde{1}$ $\tilde{57}$	1 59
Switch tenders, &c		1 81	2 00
Telegraph operators	1 88	2 07	2 09
Employees—floating equipment		1 10	1 26
All other employees	1 81	1 87	1 95
All other employees	1 01		

The outstanding feature in the above table is the fact of increases to all classes, as between 1907 and 1909, with the single exception of general officers.

The distribution of salaries and wages during the past three years, has been as follows:-

	1907.	1908.	1909.
Way and structures Equipment Traffic expenses Transportation expenses General expenses	27,398,553	\$ 14,715,572 13,008,104 28,479,096 4,173,835	\$ 14,249,186 14,623,930 5,353,607 24,656,585 4,333,354

The new division of Traffic Expenses, it may be explained, was created almost wholly out of Transportation Expenses.

### TAXATION OF RAILWAYS.

The tax bill of Canadian railways amounted to \$1,594,880 in 1909, an increase over 1908 of \$275,480.

It is thought well to repeat the information given last year, with regard to the basis of taxation in the several provinces:

Ontario.—Section 6 of 'An Act to Supplement the Revenues of the Crown,' assented to

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 twenty 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 S of 'The Act to impose taxes on Commercial Corporations, etc.,' 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 provinec 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 Rail-

way 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.

### ELECTRIC RAILWAYS.

A complete reorganization of the basis of reporting by electric railways took place during the year. Since the collection of statistics began in 1901 it had been the practice to merely distribute schedules for the purposes of the annual return to this department. These schedules were probably the best that could be devised in the absence of any pattern or experience in dealing with such data. They were more or less general in character. Each railway followed its own method of accounting. The essential facts with regard to capital, public service, earnings, operating expenses, employees, equipment and accidents were no doubt accurately reported; but they were not in a form to permit of comparisons being made. Important and useful details were lacking. In the meantime, the number of lines multiplied and the business of electric railways increased greatly. The time was opportune for the installation of a new and carefully considered system in relation to statistics.

Classifications and schedules were printed and distributed; but this heavy task could not be carried out until nearly six months of the railway year had passed. It had been my privilege, however, to meet the members of the Canadian Street Railway Association on 11th November, 1908, and to explain to them the general features of the proposed changes. They heartily approved of the new plan, and expressed their willingness to co-operate. I desire in this way to gratefully recognize the response of electric railway corporations to the demands made upon them under circumstances which must have been exceedingly

inconvenient to many of them.

This year, however, for the first time the legal right of the department to ask for statistical information from corporations operating under a provincial charter has been questioned. This grave issue was raised by the largest reporting railway in the Dominion, the Montreal Street Railway Company. It would not, perhaps, be proper for me to discuss the technical aspects of this matter; but it will at least be generally conceded that, if any doubt exists as to the jurisdiction of the department in the premises, public interests demand that legislative steps should immediately be taken to set that point at rest. Canada has now adopted a system of street railway statistics which secures a uniform standard of reporting over North America, and it would be on the side of retrogression if it should lie in the power of any single corporation to render nugatory, or even to cripple, this commendable movement. In this instance, the Montreal Street Railway Company declined to conform with the requirements of the new schedules, for the reason above indicated, and to that extent the statistical tables for 1909 are incomplete.

#### MILEAGE.

The total mileage of electric railways in Canada in 1909 may be put at 988.97. This would show a decrease of 3.06 miles, as compared with 1908; but there was actually an increase. There has all along been confusion on the part of reporting lines as to the proper method of computing mileage, due almost wholly to the lack of a specific classification on the subject. That difficulty has been removed, and hereafter the facts in relation to mileage will be returned on a uniform basis. The mileage of 988.97 for 1909, following the analogy of steam railways, refers to first main track. The details with respect to mileage are as follows:—

Length of first main track	988.970
Length of second main track	215.057
Total length of main track	1,204.027
Length of sidings and turnouts	83.624
Total, computed as single track	1,287.651

It is not possible to turn back and revise the returns for preceding years, and the figures as reported are used in the following summary relating to mileage:—

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

<sup>\*</sup>Improperly included double track and sidings.

#### CAPITAL LIABILITY.

The paid-up capital on June 30, 1909, aggregated \$91,604,989, as against \$87,409,885 in 1908. The increase was therefore \$4,195,104.

The capital statement for 1907, 1908 and 1909 is as follows:—

	1907.	1908.	1909.
Stocks	\$ 43.491.746	\$ 50,295,266	\$ 51.946.433
Funded debt	31,166,976	50,295,266 37,114,619	39,658,556
Total	74,658,722	87,409,885	91,604,989

From the foregoing has been omitted the subsidies paid by governments and municipalities. These amounted to \$493,346 in 1908. They do not form a proper charge to capital.

### EARNINGS AND OPERATING EXPENSES.

The gross earnings for the year 1909 were \$14,824,936.55, showing a gain of \$817,887 over the preceding year.

The following is a comparison of earnings for the years 1907, 1908 and 1909:—

	1907.	1908.	1909.
	8	8	\$
Passenger Freight. Mails and express. Other earnings.	$12,013,421 \\ 344,367 \\ 41,951 \\ 233,190$	$13,233,724 \\ 346,021 \\ 54.883 \\ 372,421$	14,080,755 386,092 110,452 34,185
Total	12,630,430	14,007,049	14,611,484

The decrease in 'other earnings' for 1909 is accounted for by a change of classification, which limited this item to 'other car earnings,' and transferred sums previously credited under this head to 'miscellaneous income,' which forms part of the account dealing with net income.

The balance sheet for the year 1909, prepared in accordance with the new form, is as follows:—

Earnings and income: Gross earnings from operation Miscellaneous income		\$14,811,725 97 988,124 96
Operating expenses	\$8,885,235 70 843,959 12 1,213,142 24	15,799,850 93
Interest on floating debtOther deductions	104,573 13 36,631 99	11,083,542 18
Net income		\$ 4,716,308 75

It must be remembered, of course, that the operating expenses as given above include \$246,192.77 of net loss by certain railways.

The above net income was equal to 5.13 per cent on the electric railway capitalization of \$91,604,989.

The operating expenses for 1909 were \$8,884,690.71. These figures are slightly below those given in the statement above, in consequence of misunderstandings with respect to the charging of certain small items under the new classification. They fit, however, to the following details:——

Maintenance of way and structures:	
Track and roadway	\$386,646 54
Electric line	94,249 33
Buildings and fixtures	50,241 32
Maintenance of equipment:	00,211 02
Steam plant	18,008 61
Electric plant	36,682 74
Cars	405,497 36
Cars	321,050 88
Miscellaneous equipment	48,317 04
Miscellaneous shop expenses	39,608 67
Transportation—Operation of power plant:	,
Power plant wages	127,015 19
Fuel for power	184,719 72
Water for power	20,818 00
Lubricants and waste for power plant	8,262 43
Miscellaneous supplies and expenses	26,124 49
Hired power	686,128 63
Transportation—Operation of cars:	,
Superintendence	130,475 58
Wages of conductors	1,181,244 60
Wages of motormen	1,150,002 77
Wages, miscellaneous car service employees	121,009 71
Wages, car house employees	307,351 76
Car service supplies	53,713 15
Miscellaneous car service expenses	75,940 59
Hired equipment	25,988 40
Cleaning and sanding track	26,703 64
Removal of snow and ice	100,154 28
General:	· ·
Salaries of general officers	153,665 61
Salaries of clerks	154,213,54
Printing and stationery	28,157 11
Miscellaneous office expenses	32,422 53
Store expenses	20,133 95
Stable expenses	17,059 38
Advertising and attractions	55,343 96
Miscellaneous general expenses	151,399 58
Damages	201,877 48
Legal expenses—damages	19,147 15
Miscellaneous legal expenses	26,764 29
Rent of land and buildings	15,628 20
Rent of track and terminals	73,087 18
Insurance	85,235 41

The above operating expenses were equal to 59.93 of the gross earnings. In 1908 the proportion was 62.08.

#### PUBLIC SERVICE.

The electric railways of Canada carried 314,026,671 fare passengers in 1909, and 81,670,945 transfer passengers—making 395,697,616 in the aggregate.

Using the primary total for purposes of comparison, it is interesting to observe the growth of passenger traffic since 1901. Following are the figures:—

1901	120,934,656
1902	137,681,402
1903	155,662,812
1904	181,689,998
1905	203,467,317
1906	
1907	273,999,404
1908	299,099,309
1909	314,026,671

The total car mileage was 60,152,846, of which 737,720 was in connection with the carrying of freight, mails and express.

#### EQUIPMENT.

There were of all classes 3,544 cars in the service of electric railways in 1909. These were classified as follows:—

Passenger, closed	89 17
" combination 3	
Mail, express and baggage	20
Combination, passenger and freight	7 85
Snow ploughs	54
	90 93
Total	44

#### EMPLOYEES.

The number of employees in 1909 was 10,557—a gain of 603 over 1908. The aggregate of salaries and wages paid to this staff was \$6,761,281.12. This sum was equal to 77.84 per cent of the total operating expenses.

The employees were distributed according to the following division:—

General Administration—	
General officers	132
General office clerks.	413
Maintenance—	
Superintendents	72
Other employees	3,548
Transportation—	
Superintendents	100
Superintendents. Other employees.	6,292
<del>-</del>	
Total 10	0.557

#### ACCIDENTS.

The return of accidents for 1909 shows 68 persons killed and 2,139 injured—an increase over 1908 of one in the number killed and 256 in the number of injured.

These accidents were divided up as follows:-

	Killed.	Injured.
Passengers	11	1,303
Employees Others	50	618
. Total	68	2,139

The following summary of statistical facts will be instructive:-

1909.	988-97 91,604,989 14,611,484 4,962,501 14,980,755 386,092 31,185 8,885,235 643,135 643,135 643,135 643,135 663,135 663,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661,135 661
1908.	992 · 03 87,903,231 14,007,049 5,311,170 13,233,724 346,021 54,883 372,821 8,695,890 11,803,723 1,118,925 1,118,925 1,118,925 1,118,925 1,118,925 269,969,303 56,966,303 56,969,303
1907.	814-52 73,567,795 4,971,624 12,013,421 844,367 344,367 19,013,421 19,013,421 233,190 7,373,251 765,684 1,412,358 1,060,783 4,498,424 53,361,227 273,999,404
1906.	813 · 7+ 63,857,967 10,966,871 4,291,834 10,438,000 288,105 35,041 205,724 6,675,037 6,675,037 1,242,075 894,460 3,929,733 50,618,836 2,327,655,074 506,024
1905.	793-12 61,033,321 9,357,125 3,438,125 3,438,193 216,022 311,753 1,76,435 5,918,194 (29,656 1,240,001 1,240,001 3,301,402 45,959,101 203,467,317
1904.	766 -50 50, 399, 188 54, 399, 188 31, 27, 609 8, 082, 373 182, 143 30, 738 158, 333 5, 326, 516 606, 146 1, 377, 199 659, 213 2, 683, 957 42, 066, 124 181, 689, 998
1903.	47, 759, 36 47, 096, 453 7, 23, 677 2, 769, 819 6, 888, 409 164, 188 20, 276 160, 803 4, 472, 858 481, 236 777, 201 606, 602 2, 607, 817 38, 028, 529 155, 662, 812 155, 662, 812 155, 662, 812 155, 662, 812 155, 662, 812 155, 662, 812 157, 66
1902.	41,593,063 6,486,488,363 2,683,583 6,195,915 127,917 15,927 146,652 3,802,855 445,837 541,087 353,891 2,462,088 35,833,841 135,681,402 266,182
1901.	*674-58 \$39,076,018 \$5,768,283 \$2,333,120 \$5,529,687 \$81,33,135 \$110,377 \$3,435,162 \$31,299 \$502,101 \$32,299,760 \$3,299,760 \$3,299,760 \$31,750,754
	Paid unileage

\*Improperly included, double track and sidings.

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SSIONAL PAPER No. 20b										
	Injured one in every	255,137	335,808	308,855	357,657	236,041	219,327	277,327	258,736	241,001
Passengers,	Killed one in every	40,311,552	15,297,933	15,566,281	18,168,999	6,782,243	21,605,006	10,148,126	16,616,628	28,547,879
	Number carried.	120,934,656	563 137,681,402	778 155,662,812	844 181,689,998	1,296 203,467,317	1,653 237,655,074	1,736 273,999,404	1,883 299,099,309	2,139 314,026,671
	Total.	314	563	778	8.14	1,296	1,653	1,736	1,883	2,139
BD.	Others.	98	120	212	272	347	-14	532	539	618
INTURED	Employees.	58	33	62	64	87	127	216	188	218
	Passengers, Employees.	158	410	504	508	862	1,085	886	1,156	1,303
	Total.	15	32	39	53	26	47	7.1	29	89
eD,	Others.	11	22	22	40	133	3.4	37	43	50
Кільер,	Employees.	-	1	1.	ec	252	61	. 7	9	7
	Passengers, Employees.	က	6	10	10	30	=	25	18	11
Years.		901	902	903	904	905	906	907	908	

Details with respect to the foregoing facts will be found in tables forming the body of the annexed report.

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

> J. L. PAYNE, Comptroller of Statistics.

TAALE 1.—Location of Steam Railway of the Dominion of Canada, to June 30, 1909

4 D. II		Dista	nce.
Name of Railway.	Description.	Miles.	Total.
Alberta Railway and Irrigation Co	From Lethbridge, Alberta, to Coutts, on International boundary, 4 ft. Si in. gauge	64 · 61 47 · 21	111 ·82
Albert Southern	Harvey Branch Junction to Alma, N.B Harvey Branch, Albert, to Harvey Bank, N.B	16·00 3·00	
Algoma Central and Hudson Bay	Sault Ste. Marie to Chippewa—Main line Branch—Michipicoten to Helen Mines Josephine Junction to Josephine Mine	69 · 35 10 · 29 10 · 00	19·00 89·64
Atlantic, Quebec and West- ern Baie des Chaleurs in Atlan-	82 miles under construction		20.00
tic and Lake Superior System Bay of Quinté Railway	Metapedia Station on I.C.R. to Paspebiac, 100 miles.  Deseronto to Bannockburn	$\begin{array}{c} 76.00 \\ 2.00 \end{array}$	100.00
Bedlington and Nelson	Yarker to Sydenham		89 · 37
Beersville Coal and Railway	From Adamsville to Mount Carlyle		23·97 8·63
Brandon, Saskatchewan and Hudson Bay	International boundary at Bannerman to Brandon, Man		69 .45
Bessemer and Barry's Bay. British Yukon	White Pass to White Horse Spur, B.C., and Branch to White Horse.		5·00 90·32
Brockville, Westport and	Moncton, on Intercolonial Railway, to Buctouche, N.B.		32.00 $45.00$
Bruce Mines and Algoma. Canada Atlantic, including Ottawa, Arnprior and Parry Sound Railway, now in Grand Trunk Sys-	Town of Bruce Mines to Rock Lake Mine		17 -28
tem	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  From Glen Robertson, on Canada Atlantic, to Hawkes-		396 · 41
	bury, Ont	16.25	38 -49
Canadian Northern	Port Arthur to Rainy River.  International boundary to Winnipeg. Beaver to Edmonton.  Branches—Stanley Junction to Gunflint Lake.  "Carman Junction to Somerset.  "Neepawa Junction to McCreary Junction.  "Gilbert Piains Junction to Prince Albert.  "Sifton Junction to Winnipgosis.  "Emerson to South Junction.  "Winnipeg Transfer Track.  "Rossburn Junction to Russell.  "Greenway to Adelpha.  "Arizona Junction to Brandon Junction.  "Brandon Junction to Carberry.	705 · 00 751 · 36 66 · 90 78 · 60 70 · 40 360 · 60 21 · 20 72 · 70 9 · 96 104 · 20 52 · 10 77 · 00	

Table 1.—Showing Location of Railways, &c.—Continued.

Main Line—Windsor, Ont., to Suspension Bridge,   226-18   Amhlerstburg Branch—Esex Centre to Amherstburg   16-88   St. Clair Branch—Fort Erie to Melland Junction   17-50   Erie and Niagara Branch—Old Fort Erie to Niagara   30-60   Oil Springs Branch—Old Fort Erie to Niagara   30-60   Oil Springs Branch—Oll Springs to Oil City   5-50   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   125-00    Canadian Pacific—Owned   Main Line—Montreal to Vancouver   2,905-96   Main Line—Montreal to Vancouver		—Showing Education of Italiways, &c. — Constitute		
Canadian Northern—Con.   Branches—Oak Point Junction to Oak Point   60-40			Dist	ance.
## Hartney to Virden	Name of Railway.	Description.	Miles.	Total.
Canada Coals and Railway	Canadian Northern—Con.	" Hartney to Virden " Battleford to Battleford Junction " Brandon to Regina " Edmonton Junction to Mornville " Edmonton to Stony Plains " Oakland to Tobogan " Thunderhill Junction to Provincial boun-	37.40 $8.00$ $220.02$ $22.90$ $21.40$ $17.30$	
Canada Eastern, now included in Intercolonial Railway.   Late Northern and Western of New Brunswick.   Fredericton to Loggieville.   125 · 00	Co., now Maritime Railway, Coal and Power Co. Canada Southern	Maccan Station, I.C.R., to Joggins Coal Mine.  Main Line—Windsor, Ont., to Suspension Bridge  Amherstburg Branch—Essex Centre to Amherstburg.  St. Clair Branch—St. Clair Junction to Courtwright  Fort Erie Branch—Fort Erie to Welland Junction  Erie and Niagara Branch—Old Fort Erie to Niagara.  Oil Springs Branch—Oil Springs to Oil City  Sarnia, Chatham and Erie—Oil City to Petrolia	$\begin{array}{c} 226 \cdot 18 \\ 16 \cdot 83 \\ 62 \cdot 63 \\ 17 \cdot 50 \\ 30 \cdot 60 \\ 5 \cdot 50 \\ 7 \cdot 00 \end{array}$	15.00
Owned.         Main Line—Montreal to Vancouver Branches—Coleridge to Crows Nest.         214-90           Branches—Coleridge to Crows Nest.         214-90           "Quebec to St. Martins Junction.         159-80           "Berthier Junction to Grand Piles.         26-90           "Berthier Junction to Berthier.         2-10           "Joliette Junction to St. Félix.         16-60           "Ste. Thèrésé Junction to St. Jérome.         13-30           "Ste. Thèrésé To St. Eustache.         60-00           "St. Lin Junction to St. Lin.         15-10           "Brockville and Ottawa Ry.         "St. Lin Junction to St. Lin.         15-10           "Buckingham Stn. to Buckingham Village.         3-20           "Carleton Junction to Brockville.         44-90           "Sudbury to Capper Mines.         5-60           "Dyment to Ottamine.         6-90           "Molson to Lac du Bonnet.         21-50           "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           "Rudyard to Kaleida.         6-50	Canada Eastern, now in- cluded in Intercolonial	Late Northern and Western of New Brunswick		382 · 19
## Mattawa to Kippewa. 47 20  ## Mission Junction to Sumas. 10 00  ## Revelstoke to Arrow Head. 27 40  ## Vancouver to Coal Harbour. 1 20  ## Three Forks to Sandon 4 30	Owned  Montreal and Western  Brockville and Ottawa Ry.	Branches—Coleridge to Crows Nest.  " Quebec to St. Martins Junction. " Piles Junction to Grand Piles. " Berthier Junction to Berthier. " Joliette Junction to St. Félix. " Ste. Thèrésé Junction to St. Jérome. " Ste. Thèrésé to St. Eustache. " St. Jérome to Labelle. " St. Jérome to Labelle. " St. Lin Junction to St. Lin. " Buckingham Stn. to Buckingham Village. " Carleton Junction to Brockville. " Sudbury to Sult St. Marie. " Sudbury to Soult St. Marie. " Sudbury to Copper Mines. " Dyment to Ottamine. " Molson to Lac du Bonnet. " MeGregor to Varcoe. " Whittier Junction to Emerson. " Rugby Junction to Gimli. " Rosenfeldt to Gretna. " Rugby Junction to Gimli. " Rosenfeldt to Gretna. " Rugby Junction to Rogina. " Kenmay to Estevan. Souris Branch (Glenboro' to Souris. Deloraine to Napinka. Branches—Schwitzer Junction to Regina. " North Portal to Pasqua. " North Portal to Pasqua. " North Portal to Pasqua. " New Westminster Jct. to New Westminster  " Mattawa to Kippewa. " Mission Junction to Sumas. " Revelstoke to Arrow Head. " Vancouver to Coal Harbour.	214 · 90 159 · 80 26 · 90 2 · 10 16 · 60 6 · 90 6 · 90 179 · 30 5 · 60 6 · 90 21 · 50 55 · 50 63 · 80 100 · 40 56 · 10 13 · 80 45 · 80 6 · 50 156 · 20 46 · 90 47 · 20 16 · 30 8 · 20 47 · 20 10 · 40 179 · 30 18 · 60 19 · 70 10 · 80 10 · 90 11 · 50 12 · 50 13 · 80 14 · 90 15 · 50 15 · 50 15 · 50 15 · 50 15 · 50 16 · 30 179 · 30 18 · 60 18 · 60 18 · 60 18 · 60 18 · 60 179 · 70 18 · 70 19 · 70 10	

Table 1.—Showing Location of Railways, &c.—Continued.

		Dist	ance.
Name of Railway.	Description,	Miles.	Total.
anadian Pacific—Con. Lake Témiscamingue Colonization		5·60 430·10 0·90 182·10 0·90 122·40 28·50 226·20 118·50 37·00	3,053 10
	Total mileage owned		5,959 00
Lines leased	Atlantic and North-west (in Canada)—         South end Lachine Bridge to Maine boundary, Que	200.70	
	St. Lawrence and Ottawa— Ottawa to Prescott, Ont	58.30	
	Ontario and Quebec—  Montreal (Windsor Sta.) to Toronto Jct 339 ·00  Mile End to Adirondack Jct 10 ·00  St. Luc Jct. to Western Jct 1 ·70  Toronto Jct. to Toronto (Union Station). 4 ·90  Leaside Jct " 5 ·30  London to Windsor 112 ·60	474.70	
	Credit Valley	474.50	
	West Ontario Pacific—Woodstock to London  Toronto, Grey and Bruce— Toronto Junction to Owen Sound	175 · 80 26 · 70	
	Guelph Junction— Guelph Junction on Credit Valley Rv. to	190.00	
	Guelph	14·90 11·00	
	Montreal and Ottawa— Vaudreuil to Jet. with Canada Atlantic 86·70 Rigaud to Pt. Fortune		
	Lindsay, Bobcaygeon and Pontypool— Burketon Junction to Bobcaygeon.	93·50 38·70	
	Toronto, Hamilton and Buffalo—  Mamilton Junction to Hamilton  Cap de la Madeleine—	2.70	
	From Main Line C. P. R., at Junction with Piles branch to Cap de la Madeleine	2.30	
	Aroostook Junction to Edmondston 57·10	177 -30	

TABLE 1.—Showing Location of Railways, &c.—Continued.

		Dista	nce.
Name of Railway.	Description.	Miles.	Total
anadian Pacific—Con. Leased lines	St. John and Maine—       90.30         Vanceboro to St. John.       90.30         Fairville to West St. John.       3.40	93.70	
	Fredericton— Fredericton Junction to Fredericton  New Brunswick and Canada— McAdam Junction to St. Stephen	22 · 10	
	St. Stephen and Milltown Ry.— St. Stephen to Milltown	117 ·60 4 ·60	
	Tobique Valley— Perth Centre to Plaster Rock	27 .50	
	Manitoba and Northwestern— Portage la Prairie to Wynyard	941.00	
	Manitoba Southwestern Colonization—         100 · 50           Manitou to Deloraine	341·80 215·40	
	Great Northwest Central—   Chater to Miniota		
	British Columbia Southern— Nelson to Proctor		
	Northern Colonization— Labelle to Nominique.	28.90 $23.50$	
	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 Columbia and Western—	36.40	
	Castlegar Junction to Midway		
	Kootenay and Arrowhead— Lardo to Gerrard Columbia and Kootenay— Nelson to Robson		
	Vancouver and Lulu Island, Vancouver, to Steveston. Calgary and Edmonton— Calgary Junction to Strathcona	59·50 16·90	
- 	Wetaskiwin to Hardisty. 95 · 00 Lacombe to Stettler. 49 · 60		

Table 1.—Showing Location of Railways, &c.—Continued.

Yawa of Dailman	Describedien		Dista	ince.
Name of Railway.	Description.		Miles.	Total.
Canadian Pacific—Con.	Ottawa Northern and Western— Hull to Waltham Hull Junction to Maniwaki	77·50 80·90	158.40	
	Tilsonburg, Lake Erie and Pacific— Ingersoll to Port Burwell. Code Junction to Embro.	33·40 5·00	38.40	
Leased lines	Guelph and Goderich— Guelph to Goderich Linwood Junction to Listowel	80 · 60 16 · 20	96.80	
	Nicola, Kamloops, and Similkameen— Nicola to Spence's Bridge. Walkerton and Lucknow— Walkerton to Saugeen Junction		47·00 37·60	
	Georgian Bay and Seaboard— Victoria Harbour to Coldwater St. Mary's and Western Ontario—		13.30	
	Embro to St. Marys	-	15.70	2 640 .20
	" owned	• • • • • • • • • • • • • • • • • • • •	ê	959.00
Canadian Government Rys.	Halifax to St. Rosalie Junction Dartmouth Branch Truro to Sydney Pt. du Chene to St. John Indian Town Branch St. Leonard Junction to Nicolet River Ouelle Branch St. Charles Junction to Chaudiere Junction Dalhousie Branch Pictou to Oxford Junction Brown's Point to Stellarton New Glasgow Junction to Pictou Landing Pugwash Junction to Pugwash.	796 ·04 12 ·00 214 ·27 101 ·29 13 ·45 14 ·70 6 ·19 16 ·73 6 ·28 6 ·28 6 ·39 11 ·90 8 ·18 4 ·4 ·48 7 ·07 43 ·54		,450.37
	Windsor Branch (32 miles) of I.C. Ry. is operated by Dominion Atlantic Ry.  Prince Edward Island—  Main Line—Tignish to Georgetown Charlottetown to Murray Harbour  Branch—Mount Stewart to Souris  "Montague Junction to Montague.  "Emerald to Cape Traverse	158 ·60 52 ·30 38 ·40 6 ·20 12 ·90		269 -33
		145 · 40 140 · 30 23 · 58 23 · 45	1	,719·70 332·73
	Hawkesbury to River à Pierre	169 · 00 33 · 00 15 · 20 36 · 20 13 · 40		

Table 1.—Showing Location of Railways, &c.—Continued.

No. of Dellaces	Description	Dista	ince.
Name of Railway.	Description.	Miles.	Total.
Cape Breton Railway	Point Tupper to St. Peters	30·00 1·00	21 00
Caraquet	From Gloucester Junction, Intercolonial Railway, 5 miles south of Bathurst Station, easterly along the south shore of Baie des Chaleurs to Shippigan Harbour, N.B.		31·00 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	$ \begin{array}{llllllllllllllllllllllllllllllllllll$		140 · 13
Central Railway of New Brunswick, now New Brunswick Coal and Rail- way Company	From Norton Station, on the Intercolonial Railway to Chipman	44·66 13·34	
Campbellford, Lake Ontario and Western	From Cobourg, Ont., to Junction with Central Ontario Railway, 49 miles under construction.		58 •00
Cumberland Railway and Coal Company (formerly Spring Hill and Parrs-	Spring Hill Junction, Intercolonial Railway, to Spring		74 · 18
	Hill Coal Mines, N.S., and Parrsboro', on the Bay of Fundy.  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.		32.00
Dominion Atlantic, com- prising Windsor and An- napolis, Yarmouth and Annapolis and Corn- wallis Valley and lease of Windsor Branch of Inter- colonial and Midland of			
	Windsor to Yarmouth	170.78	
	Wilmot to Torbrook	5 · 26	
	(formerly Cornwallis Valley Railway)	14 · 15	
	Halifax, leased. Windsor to Truro.	$\begin{array}{c} 31 \cdot 47 \\ 57 \cdot 21 \end{array}$	979.97
Eastern British Columbia.	Corbin to McGillivray, B.C		278 · 87 14 · 00
Edmonton, Yukon and			4.50
	From Elgin, County of Albert, N.B. to Petitcodiae		± .00
-0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	Junction with Intercolonial Railway; thence to Havelock in County of King's, N.B	27 ·00 1 ·00	90.00
Esquimalt and Nanaimo	Victoria to Wellington, Island of Vancouver		28 · 00 78 · 00

# TABLE 1.—Showing Location of Railways, &c.—Continued.

Name of Railway.	Description.		Distance.		
valid of Railway.	Description.	Miles.	Total.		
Fredericton and St. Mary's Rv. Bridge, now in Inter-colonial 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		
			001.01		
			1,326.14		
Leased and partly owned	Buffalo and Lake Huron Ry	161.30	2,947·14 161·30		
	Total mileage owned and leased		3,108.44		
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		2 · 25		
Grand Trunk Pacific	inches). Under construction, 945 miles track laid				
Gulf Shore	Junction with Caraquet Railway at Pokemouche to Tracadie operated by Caraquet Ry		16.78		
Halifax and South-western, formerly Nova Scotia Southern, including Cen- tral Nova Scotia, Halifax and Yarmouth and Middleton and Victoria Beach			10.73		
Hampton and St. Martin,	Mahone Junction to Lunenburg.  Bridgewater Junction to Middleton Junction.  New Germany Junction to Caledonia.  Middleton Junction to Victoria Beach.	7.60 $53.20$ $22.21$			
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·S5		
Irondale, Bancroft and Ot-	Across the Ottawa River at City of Ottawa 1.40		- 02 00		
Inverness and Richmond, now Inverness Ry. and			48.00		
Coal Co	Inverness to Point Tupper Junction		61 .00		
Kaslo and Slocan	From Kaslo to McGuigan, B.C		23.37		
Kent Northern and leased line	Richibucto, N.B., to Kent Jct., Intercolonial Railway.		27.00		

Table 1.—Showing Location of Railways, &c.—Continued.

	Description.		
Name of Railway.		Distance.	
		Miles.	Total.
Kettle River Valley	Richibucto to St. Louis. Grand Forks to Lynch Creek, B.C Main Line Kingston to Renfrew. Glendower Branch—Bedford to Zanesville Mine. Robertsville Branch—To Robertsville Mines. Branches—To Doran's Mills, Charcoal Works Me- Laren's Mills, Bethlehem Iron Mines, Lavant Mills,	103·40 4·10 •90	7 · 00 20 · 00
	Clyde Forks Mills, Wilson's Mine, Carswell's Mills, William's Mine, Cameron Bay	1 · 40	100 80
Lenora Mount Sicker	Dawson City to Sulphur Springs Lenora Mines to Crofton, B.C Lyster Station, Grand Trunk, to St. Jean des Chaillons.		109 ·80 31 ·81 12 ·00 30 ·00
Lake Erie & Detroit River. Erie and Huron	Walkerville, Ont., to St. Thomas	$126.78 \\ 72.03$	
Liverpool and Milton Manitoulin and North Shore	London to Port Stanley on Lake Erie		198 ·81 23 ·66 5 ·75 15 ·83
Middleton and Victoria Beach, now included in Halifax and Southwest-	Middleton to Victoria Beach		1 ·91
peg Transfer Ry., the Portage and North- western the Waskada and Northeastern leas- ed to Govt. of Manito- ba and operated by the Canadian Northern Marmora Ry. and Mining Co., (formerly Ontario, Belmont and Northern). Midland of Nova Scotia	International boundary to Winnipeg, and branches  Central Ontario Junction to Wanston		350 · 68
•	From Windsor to Truro, N.S., see Dominion Atlantic Railway.  From Lennoxville to Vermont boundary, there connecting with Connecticut and Passumpsic Rivers Railway; also connects with Grand Trunk and C. P. R. at Lennoxville.		
	Branch—Stanstead Junction to Stanstead	3.51	35.46
	International Boundary to Portage la Prairie  " Morden	$ \begin{array}{r} 76.52\\ 15.25\\ \end{array} $	91 .77
Montreal and Vermont Jet.	From Junction with Stanstead, Shefford and Chambly 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 Chambles and St. Lawrence Luncius.		
Montreal, Portland and Boston, now Montreal & Province Line	Champlain and St. Lawrence Junction Railway  Junction with Grand Trunk at St. Lambert to Farnham Maniaville to Cooking	32.00	23.60
	Marieville to Césaire	8.60	58 -60

# Table 1.—Showing Location of Railways, &c.—Continued.

Name of Railway.	Description.	Dista	ince.
	,	Miles.	Total.
Montreal and Atlantic (for- merly Southeastern)	Main Line—Farnham to Richford on International boundarySutton Junction to Drummondville	43 ·70 59 ·20	
	Leased—Lake Champlain and St. Lawrence Junction —Stanbridge to St. Guillaume	102·90 60·50	109 40
Morrissey, Fernie and	(Connects with Connecticut and Passumpsic, Grand Trunk and Stanstead, Shefford and Chambly Rys.).		163 · 40
Michel	From Swinton to Carbonado, B.C., and leased line St. Constant Junction to Rouse's Point From Five Mile Point to Fort Sheppard on Interna-		10 · \$5 27 · 06
New Glasgow Iron, Coal and Railway Company, now Nova Scotia Steel	tional boundary, B.C		55.42
and Coal Co New Brunswick and Prince	From Ferrona Junction, I.C.R., to Sunny Brae		12.50
	From Sackville Station, Intercolonial Railway to Cape Tormentine		36.00
New Brunswick Southern (formerly Shore Line) New Westminster Southern	St. John, N.B., to St. Stephen, N.B		$82.35 \\ 24.10$
Nosbonsing and Nipissing. Orford Mountain Ottawa and New York Pembroke Southern leased	From Lake Nosbonsing to Lake Nipissing		5·50 55·10 56·90
to Canada Atlantic Philipsburg Ry. and Quarry	From Pembroke to Golden Lake		21.36
	Stanbridge Station of Canadian Pacific and Central Vermont Railways, to Philipsburg, Missisquoi Co From Wyman's Station, on Pontiae Pacific Junction Railway, to Bristol Iron Mines, County Pontiac, Que.		6·00 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)			255.50
Quebec Bridge and appro- aches to connect adjacent railways			
Quebec and Lake St. John	struction 10 miles). Quebec to Chambord Junction. Chambord Junction to Chicoutimi. Valcartier to Gosford. Chambord Junction to Roberval.	176 · 00 51 · 00 5 · 50 14 00	
Quebec Central	La Tuque Junction to La Tuque.  Main Line—Sherbrooke to Harlaka Junction, Intercolonial Railway 5 miles from Levis, Que.  Beauce Junction to St. George.  Tring Megantic—Tring Junction to Megantic	138·00 24·00 60·00	286 · 50
	(Connects with Grand Trunk, Canadian Pacific and Boston and Maine Rys. at Sherbrooke).		222 · 00
	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 Tour- mente		27 .00

# Table 1.—Showing Location of Railways, &c.—Continued.

Name of Dailway	Description	Dista	nce.
Name of Railway.	Description.	Miles.	Total.
Quebec, Montreal and Southern, comprising East Richelieu Valley Railway and United Counties		80.82	
And South Shore Railway	From Fortierville to Junction with Grand Trunk at St. Lambert	109 · 69 1 · 40	191 -91
Red Mountain	Campbellton, N.B., to St. Leonard's, 110 miles (30		9 · 59
Rutland and Noyan Stanstead, Shefford and Chambly	miles under construction). International Boundary to Noyan Jct.  From Junction St. Labor Control of Wiles Wilder		80 00 3 · 39
	From St. John to Fairville, crosses St. John River at the Falls by a cantilever steel bridge, and connects Intercolonial Railway with New Brunswick Rail- way, C.P.R., included in Canadian Pacific System, 2.00 miles.		43.00
St. John Valley and Rivière du Loup	From Fredericton, N.B., to Woodstock, N.B., 66 miles, of which 6 miles are built		
	Salisbury to Albert, N.B		50.00
St. Lawrence and Adiron	Bond Lake, Ont., to Schomberg	19·92 12·90	14.40
Sydney and Louisburg (Dominion Coal Co.)	Leased—Valleyfield to Beauharnois.  Sydney Harbour to Louisburg Harbour.  Branches to coal mines.  Sydney Junction to Sydney.	$ \begin{array}{r}     13 \cdot 30 \\     \hline     39 \cdot 31 \\     22 \cdot 43 \\     \hline     1 \cdot 25 \end{array} $	46 · 12
Spokane and British Col- umbia	Carson to Grand Forks		62.99 $3.70$
St. Mary's River, now Alberta Railway and Irrigation Co			
Temiscamingue and Northern Ontario	North Bay to Cochrane	251 ·40 7 ·80 3 ·90 1 ·64	
Thousand Islands	Gananoque on St. Lawrence River to Thousand Island		264 · 74
Témiscouata	Junction. Riviere du Loup, Que., to Edmundston, N.B., on the New Brunswick Railway. Branch—Edmundston to Connors, on St. John River	\$1.00 32.00	6.33
Tilsonburg, Lake Erie and Pacific	Port Burwell to Ingersoll, now in Can. Pac. Ry		113.00

Table 1.—Showing Location of Railways, &c.—Concluded.

Name of Railway.	Description.	Dista	ance.
Name of Italinay.	Description.	Miles.	Total.
		79 ·88 0 ·27 3 ·52	
Trans-Canada	From Roberval to Port Simpson across the continent, 60 miles from Roberval, westward under construction.		83 •67
Victoria and Sydney Victoria Terminal Railway	Victoria to Sidney, B.C		16.26
and Ferry Vancouver, Victoria and Eastern	City of Victoria  Laurier to Grand Forks.  Grand Forks Junction to Phœnix  Grand Forks to Granby Smelter.  Midway to International Boundary.  Chopaka to Keremoes.  International Boundary to Vancouver.  Cloverdale to Port Guichon.  Cloverdale to Sumas.  Burrard Inlet to Line.	16·47 25·82 4·74 28·89 18·20 35·84 17·31 29·29 1·93	1.14
Wellington Colliery York and Carleton	Union Bay to Cumberland  Junction with Canada Eastern Ry. at Cross Creek Station to Ryan Brook, N.B		178 · 49 10 · 75 10 · 50

9-10 EDWARD VII., A. 1910

Table 2.—Summary of Mileage Operated for the

						S	INGLE TR	ACK.
TAGITICAL:	Name of Railway.	Capital	esented by Stock.	Line of Proprietary	Line operated under	operated under	Line operated under	Total mileage
1111111		Main line.	Branches and spurs.	com- panies.	lease.	&e.	rights.	operated.
1	Albert Southern	19:00		 				19.0
	Alberta Ry. & Irrigation Co	111 29	.53				1.60	113.4
3	Atlantic & Lake Superior	100:00					1.75	$\frac{100.0}{22.2}$
ł	Atlantic, Quebec & Western Algoma Central & Hudson Bay	20·50 89·64						89.6
	Bay of Quinté	78.00	11.37				19:00	108.3
í	Bedlington & Nelson	15:30			8.67			23.9
	Bessemer & Barry's Bay	5:00					[	69·4
	Brandon, Sask. & Hudson Bay British Yukon	69:45 85:80	4:52					90.3
	Brockville, Westport & North-	00 0						
	western	45.00						45.0
	Bruce Mines & Algoma	17.28 $226.18$						$\frac{17 \cdot 2}{382 \cdot 1}$
0	Canada Southern	1 20 IC	150 01					002 1
1		1,406.83	43.54				40.30	1,490.0
5	Prince Edward Island	150.90	118:43					269.3
	Canadian Northern	1,146 26	1,345 22		349.44	255 50	3.80	3,096°4 336°8
1	Canadian Northern, Ontario Canadian Northern, Quebec	169:00	97.80			3 70	3.80	266 . 8
	Canadian Pacific	2,905.90	$2.750 \cdot 30$	0.2.457.50	)=1.310°60	$^{1}$ $-184^{\circ}00$	37:30	9,6451
)	Cape Breton	31.00	)	1	1	1		31
	Caraquet	68.00			16.48			84 · 13 · (
	Carillon & Grenville	13.00 140.13				9:60		149.7
	Crow's Nest Southern		8					74.
	Cumberland Ry. & Coal Co	32:00		1	1			32 (
6	Dominion Atlantic	242.14	5.26		31.47		14.42	293 :
6	Edmonton, Yukon & Pacific (C.N.R.).	4.50						4.5
8	Eastern British Columbia	14.00					}	14.0
9	Elgin & Havelock	27:00	1.00					28.0
	Esquimalt & Nanaime	78:00				1/21 - 2/	12.71	$\frac{78}{3,122}$
)	Grand Trunk (in Canada) Grand Trunk (Canada Atlantic)	308:41			59.8	101 90	19 (1	456
3	*Grand Trunk (Canada Amanue)	0.00 4						
1	Halifax & Southwestern	246.80	) 123 (0)	ll		1	+ 2.30	372
	Hampton & St. Martins		)					30° 52°
	Hereford	52 88 80 00				••		80
	Inverness Ry. & Coal Co	61.00	)					61
	Irondale, Bancroft & Ottawa Kalso & Slocan	1 48.00	) i					48.
	Kalso & Slocan	23.18	19	•	7:00			23· 34·
	Kent Northern	20:00	)		1 100	<u> </u>		20
	Kingston & Pembroke	103.40	6:40	)				109
	Klondike Mines	31.8	1					31.
	Lake Erie & Detroit River (Pere		,				136.78	335
	Marquette)			5				5.
	London & Port Stanley						42	24
	Lotbinière & Megantic	30.0	0					30.
	Maganetawan River	1.9		2				15
	Manitoulin & North Shore Maritime Ry. & Coal Co							15.
	Massawippi Valley						2:95	38.
•	Midland of Manitoba	91 7	7				. 99	
	Montreal & Atlantic			0		9		163
	Montreal & Province Line Montreal & Vermont Junction.			0				
	Morrissey, Fernie & Michel				5:0	3		

<sup>\*</sup> Under construction 945 miles; track laid June 30, 1909.

# SESSIONAL PAPER No. 20b Year ended June 30, 1909—All Tracks.

#### SECOND TRACK.

New line	R	ails.		resented by al Stock.	Lines operated	Lines operated under	Total Mileage	New line con- structed	Rails.
structed during year.	Iron.	Steel.	Main line.	Branches and spurs.	under lease.	trackage rights.		during year.	Steel.
1									
		19:00							
		111.82							
		100:00 20:50							
		89.64							
		89.37							
		23:97							
		5.00							
		69 45 90 32							
		90 52							
		45.00							
		17.28							242.98
		382.19	226.18	16 80			242.98		242 98
		1,450.37	16:00			37 60	53.60		16:00
		269:33							
		3,096 42							
		332.73							
· · · · · · · · ·		266·80 9,608·30			98:10		483 20		
		31.00			00 10				
		84.78							
		13.00							
		149:73							
		74·18 32·00							
	2.84	276.03							
	1	2,000							
		4.50							
		14.00					1		
		28:00 78:00			*				
		3,108 44			\				706:48
		456 · 26							.88
		369.81							
		30.00 $52.85$							
		80.00							
		61.00			[				
		48:00							
		23.37			,				4
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	6:40	103:40				1			
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		400.01							
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		23.66							
		30.00							
		1.91	II						
		15.83							
		15·00 35·46							
		91.77							
		163 40					6:40		
		58.60	)						
		23.60							
		10.83	)	. '					

9-10 EDWARD VII., A. 1910
Table 2.—Summary of Mileage Operated for the

1						s	INGLE TR	ACK.
ber.	Name of Railway.	Line repre Capital	esented by Stock.	Line of proprietary	operateu	Line operated under	Line operated under	Total mileage
Number.		Main line.	Branches and Spurs.		under lease.	contract &c.		operated.
	Moneton & Buctouche	32 00						32:00
	Napierville Junction	27.06						27.06
	Nelson & Fort Sheppard	55.42						60.84
	New Brunswick Coal & Ry.Co	58.00						58.00
62	New Brunswick & Prince Ed-	36:00						36 00
63	ward Island	82.19						82:35
	New Westminster Southern	24.10					1.48	25.58
	North Shore	6.13					1 10	8.63
66	Nosbonsing & Nipissing	5.50						5.50
	Nova Scotia Steel & Coal Co	12:50						12.50
	Orford Mountain	28:60						55.10
69	Ottawa & New York	56.90					1.90	58.80
	Phillipsburg Ry. & Quarry Co	6.00						6.00
71	Pontiac & Renfrew	4.25						4.25
72	Princeton Branch of Washing-		1					
	ton Co. Ry. U.S	5.10						5.10
	Quebec Central	138.00						222 00
	Quebec Ry. Light & Power Co	24.00						27:00
	Quebec & Lake St. John	240.00						286.50
	Quebec, Montreal & Southern							191.91
	Red Mountain							9:59 3:39
	Rutland & Novan	\$ 39 45:00		)				50:00
	Salisbury & Harvey	11.40		,				. 14:40
	Stanstead, Shefford & Chambly							43.00
	St. Clair Tunnel	2 25		1		1		2.25
	St. Lawrence & Adirondack	32.82					8.92	55.04
	Sydney & Louisburg	39.00					1.20	64.19
	Spokane & British Columbia							3.70
	Temiscouata	113.00						113.00
	Temiskaming & Northern Ontario	251.40						264 · 74
	Thousand Islands			5				6.33
	Toronto, Hamilton & Buffalo							88 03
	Vancouver Copper Co							12.00
91	Vancouver, Victoria & Eastern	178.49				1.	1.48	179.97
92	Victoria & Sydney	16.56			{· · · · · · ·			16.26
93	Victoria Terminal Ry. & Ferry	1.1						1.74
0.4	Walliamton Calliam Ca				1			1.14
	Wellington Colliery Co	10.75						10.75 10.50
370	York & Carleton	10 90	1					10 30
	Final Totals	14,258.60	4,903.5	2,458.59	1,866.34	617:10	300.08	24,404.25

SESSIONAL PAPER No. 20b

Year ending June 30, 1909.—All Tracks.—Continued.

					Sı	ECOND TE	ACK.		
New line	Ra	ils.	Line repr Capita	resented by al Stock.	Lines	Line operated under	Total mileage	New line	Rails.
construct- ed during Year.	Iron.	Steel.	Main line,	Branches and Spurs.	under lease.	under trackage rights.		ed during year.	Steel.
		32:00							
		27:06							
		55°42 58°00							
		00 00							
		36:00			·				
		82·35 24·10							
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		5:50							
		12.50 $55.10$							
		56.80							
		6:00						l	
		4 · 25							
		5.10	1						
		222:00							
		27:00					6.00		6.00
		286 50 191 91							
		9.59							
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		6.33					9.04		9:0
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		178.49							
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	39.24	24,064 93	3 1,349.08	16.80	98.10	37.60	1,501.58		1,463 98

9-10 EDWARD VII., A. 1910 Table 2.—Summary of Mileage operated for

Sessemer & Barrys Bay.   1 00   1 00   1 00     Brandon, Saskatchewan & Hudson Bay   8 32   8 32   8 32     British Yukon.   11 Brockville, Westport & North-western .   2 00   2 00   2 00     2 Bruce Mines & Algoma   144 65 44 56   189 21   189 21     Canadian Government Rys.   365 74   365 74   365 74     Intercolonial   365 74   365 74   365 74     Intercolonial   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365 74   365	-									
Albert Sauthern   2 Alberta Ry & Irrigation Co.   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11					YAI	RD TRA	ck and Si	bings.		
Albert Sauthern   2 Alberta Ry & Irrigation Co.   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11 59   11	, .	Name of Railway,	Line repre	sented Stock.	erat-	der der nct.	Total		I	Rails.
3 Atlantic & Lake Superior   4 Atlantic, Quebec & Western   5 Algoma Central & Hudson Bay   22°50   9°38   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   3	Number	•	Main line.	Br'hs and spurs.	Line op ed un lease.	Line op ed un contra	Mileage	structed during	Iron	Steel.
3 Atlantic & Lake Superior   4 Atlantic, Quebec & Western   5 Algoma Central & Hudson Bay   22°50   9°38   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   32°43   3	1	Albert Southern	11:59			) l	11:59		 	11:59
Bedlington & Nelson	3	Atlantic & Lake Superior								
Bedlington & Nelson	4	Atlantic, Quebec & Western	99:50	0.09			90.49			29: (2
1	- 6 6	Ray of Oninté	11:30	4.00			52 45 15:30			15:30
9 Brandon, Saskatchewan & Hudson Bay 8 32 8 32 8 32 8 32 10 British Yukon western 2 00 2 00 2 00 2 00 2 00 2 00 2 00 2	- 7	Bedlington & Nelson	1.28				1.28			1.28
Son Bay							1.00			1.00
10 British Yukon.	9		8:32				8:32			8:32
Western		British Yukon								
12 Bruce Mines & Algona	11		0.00				0.00			2:00
13 Canada Southern	12		2 00							2 00
14   Intercolonia    365 74   365 74   365 74   20 25 25   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 26   20 25 27   20 20 20 20 20 20 20   20 20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20 20   20			144.65	44.56						189 21
15   Prince Edward Island	1.1		205.51				00"."1		1	965.71
16 Canadian Northern										
17   Canadian Northern Ontario   23   11   23   11   27   10   18   Canadian Northern Quebec   14   20   12   80   27   700   27   700   27   700   20   19   Canadian Pacific   1,997   10   1,997   10   9   50   1,987   60   20   Cape Breton   3   50   3   50   3   50   3   50   3   50   20   Carajquet   3   50   3   50   3   50   3   50   20   Carajquet   3   50   3   50   3   50   3   50   20   Carajquet   3   50   3   50   3   50   3   50   3   50   20   Carajquet   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   3   50   5   50   50	16	Canadian Northern					289 · 18			289.18
19 Canadian Pacific.   1,997.10   1,997.10   9.50   1,987.60	17	Canadian Northern Ontario	23.11	10.00						
20 Cape Breton.   3 :50   3 :50   3 :50   2   21 Caraquet.   3 :50   3 :50   3 :50   3 :50   22 Carillon & Grenville.   15 :50   16 :00   16 :00   16 :00   23 Central Ontario.   15 :50   16 :00   13 :90   13 :90   25 Cumberland Ry. & Coal Co   16 :00   16 :00   16 :00   16 :00   26 Dominion Atlantic.   17 :56   11 :72   3 :60   32 :88   8 :78   24 :10   27 Edmonton, Yukon & Pacific (C. N. R)   20   2 :00   2 :00   2 :00   29 Elgin & Havelock.   20   2 :00   2 :00   2 :00   31 Grand Trunk (in Canada).   1,090 :77   1,090 :77   13 :80   1,090 :77   32 Grand Trunk (Canada Atlantic).   100 :05   5 :29   105 :34   5 :85   105 :34   34 Halifax & South Western.   12 :42   5 :91   18 :33   18 :33   35 Hampton & St. Martins.   3   8 :33   8 :38   8 :30   36 Hereford.   5 :83   8 :83   8 :83   8 :30   37 'International of New Brunswick   8   1 :00   1 :00   1 :00   1 :00   40 Kaslo & Slocan.   1 :43   1 :43   1 :43   1 :43   1 :43   41 Kenth Northern.   12 :9   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29   1 :29			1 997 10	12.80						
21 Caraquet	20	Cape Breton			1					
23 Central Ontario.	21	Caraquet		3.20			3.20			
25 Cumberland Ry, & Coal Co	22	Carillon & Grenville	15:50							
25 Cumberland Ry, & Coal Co			13.90			50	13.90			
Edmonton, Yukon & Pacific (C. N. R)			[ 16.00				16.00			16.00
(C. N. R.)  28 Eastern British Columbia 2 00 29 Elgin & Havelock 36 Esquimault & Nanaimo 31 Grand Trunk (in Canada) 31 Grand Trunk (in Canada) 32 Grand Trunk (Canada) 43 **Grand Trunk (Canada Atlantic) 44 Halifax & South Western 45 Hampton & St. Martins 46 Hereford 47 **International of New Brunswick 48 Inverness Ry. & Coal Co. 4	26	Dominion Atlantic	17:56	11:72	3.60		32.88		8.48	24.10
31   Grand Truuk (in Canada)		(C X R)			J					
31   Grand Truuk (in Canada)	28	Eastern British Columbia	2.00				2.00			2.00
31   Grand Truuk (in Canada)	29	Elgin & Havelock.								
33   Grand Trunk Pacific   34   Halifax & South Western   12   42   5   91   18   33   18   33   34   Halifax & South Western   12   42   5   91   18   33   18   33   34   35   44   44   44   45   45	30	Grand Trunk (in Canada)								
33   Grand Trunk Pacific   34   Halifax & South Western   12   42   5   91   18   33   18   33   34   Halifax & South Western   12   42   5   91   18   33   18   33   34   35   44   44   44   45   45	32	Grand Trunk (Canada Atlantic).	100.05		5.29		105.34	5.85		105.34
S   Hampton & St. Martins   S   S3   S   S   S   S   S   S   S	33	*Grand Trunk Pacific								
S   S   S   S   S   S   S   S   S   S	34	Habitax & South Western	12.43	9.91			18.33			18.33
38 Inverness Ry, & Coal Co.   4 '50   4 '50   4 '50   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '00   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43   1 '43	36	Hereford	8.83				8.83		83	8.00
44 Klondike Mines       2 00       2 00       2 00         45 Lake Erie & Detroit River (Père Marquette)       60 82       60 82       60 82         46 Liverpool & Milton       10 12       10 12       10 12       10 12         48 Lotbinière & Megantic       3 00       3 00       3 00       3 00         49 Maganetawan River       50 Manitoulin & Notth Shore       3 98       3 98       3 98         51 Maritime Ry. & Power Co       3 00       3 00       3 00       3 00         52 Massawippi Valley       8 88       8 88       8 88         53 Midland of Manitoba       8 88       8 88       8 88         54 Montreal & Atlantic       35 40       35 40       35 40         55 Montreal & Province Line       2 50       2 50       2 50	37	*International of New Brunswick								
44 Klondike Mines       2 00       2 00       2 00         45 Lake Erie & Detroit River (Père Marquette)       60 82       60 82       60 82         46 Liverpool & Milton       10 12       10 12       10 12       10 12         48 Lotbinière & Megantic       3 00       3 00       3 00       3 00         49 Maganetawan River       50 Manitoulin & Notth Shore       3 98       3 98       3 98         51 Maritime Ry. & Power Co       3 00       3 00       3 00       3 00         52 Massawippi Valley       8 88       8 88       8 88         53 Midland of Manitoba       8 88       8 88       8 88         54 Montreal & Atlantic       35 40       35 40       35 40         55 Montreal & Province Line       2 50       2 50       2 50	38	Inverness Ry. & Coal Co	4.20				1:00			1:00
44 Klondike Mines       2 00       2 00       2 00         45 Lake Erie & Detroit River (Père Marquette)       60 82       60 82       60 82         46 Liverpool & Milton       10 12       10 12       10 12       10 12         48 Lotbinière & Megantic       3 00       3 00       3 00       3 00         49 Maganetawan River       50 Manitoulin & Notth Shore       3 98       3 98       3 98         51 Maritime Ry. & Power Co       3 00       3 00       3 00       3 00         52 Massawippi Valley       8 88       8 88       8 88         53 Midland of Manitoba       8 88       8 88       8 88         54 Montreal & Atlantic       35 40       35 40       35 40         55 Montreal & Province Line       2 50       2 50       2 50	40	Kaslo & Slocan.	1.43				1.43			1.43
44 Klondike Mines       2 00       2 00       2 00         45 Lake Erie & Detroit River (Père Marquette)       60 82       60 82       60 82         46 Liverpool & Milton       10 12       10 12       10 12       10 12         48 Lotbinière & Megantic       3 00       3 00       3 00       3 00         49 Maganetawan River       50 Manitoulin & Notth Shore       3 98       3 98       3 98         51 Maritime Ry. & Power Co       3 00       3 00       3 00       3 00         52 Massawippi Valley       8 88       8 88       8 88         53 Midland of Manitoba       8 88       8 88       8 88         54 Montreal & Atlantic       35 40       35 40       35 40         55 Montreal & Province Line       2 50       2 50       2 50	41	Kent Northern								
44 Klondike Mines       2 00       2 00       2 00         45 Lake Erie & Detroit River (Père Marquette)       60 82       60 82       60 82         46 Liverpool & Milton       10 12       10 12       10 12       10 12         48 Lotbinière & Megantic       3 00       3 00       3 00       3 00         49 Maganetawan River       50 Manitoulin & Notth Shore       3 98       3 98       3 98         51 Maritime Ry. & Power Co       3 00       3 00       3 00       3 00         52 Massawippi Valley       8 88       8 88       8 88         53 Midland of Manitoba       8 88       8 88       8 88         54 Montreal & Atlantic       35 40       35 40       35 40         55 Montreal & Province Line       2 50       2 50       2 50	42	Kettle River Valley	1.29	1:00			1.29		91:00	1.29
45 Lake Erie & Detroit River (Père   Marquette).   60 82   60 82   60 82     46 Liverpool & Milton.   10 12   10 12     48 Lotbinière & Megantic.   3 00   3 00   3 00     49 Maganetawan River   50 Manitoulin & Notth Shore.   3 98   3 98   3 98     51 Maritime Ry. & Power Co   3 00   3 00   3 00     52 Massawippi Valley.   8 88   8 88   8 88     53 Midland of Manitoba   8 88   8 88   8 88     54 Montreal & Atlantic.   35 40   35 40   35 40     55 Montreal & Province Line.   2 50   2 50   2 56	70	Tringston to I children								
46 Liverpool & Milton       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 12       10 1		Lake Erie & Detroit River (Père			1					
47 London & Port Stanley.     10 12     10 12     10 12       48 Lotbinière & Megantic.     3 00     3 00     3 00       49 Maganetawan River.     50 Manitoulin & North Shore.     3 98     3 98     3 98       51 Maritime Ry. & Power Co.     3 00     3 00     3 00     3 00       52 Massawippi Valley.     8 88     8 88     8 88       53 Midland of Manitoba     8 88     8 88     8 88       54 Montreal & Atlantic.     35 40     35 40     35 40       55 Montreal & Province Line.     2 50     2 50     2 50	10	Marquette)	60.82				- 60 82			60.82
48 Lotbinière & Megantic     3 00     3 00     3 00       49 Maganetawan River     50 Manitoulin & North Shore     3 98     3 98       50 Maritime Ry, & Power Co.     3 00     3 00     3 00       52 Massawippi Valley.     8 88     8 88     8 88       53 Midland of Manitoba     8 88     8 88     8 88       54 Montreal & Atlautic.     35 40     35 40     35 40       55 Montreal & Province Line.     2 50     2 50     2 50			10:19				10:19			10 12
49 Maganetawan River       3.98       3.98       3.98         50 Manitoulin & North Shore       3.98       3.98       3.98         51 Maritime Ry, & Power Co       3.00       3.00       3.00         52 Massawippi Valley       8.88       8.88       8.88         53 Midland of Manitoba       8.88       8.88       8.88         54 Montreal & Atlautic       35.40       35.40       35.40         55 Montreal & Province Line       2.50       2.50       2.50	48	Lotbinière & Megantic		1						3.00
51 Maritime Ry. & Power Co       3:00       3:00       3:00         52 Massawippi Valley.       8:88       8:88       8:88         53 Midland of Manitoba       8:88       8:88       8:88         54 Montreal & Atlantic.       35:40       35:40       35:40         55 Montreal & Province Line.       2:50       2:50       2:50	49	Maganetawan River								0.00
52 Massawippi Valley.       8 '88       8 '88       8 '88         53 Midland of Manitoba       8 88       8 '88       8 '88         54 Montreal & Atlautic.       35 '40       35 '40       35 '40         55 Montreal & Province Line.       2 '50       2 '50       2 '50			)							
53 Midland of Manitoba     8 88     8 88     8 88       54 Montreal & Atlantic     35 40     35 40     35 40       55 Montreal & Province Line     2 50     2 50     2 50							8.88			8.88
55 Montreal & Province Line. 2 · 50	53	Midland of Manitoba					8.88		1	8.88
			30,40							
					4	4				

SESSIONAL PAPER No. 20b the Year ending June 30, 1909.—All Tracks.

TOTAL MILEAGE OPERATED-ALL TRACKS.

							•			
Line Repr Capital	resented by Stock.	Line of pro-	Line operated under	Line operated	Line operated under	Total	New line	Ra	ils.	
Main line.	Branches and Spurs.	com- panies.	under lease.	under contract &c.	trook-	mileage operated.	structed during year.	Iron.	Steel.	Number,
122.88 100.00 20.50 112.14 89.30 16.58	9·93 15·37		8.67		19.00	125.01			19:00 123:41 100:00 20:50 122:07 104:67 25:23 6:00	1 2 0 3 0 4 7 5 7 6
77·77 85·80	4.52					77:77 90:32		8.32	69·43 90·3	
47:00 17:28 597:01						47:00 17:28 814:38			47 · 00 17 · 28 814 · 38	8 12
1,788 : 57 162 : 05 1,300 : 20 332 : 39 183 : 20 5,288 : 10 31 : 00 68 : 00 13 : 00 155 : 63 88 : 08 48 : 00 259 : 70	127 · 53 1,433 · 42 19 · 75 110 · 60 2,750 · 30	2,457 · 50	396 · 48 1,408 · 70 16 · 78	10.10	3.80	289 58 3,385 60 359 64 293 80 12,125 90 31 00 88 28 13 00 165 73 88 08 48 00		9.50	1,832.1. 280.6 3,385.6 355.8 293.8 12,079.1 31.0 88.2 13.0 165.7 88.0 48.0 300.1	3 15 0 16 4 17 0 18 0 19 0 20 8 21 0 22 3 23 8 24 0 25
			65.14	161 30	13.71	4,919:40			4:50 16:00 28:00 78:00 4,905:69 562:48	0 28 0 29 0 30 9 31 8 32
259·22 30·00 61·68 89·00 65·50 49·00 21·61 27·00 21·29 126·40 33·81	128 92		7:00			61 68 80 06 65 50 49 00 24 80 34 00 21 29 133 80		-83	388 1- 30 00 60 83 80 00 65 50 49 00 24 80 34 00 21 20 103 40 33 81	4 34 0 35 5 36 0 37 0 38 0 39 0 40 0 41 0 42 0 43
144.70 52.50 25.60	2·92 3·00		60.50		2.95	34 · 20 33 · 00 1 · 91 19 · 81 18 · 00) 47 · 29 101 · 64 205 · 20			259 66 5 77 33 78 33 90 1 9 81 18 90 44 3 100 65 205 26 61 16 25 60	5 46 5 47 0 48 1 49 1 50 0 51 4 52 5 53 0 54

9-10 EDWARD VII., A. 1910
TABLE 2.—Summary of Mileage Operated for

	•			Yaı	RD <b>T</b> RA	ck and Sii	olngs.		
J.	Name of Railway.	Line Repre	esented Stock.	perat ider	peratinder	Total	New line con- struct-	. 1	Rails.
Number.		Line Repreby Capital  Main line.	B'ches and spurs.	Lime o	Line operated under	mileage operated.	ed during year.	Iron.	Steel.
	Morrissey, Fernie & Michel, B.C.								
	Moncton & Buctouche  Napierville Junction								3.20
	Nelson & Fort Sheppard								3.39
	New Brunswick Coal & Ry. Co.								7:00
	New Brunswick & Prince Ed-								•
	ward Island	1.20							1:50
	New Brunswick Southern								
	New Westminster Southern	1:64							1:64 1:37
60	North Shore Nosbonsing & Nipissing								1.25
67	Nova Scotia Steel & Coal Co	1.00							
	Orford Mountain.		1:30						2 30
60	Ottown & Vous Vouls	5.81							5.81
70	Phillipsburg Ry. & Quarry Co								
71	Pontiac & Kenfrew		1						
-72	Princeton Branch of Washington					+1 (			•14
₩0	Co. Ry. (U.S.)	14							
7.1	Quebec Ry., Light & Power Co.	5:00	1						5.00
75	Quebec & Lake St. John	35-41							39.05
76	Quebec, Montreal & Southern	23:05				23.05			23.05
77	Red Mountain								3.68
78	Rutland & Noyan	.77							.77
79	Salisbury & Harvey								
80	Schomberg & Aurora	9.09				9.00			9.00
81	Stanstead, Shefford & Chambly St. Clair Tunnel	0 20				0 20			
95	St Lawrence & Adirondack	7.15							7.15
84	St. Lawrence & Adirondack Spokane & British Columbia	1		20					.20
85	Sydney & Louisburg		41.86			41.86			
86	Temiscouata	9.86	2.14						
87	Temiskaming & Northern Ontario	67.84			1				
	Thousand Islands	1.00	0.99						1.00
89	Toronto, Hamilton & Buffalo Vancouver Copper Co	29.91	2:33			32.24			32.24
90	Vancouver, Victoria & Eastern.	30.34		1					30:34
91	Victoria & Sidney					1.20			1.50
93	Victoria Terminal Rv. & Ferry				1				- 20
	Co								
94	Weilington Colliery Co								
95	York & Carleton								
	fD-4-1	1 101.00	0.49.55	50 10	.=0	1.701.70		(9,11	1.510.20
	Total	4,461 · 32	249 99	00 13	.50	4,701.90		43.11	4,718:39

SESSIONAL PAPER No. 20b the year ending June 1908.—All tracks.

TOTAL MILEAGE OPERATED—ALL TRACKS.

Line Repre		Line of pro-	Line	Line	Line operated under	Total	New line	Ra	ils.
Main line.	Branches and Spurs.	com- panies.	operated under lease.	under contract &c.	track- age rights.	mileage operated.	structed during year.	Iron.	Steel. Number.
32·00 30·26 58·81 65·00					5.42	32·00 30·26 64·23 65·00			10 · 85 · 57 32 · 60 · 58 30 · 26 · 59 58 · 81 · 60 65 · 00 · 61
37*50 85 06; 25*74 7:50 6:75 13:50; 29:60; 62:71 6:00; 4:25					1.48	37:50 85:22 27:22 10:00 6:75 13:50 57:40 64:61 6:00 4:25			37·50 62 85·22 63 75·74 64 10·00 65 6·75 66 13·50 67 57·40 68 62·71 69 6·00 70 4·25 71
5 24 138 00 35 00 275 41 214 96 13 27 4 16 45 00 14 40 46 23	84°00 50°14 5°00					5·24 222·00 38·00 325·55 214·96 13·27 - 4·16 50·00 14·40 46·23		30.00	5 · 24 72 222 · 00 73 38 · 00 74 325 · 55 75 214 · 96 76 13 · 27 · 77 4 · 19   78 20 · 00 79 14 · 40 81
2·25 39·97 	64.76 2.74 14.30 25 6.12	1:09	13·30 3·90		8 92 1 20 4 36	2·25 62·19 3·90 106·05 121·60 333·54 7·33 122·31 12·00			2·25 82 53·27 83 3·90 84 104·85 85 121·60 86 333·54 87 7·33 88 117·95 89 12·00 9208·83 91
208.83 17.46 1.14 10.75 10.50 20,069.00						17:46 1:14 10:75			17:46 92 1:14 93 10:75 94 10:50 95

Table 3.—Summary of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada.

## NOVA SCOTIA.

	Name of Railway.	Mileage o Nova S on Jun	cotia	Increase.	Decrease.
Number.		1909.	1908.		
$\frac{1}{2}$	Canadian Government Railway—Intercolonial Cape Breton	481.61	483.03 31.00		1.42
4	and Ry. Co	15.00 32.00	12:00 32:00	3.00	
5 6	Dominion Atlantic, and	247 · 40 31 · 47	246·38 32·00	1.02	.53
7 8	Halifax and South Western	369.81	369·81 65·50		*4.50
	Liverpool and Milton	$\begin{array}{r} 5.75 \\ 12.50 \\ 62.99 \end{array}$	5·53 12·50 54·30	*22 8·69	
11	Sydney and Louisburg Ry. (Dominion Coal Co)	1,350 53	1,344.05	12.93	6.45

<sup>\*</sup> Sidings.

#### PRINCE EDWARD ISLAND.

Number.	Name of Railway.	Prince Ed	owned in ward Isl'd ne 30.	Increase.	Decrease.
	Canadian Government Railway—Prince Edward Island	269·33 269·33	267 50	1.83	

Table 3.—Summary of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada—Continued.

#### NEW BRUNSWICK.

ber.	Name of Railway.	Mileage o	nswick	Increase.	Decrease.
Number.		1909.	1908.		
9 10 11 12 13 14 15	Albert Southern. Canadian Government Railway—Intercolonial. Canadian Pacific. Caraquet and Gulf Shore. Elgin and Havelock Hampton and St. Martins International of New Brunswick Kent Northern, and St. Louis and Richibucto Moncton and Buctouche. New Brunswick Coal and Railway Co New Brunswick and Prince Edward Island. New Brunswick Southern North Shore (formerly Beersville Ry.). Princeton Branch of Washington Co. Ry. (U.S.). Salisbury and Harvey Temiscouata. York and Carleton.	19:00 504:69 440:20 68:00 16:78 28:00 30:00 80:00 27:00 7:00 32:00 58:00 36:00 36:00 86:35 8:63 5:10 50:00 44:00 10:50	19:00 503:80 440:20 68:00 16:78 28:00 30:00 43:00 27:00 7:00 32:00 36:00 82:35 8:63 5:10 50:00 44:00 10:50	· S9	
	Total	1,547 25	1,509.36	37.89	

Table 3.—Summary of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada—Continued.

#### QUEBEC.

Numbe	Name of Railway.	Mileage of Quet on Jun	ee	Increase.	Decrease.
		1909	1908		
1 2 3 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20 21 22 22 23 23 24 24 25 26 26 27 27 27 28 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Atlantic & Lake Superior Atlantic, Quebec & Western Canadian Government Railway—Intercolonial Canadian Pacific Carillon & Grenville Canadian Notthern Quebec Grand Trunk Grand Trunk (Canada Atlantic) Hereford Lotbinière & Megantic Massawippi Valley Montreal & Atlantic Montreal & Province Line Montreal & Province Line Montreal & Vermont Junction Napierville Junction Ortord Mountain Phillipsburg Railway & Quarry Co. Quebec Central Quebec & Lake St. John Qeebec Railway Light & Power Co. Quebec, Montreal & Southern Rutland & Noyan Stanstead, Shefford & Chambly	100 00 20 50 464 07 939 80 13 00 266 80 451 40 66 38 52 85 30 00 35 46 163 40 58 60 23 60 27 06 55 10 6 00 222 00 286 50 27 90 191 91 3 39 43 00	100 00 20:00 464:39 939:80 13:00 266:80 451:40 66:38 52:85 30:00 35:46 163:40 23:60 27:11 55:10 6:00 222:00 246:50 26:00 143:75 3:39 4:00	40.00 1.00 48.16	. 32
24 25	St. Lawrence & Adirondack Temiscouata.  Total	46·12 69·00	46:12 69:00		
		3,662.94	3,573.65	89.66	.37

Table 3 —Summary of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909.—Canada—Continued.

## ONTARIO.

er.	Name of Railway.	Mileage or Ontai	rio.	Increase.	Decrease.
Number.		1909	1908		
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 24 25	Algoma Central & Hudson Bay Bay of Quinté Bessemer & Barry's Bay Brockville, Westport & North Western Bruce Mines & Algoma Canada Southern Canadian Northern Canadian Northern Canadian Pacific Central Ontario Canadian Pacific Central Ontario & Marmora Ry. & Mining Co. Grand Trunk Grand Trunk Grand Trunk Central Councies Grand Trunk Grand Gra	89 64 89 37 5 00 45 00, 17 28 382 19 353 70 332 73 382 13 9 60 2,657 04 389 88 48 00 109 80 109 81 23 66 1 1 91 15 83 5 50 5 690 4 25 14 40 2 25 26 4 74 6 33 83 67	89 · 64 89 · 37 5 · 00 45 · 00 17 · 28 382 · 19 353 · 70 146 · 80 2,828 · 70 140 · 13 9 · 60 2,657 · 04 389 · 88 48 · 00 19 · 80 198 · 81 13 · 69 5 · 50 5 6 · 90 4 · 25 14 · 40 2 · 25 14 · 40 6 · 33 83 · 67	185 · 93 52 · 80 2 · 14	
	Total	8,229 · 11	7,932 90	296.21	

Table 3.—Summary of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909—Canada—Continued.

# MANITOBA.

er.	Name of Railway.	Mileage o Manie on Jur	toba	Increase.	Decrease.
Number.		1909	1908		
3	Brandon, Sask. and Hudson Bay	69°45 1,522°08 1,522°00 91°77	69°45 1,427°20 1,522°00 92°26	94.88	•49
	Total	3,205:30	3,110.91	94.88	•49

#### SASKATCHEWAN.

Number.	Name of Railway.	Mileage o Saskate on Jun	hewan ne 30.	Increase.	Decrease.
Ž.		1909.	1908.		
F-4					
1	Canadian Northern	1,006.44	856:10	150.34	
2	Canadian Pacific	1,624 90	1,225 · 20	399.70	
	Total	2,631 34	2,081:30	550.04	
	,				

#### ALBERTA.

er.	Name of Railway.	Mileage o Albe on Jur	rta	Increase.	Decrease.
Number.	<u> </u>	1809.	1908.		
3 4	Alberta Railway and Irrigation Co	111 82 214 20 991 00	111 · 82 214 · 20 991 · 00 1 · 50 4 · 50		1:50
	Total	1,321 52	1,323.02	1	1.20

Table 3.—Summary of Single-track Railway Mileage owned in Provinces for the Year ending June 30, 1909—Canada—Concluded.

#### BRITISH COLUMBIA.

Jer.	Name of Railway.	Mileage o Bitish C on Jun	olumbia	Increase.	Decrease.	
Number.		1909.	1908.			
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Bedlington and Nelson. British Yukon Canadian Pacific. Crowsnest Southern Eastern British Columbia. Esquinalt and Nanaimo. Kaslo and Slocan Kettle River Valley Morrissey, Fernie and Michel. Nelson and Fort Sheppard. New Westminster Southern Red Mountain. Spokane and British Columbia. Vancouver Copper Co's Railway Vancouver, Victoria and Eastern Victoria and Sydney. Victoria Terminal Railway and Ferry Co. Wellington Colliery Co's Railway	23:97 31:22 1,208:90 *74:18 14:00 78:00 23:37 20:00 10:85 55:42 24:10 9:59 3:70 12:00 178:49 16:26 1:14	23 97 31 22 1,208 90 74 18 78 00 31 73 3 86 10 85 60 12 24 10 9 59 12 00 126 22 16 26 1 14 20 69	14·00 	8:36 4:70 *9:94	
10	Total	1,795 · 94	1,732 · 83	86.11	23:00	

is mileage was shown st year as, Ladysmith Extension.

## YUKON TERRITORY.

Number.	Name of Railway.	Mileage of Yukon Ton Jun	Cerritory	Increase.	Decrease.
	British Yukon. Klondike Mines. Total.	59·10 31·81 90·91	59·10 31·81 90·91		

9-10 EDWARD VII., A. 1910
TABLE 4.—AMOUNT of Railway Capital at the

1	2	3	4	õ	6	
	Stocks.			Funder		
Name of Railway.	Amount Out- stancing.	Amount per Mile of Line.	Proportion to Total Railway Capital.	Amount Out- standing.	Amount per Mile of Lin	
·	stanting.	June of Line.	$\frac{100 \times \text{Col. } 2.}{\text{Col. } 12.}$	Cols. 8+9+10+11		
	8	\$	p. c.	S	8	
1 Albert Southern	125,920	7,870				
2 Harvey Branch 3 Alberta Ry. & Irrigation Co	32,500 812,500	10,833 $7,266$		1,031,584	9,2	
4 Algoma Central & Hudson Bay	10,000,000	81,920		7,703,763	63,1	
5 Atlantic & Lake Superior	400.000			1,941,313	19,4	
6 *Atlantic, Quebec & Western 7 Bay of Quinté	600,000 1,395,000	14,940	61:34	1,461,305 880,000		
8 Bedlington & Nelson	1,000,000				,	
9 Bessemer & Barrys Bay	125,000	20,833	100.00			
0 Brandon, Sask. & Hudson Bay	2,100,000 $12,600$	30,238				
1 *Brandon Transfer 2 British Yukon.	2,934,119		100.00		20.1	
3 Brockville, Westport & North-						
western.			66.66		10,0	
4 Bruce Mines & Algoma.  5 *Burks Falls & French River  6 Canada Atlantic, (now in Grand	99,000 12,500		33.79 100.00		11,5	
Trunk System) including, Otta- wa, Arnprior & Parry Sound	7,200,000	18,163	32.99	14,627,628	36,9	
7 Central Counties	500,000	12,990		380,000	9,8	
8 Pembroke Southern	178,000	8,334	54.27	150,000	7,0	
9 Canada Sonthern	15,000,000	39,247	42.69	20,130,000	52,6	
1 Prince Edward Island						
2 Canadian Northern		12,135		67,363,478	26,5 $23,8$	
3 Canadian Northern Ontario	250,000 $7,550,000$			7,860,000 8,725,511	32.3	
5 Canadian Pacific	202,696,666			170,182,099	32,7 17,3	
6 Owned—Canada Central	* 000			973,333	3,6	
7 Montreal & Western 8 North Shore	5,000			353,708	5,5	
9 Leased—Atlantic & North West.	3,416,000	9,877	33 52	6,775,066	19,	
British Columbia Southern	172,200	821	12.78		5,0	
Calgary & Edmonton	1,000,000				16,9	
3 Columbia & Kootenay	20,000 25,000			1,277,500	21,	
4 Columbia & Western	1,000,000		14.94	5,691,000	36,	
5 Fredericton.	319,280			100,000		
Great North West Central Guelph & Goderich	500,000 $125,000$					
8 Guelph Junction	21,000					
Wootenay & Arrowhead	1,000,000				23,	
Lindsay, Bobycageon & Ponty.	900 000	5 169	28.56	500,000	12,	
pool	200,000 $6,562,500$					
2 Manitoba & Southwestern				i		
Colonization	700,000	3,256	21.04			
Montreal & Lake Maskinonge. Montreal & Ottawa	25,000 $22,500$		19·99 1·35	100,000 1 636,250		
Nakusp & Slocan	300,000			1,636,250 647,074	17,5 17,7	
6 New Brunswick	4,780,800		37 · 93	7,821,127	17,	
17 New Brunswick & Canada	2,179,867			170 000	1,-	
Nicola, Kamloops & Similka-	250,000	5.916	17:54	1,175,000	25,6	
*Under construction.	200,000	5,319	,, 14 34	1,110,000	20,0	

SESSIONAL PAPER No. 20b Close of the Year ending June 30, 1909.

7	8	9	10	11	12	13	
Debt.	D	ESIGNATION OF	FUNDED DEBT		SUMM	ARY.	
Proportion to Total Railway Capital.  100 × Col. 5 Col. 12.	Bonds.	Miscel- laneous obli- gations.	Income Bonds,	Equipment trust obligations.	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. 3 + 6	No.
р. с.	s	8	8	8	8	ŝ	
55 94 43 51 100 00 38 66	1,941,313 1,461,305 880,000	953,763			125,920 32,500 1,844,084 17,703,763 1,941,313 2,061,305 2,275,000 1,000,000 125,000 2,100,000 4,891,579	10,833 16,491 145,029 19,413 24,364 65,359 20,833 30,238	2 3 4 5 6 7 8 9 10 11
33·34 66·21	450,000 194,000	•			1,350,000 293,000 12,500	30,000 16,955	13
67 · 01 43 · 19 45 · 73 57 · 31	380,000 150,000				21,827,628 880,000 328,000 35,130,000	22,863 15,356	17 18
68.66 96.92 53.61 45.64 100.00 98.60	8,725,511 168,552,099 973,333			1,630,000	8,110,000 16,275,511	$egin{array}{ccc} 24,648 \\ 61,002 \\ 38,107 \\ 3,625 \end{array}$	23 24 25 3 26 26 27
66.48 87.22 88.74				(  	1,347,200 8,458,894	6,421 19,207	30 31
98·00 85·06 23·83 73·34 95·08 89·18 43·82	100,000 1,375,000 2,415,000					21,890 42,590 18,972 16,784 31,789 12,515	33 34 35 36 37 38
71·44 41·49	560,000 4,655,940				700,000 11,218,440	18,087	
78 · 96 80 · 01 98 · 65 68 · 33 62 · 07 7 · 23	1,636,250 $647,074$ $7,821,127$	· · · · · · · · · · · · · · · · · · ·			3,316,000 125,000 1,658,750 947,074 12,601,927 2,349,867	11,362 17,740 25,947 28,621	43 44 45 46
82 · 16					1,425,000	30,319	48

9-10 EDWARD VII., A. 1910
TABLE 4.— Amount of Railway Capital at the

	1	2	3	4	.5	6	
			STOCKS.		Funde		
ο.	Name of Railway.	Amount	Amoun	Proportion to Total Railway	Amount Out-	Amount	
		Out standing.	per Mile of Line.	$\begin{array}{c} \text{Capital.} \\ 100 \times \text{Col. 2} \\ \hline \text{Col. 12} \end{array}$	standing.  Cols. $8+9+10+11$	Mile of Lin	
_			\$	p. c.	8		
49	Canadian Pacific Ry.—Con. Northern Colonization	300,000	12,765	41.78	418,000	17,78	
50	Ontario & Quebec	2,000,000	2,946 8,207	9.26	19,502,591	28,8	
51	Ottawa Northern & Western	1,300,000	8,207	30.00	3,675,000	19,4	
52	Shuswap & Okanagan	750,000 200,000	14,763 100,000	40.00 61.54	1,139,253 125,000	22, 4 62, 5	
53 54	St. John Bridge & Ry. Extension St. John & Mame	2,654,153	28,296	92.43	216,664	62,5 2,3	
55	St. Lawrence and Ottawa	789,909	13,549	44.79	973,334	16,6	
56	St. Mary's & Western Outario.	250,000	16,393		198,250	13,0	
57 58	St. Stephen and Milltown Tilsonburg, Lake Erie and	59,009	10,870	100.00			
UC	Pacific	400,000	11,976	31.37	875,000	26,1	
59	Tobique Valley	29,900	1,068	9.65	280,000	10,0	
50	Toronto, Grey and Bruce	785,190 $25,000$	4,127 1,480	13·32 8·20	3,500,000 280,000	18,3 16,3	
32	Vancouver and Lulu Island Walkerton and Lucknow	19,000	504		740,000		
33	West Ontario Pacific	21,000	789				
14	Waterloo, Wellesley and Lake	500,000	99 461		426,000	32,7	
35	Huron	500,000 526,000	38,461	100.00	220,000	02,	
	Cape Breton	1,000,000	32,258	100.00			
57	Caraquet	950,000	13,286	64:44	524,297	7,	
	Carillon and Grenville	200,000 3,340,000	15,385 23,857	100.00	1,000,000	7,	
0	Central Ontario Leased:—Marmora Railway and	0,040,050	20,001	10.00	1,000,000		
ı	Mining Co	115,421	11,542		100,000	10,	
	Crowsnest Southern	4,150,000 1,000,000	55,945 31,250	100.00			
	Cumberland Railway and Coal Co. Dominion Atlantic	2,433,333	9,892	31 · 19	5,388,373	21,	
	Elgin and Havelock	44,900	1,603	47:30	50,000	1,	
	Esquimalt and Nanaimo	2,500,600	32,501	100.00	420,000	30,0	
	Eastern British Columbia* *Fort William Terminal	420,000 $375,000$	30,000	50.00	420,000	, 50,	
	Grand Trunk (in Canada)	221,092,268	75,019		135,701.846	46,	
9	Including Buffalo & Lake Huron	2,555.657	15,844	40.74	3,716,955	23,0	
30 31	Great Western	· · · · · · · · · · · · ·					
32	Northern						
33	Wellington, Grey and Bruce			0.50		90	
34	Toronto Belt Line Owen Sound Brauch	50,000	3,909	9:76	462,500 100,000	36, 8,	
	*Grand Trunk Pacific	91 010 000		28.87	61,451,440		
37	Gulf Shore	6,250	390				
38	*Ha-Ha Bay	600,000	2,704	100·00 18 72	4,341,954	11,	
	Halifax and South Western Hampton and St. Martin's	1,000,000 $99,000$	3,300		90,000	3,0	
	Hereford	800,000	15,137	50.00	800,000	15,	
92	*Hnron and Ontario	3,000,000		95.24	150,006		
	*Indian River	15,000 7,500,000	114,504	100.00 78.00	2,115,000	32,	
	*International of New Brunswick.	1,320,000	114,504	59.56	896,000		
	Irondale, Bancroft and Ottawa	52,500	1,114	12.50	374,325	7,	
97	Kaslo and Slocan	1,000,000	42,735	57:15	750,000	32,0	
18	Kent Northern, and	75,000 20,000		100.00	50,000	1,8	

SESSIONAL PAPER No. 20b Close of the Year ending June 30, 1909---Continued.

	7	8	9	10	11	12	13	
DEBT		Di	ESIGNATION OF	FUNDED DEBT.		SUMM	ARY.	
tion Ra Ca 100	ropor- to Total illway apital. × Col. 5	Bonds.	Mis- cellaneous Obligations.	Income Bonds.	Equipment Trust Obligations	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. $3+6$	No.
1	р. с.	8	s	8	8	8 .	\$	
	58·22 90·74 70·00 60·00 38.46 7·57 55·21 44·30	418,000 19,502,591 3,075,000 1,139,253 125,000 216,664 973,334 198,250	• • • • • • • • • • • • • • • • • • • •			718,000 21,502,591 4,375,000 1,889,253 325,000 2,870,817 1,763,243 448,250 50,000	37,189 162,500 30,606 30,244 29,393	50 51 52 53 54 55 56
	68 63 90 35 81 68 91 80 97 50	280,000 3,500,000 280,000				1,275,000 309,900 4,285,490 305,000 759,000 21,000	11,068 22,519 18,048 20,132	59 60 61 62
	35·56 23·04	426,000 500,000 1,000,000	24,297			926,000 526,000 1,000,000 1,474,297 200,000 4,340,000	32,258 20,619 15,385	65 66 67 68
	46·89 	4,901,707 50,000 420,000 135,701,846	486,666			215,421 4,150,000 1,000,000 7,821,706 94,900 2,500,000 840,000 375,000 356,794,114	31,250 31,707 3,389 32,501 60,000	71 72 73 74 75
	59 26					512,500		79 80 81 82 83 84
****	100·00 71·13  81·28 47·62 50·00	100,000 61,451,440				100,000 86,391,440 6,250 600,000 5,341,954 189,000 1,600,000	8,061	85 36 87 88 89
•••••	22·00 40·44 87·50 42·85 40·00	150,000 2,115,000				3,150,000 15,000 9,615,000 2,216,000 426,825 1,750,000 125,000 20,000	146,794	92 93 94 95 96 97 98 99

9-10 EDWARD VII., A. 1910
TABLE 4.—Amount of Railway Capital at the

	1	2	3	4	5	6
			Ѕтоск.			FUNDED
No.	Name of Railway.	Amount Out- standing.	Amount per Mileof Line.	Proportion to Total Railway Capital.  100 × Col. 2 Col. 12.	Amount Out- standing. Cols. 8+9+10+11	Amount per Mile of Line.
		8	8	р. с.	8	s
101	Kettle River Valley. Kingston and Pembroke. Klondike Mines. Lake Erie and Detroit River and. London and Port Stanley.	375,000 $3,393,550$ $1,375,000$ $1,400,000$ $1,332,854$	18,750 30,907 44,355 7,042 56,409	46.01 85.57 55.76 31.58 100.00	440,000 572,000 1,091,250 3,032,000	5,209 35,202
$105 \\ 106 \\ 107$	Liverpool and Milton	30,300 50,000 30,000 1,432,200	5,501 1,666 15,706 4,086	85°84 100°00 100°00 20°43	5,576,800	91
110 111 112	Maritime Coal and Ry. Co  Massawippi Valley  Midland of Manitoba	200,000 2,000,000 800,000 10,000	10,096 133,333 22,560 108	100.00	405,000 526,000	35,066
114 115 116	Moncton and Buctouche	$\begin{array}{c} 250,000 \\ 3,200,000 \\ 600,000 \\ 1,000,000 \\ 1,000,000 \end{array}$	7,812 31,098 9,917 17,064 42,372	80.65 71.34 61.35 83.33 66.66	40,000 1,065,000 378,000 200,000 500,000	12,500 6,248 4,926
118 119 120 121	Morrissey, Fernie and Michel Napierville Junction Nelson and Fort Sheppard New Brunswick and Prince Ed. I.	1,163,000 600,000 1,500,000 214,850	199,828 22,173 27,066 5,968	95·92 100·00 53·71 75·16	52,500 1,293,000 71,000	9,020
$\frac{123}{124}$	New Brunswick Southern	49,000 † 600,000	581 24,896	9.00	500,000	
125 $126$ $127$	North Shore. Nosbonsing and Nipissing Nova Scotia Steel & Coal Co.'s Ry.	98,000 250,000	11,355 45,455	73.68 100.00	35,000	4,056
128 129	Orford Mountain. Ottawa and New York *Pacific Northern and Omenica	$ \begin{array}{r}                                     $	1,042 $17,575$	7:00 38:46 100:00	702,000 1,600,000	14,625 28,119
131 132	Phillipsburg Ry. and Quarry Co Pontiac and Renfrew Père Marquette (in Canada)	124,500 20,000	20,750 4,706	98:43 100:00	2,000	333
134	Princeton Branch of the Washington Co. Railway (U.S.)	86,950	17,049	. 50.00	5,870,000 86,950	ĺ
*00	Qu'Appelle, Long Lake and Saskat- chewan (C. N. R) Quebec Central	201,000 3,381,603	787 15,233	3·80 36·55	5,083,582 5,868,406 7,702,960	19,896 26,434
138	Quebec Ry. Light and Power Co Quebec and New Brunswick	4,524,000 3,250,000 387,900	15,790 120,000	37:00 56:10 100:00	7,702,960 2,533,899	26,886 93,848
141 142 143	Quebec, Montreal and Southern Red Mountain Rutland and Noyan Salisbury and Harvey	1,000,000 $190,600$ $100,000$ $150,000$	5,211 19,874 29,498 3,333	100°00 46°76 50°00 100°00	217,000 100,000	
144 145 146	Schomberg and Aurora Stanstead, Shefford and Chambly. St. Clair Tunnel and approaches.	250,000 608,750 350,000	17,611 14,157 155,555	45.90 46.60 12.28	300,000 $697,461$ $2,500,000$	16,220
1.41	*St. John Valley and River du Loup St. Lawrence and Adirondack	$ \begin{array}{c} 34,932 \\ 1,230,655 \end{array} $	37,497	100·00 57·37	914,418	

<sup>\*</sup> Under construction.

<sup>†</sup> Operated and owned by New Brunswick Commission.

SESSIONAL PAPER No. 20b

Close of the Year ending June 30, 1909—Continued.

7	8	9	10	11	12	13	
DEBT.	D	ESIGNATION OF	FUNDED DEBT		Schm	ARY.	
							No
Proportion to Total Railway Capital.	Bonds.	Mis- cellaneous Obligations.	Income Bonds,	Equipment Trust Obligations.	Total Railway Capital,	Amount per Mile of Line.	
$\frac{100 \times \text{Col. 5}}{\text{Col. 12}}$					Cols. 2 + 5	Cols. 3 + 6	
р. с.	\$	8	\$	ŝ	8	8	
53.99	440,000				815,000	40,750	10
14.43	572,000				3,965,550	36,116	10
44.24	935,040	156,210		93.000	2,466,250	79,557 22,293	10
68.42	3,000,000				4,432,000 1,332,854	56,400	10
14.16	5.000				35,300		10
					50,000	1,666	10
					30,000	15,706	10
79·57 66·94					7,009,000 605,000		
00 94					2,526,000		
					800,000		
					10,000	108	11
19.35	60,000				310,000		
28 66 38 65	1,000,000				4,265,000 978,000		
16.67	200.000			1	1,200,000		
33.34	500,000				1,500,000	63,558	11
4.08	52,500				1,215,500	208,848	11
46 29	1 902 000				600,000 $2,793,000$		11 12
24.84	71,295,000				285,850		12
91.00	500,000				549,000	6,512	1:
					†		1:
					600,000 133,000		
26.32	35,000				250,000		15
					±	10,100	12
93.00	702,000				752,000	15,667	12
61 54	1,325,000		275,000		2,600,000		1:
1.57	9,000				60,000 126,500		13
1 3/	2,000				20,000		13
100.00	5,870,000				5,870,000	29,500	13
50.00	86,950				173,900	34,098	13
00.00	* 000 *00				5 004 500	90,009	1 10
96·20 63·45			1 644 933		5,284,582 9,250,009		
63.00			3.116.613		12,226,960		
43.90	2,500,000			23,899	5,783,899	213,848	1:
• • • • • • • • • • • • • • • • • • • •					387,900		13
53 24	217.000				1,000,000 407,600		1.
99.54 20.00	100,000	***********			200,000		1-
****	1,0,000				150,000		
54:10	300,000				550,000	38,444	
53:40	697,461				1,306,211		1-
87.72	2,500,000				2,850,000 34,932		1.
42.63	044 440				2,145,073		

 $<sup>\</sup>stackrel{+}{\rightarrow}$  General capital of the Nova Scotia Steel Company. 20b - 6

9-10 EDWARD VII., A. 1910
TABLE 4.—Amount of Railway Capital at the

1	2	3	4	5	6
		Stocks.			Funded
No.  NAME OF RAILWAY.	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.
	\$	8	p. c.	8	\$
149 Sydney and Louisburg (Dominion Coal Co.) 150 Temiskaming & Northern Ontario. 151 Temiscouata. 152 Thousand Islands 153 Toronto, Hamilton and Buffalo. 154 *Trans-Canada. 155 Vancouver Copper Co.'s Railway. 156 Vancouver, Victoria and Eastern 157 and Vancouver, Westminster and Yukon. 158 Victoria and Sidney. 159 Victoria Terminal Railway and Ferry Co. 160 Wellington Collie y Co.'s Railway. 161 York and Carleton.	1,000,000 60,000 2,500,000 37,700 50,000 3,522,000 223,000 2,000,000 34,320	8,185 28,399 280 234,800 13,714 218 186,046	51.85 36.90 100.00 100.00 100.00 42.60 100.00	58,000 4,280,000 92,466 300,000	7,913 48,620 7,705
Final Total	647,534,647			660,946,769	

<sup>†</sup> General capital of Dominion Coal Company.

SESSIONAL PAPER No. 20b close of the Year ending June 30, 1908—Concluded.

7	8	9	10	11	Summa	ARY.	
DEBT.	I	DESIGNATION OF	FUNDEL DEB	г.	12	13	
Proportion to Total Railway Capital.	Bonds.	Mis- cellaneous Obligations.	Income Bonds.	Equipment Trust Obligations.	Total Railway Capital. Cols. 2 + 5	Amount per Mile of Line. Cols. 3+6	No.
p. c.	\$	8	\$	\$	8	\$	
75·59 48·15 63·10 100·00	58,000 4,280,000 92,466				4,096,262 118,000 6,780,000 37,700 92,466 30,000 3,522,000 523,000	16,098 77,019 7,705 280 234,809 32,164 218 186,046	152 153 154 155 156 157 158 159 160
	633,155,474	8,436,282	7,892,882	11,462,131	34,320	5,968	

Constructed and operated by Ontario Government Commission.

9-10 EDWARD VII., A. 1910

Table 5.—Statement of Aid granted and paid to Railways

		_				
ır.	Name of Railway.	By Do:	MINION GOVER	NMENT.	Name of	
Number.		Bonus Granted.	Bonus Paid up.	Loan.	Province.	Bonus Granted.
		\$ ets.	\$ cts.	\$ cts.		\$ ets.
2 3	Albert Sonthern	50,460 00 5,553 57 148,094 00			New Brunswick	
5	Bay	1,440,000 00 828,435 84 156,672 00	924,976 00 828,435 84 156,672 00		Quebec	1,596,390 00
7 8	Bay of Quinté Bedlington & Nelson(Nil) Brandon, Saskatchewan &	350,455 25	350,455 25		Ontario	84,000 00
11	Hudson Bay(Nil) *Brandon Transfer British Yukon(Nil) Brockville, Westport &					
13 14	Northwestern Bruce Mines & Algoma Canada Atlantic (Grand	140,800 00 53,920 00 282,355 20			Ontario	50,918 00 270,000 00
15	Trunk) including Ottawa, Amprior & Parry Sound	932,512 00	932,512 00		Quebec Ontario	
	Central Counties. Pembroke Southern. Canada Southern, including	64,000 00	64,000 00		"	55,500 00
19 20 21	Sarnia, Chatham & Erie Leamington & St. Clair Canadian Gov't. Railways: Intercolonial, including—	51,200 00	51,200 00		11	147,859 00
$   \begin{array}{r}     22 \\     23 \\     24   \end{array} $	Canada Eastern Drummond County Fredericton & St.	374,839 84 423,936 00			Quebec	
25 26 27	Mary's Bridge Prince Edward Island. Canadian Northern, includ. Winning Creek Northern	30,000 00				
28 29	Winnipeg Great Northern Port Arthur, Duluth & Western Ontario & Rainy River .	271,200 00 1,534,526 00			Ontario	255,571 00 1,072,800 00
31	Canadian Northern Ontario Canadian Northern Quebec Canadian Pacific—owned {	1,872,960 00	1,872,960 00 1,789,540 35		Quebec	1,194,129 46 375,377 50
33 34 35	Canada Central Lake Temiscaming Col'n. North Shore	29,416,346 00 1,525,250 00 310,335 95	1,525,250 00 310,335 95		British Columbia Ontario Quebec	37,500 00 1,479,000 00 350,076 82
36 37	Montreal & Western Quebec, Montreal, Ottawa & Occidental	1,500,000 00 361,270 00			Quebec	472,500 00 727,000 00
38 39	Canadian Pacific—leased: Atlantic & Northwest BritishColumbia South'rn			· ·		711,122 02
40 41 42 43	BritishColumbia South'rn Calgary & Edmonton Cap de la Madeleine Columbia & Kootenay Columbia & Western Credit Valley Fredericton	7,424 00 88,800 00	7,424 00 88,800 00			
44 45 46	Great Northwest Central					
47 48 49	Guelph & Goderich Guelph Junction Lindsay, Bobcaygeon &	51.200 00	46,000 00		Ontario	
50	Pontypool Manitoba & Northwestern *Under construction **				Ontario	

<sup>\*</sup>Under construction. \*\*Ontario Government guaranteed bonds, 268 miles at \$20,000 per mile.

SESSIONAL PAPER No. 20b by Governments and Municipalities to June 30, 1909.

By Provincial	GOVERNMENT:	5.		By Munic	IPALITIES.	
Bonns Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
\$ ets.	8 ets.	\$ ets.	\$ ets.	\$ ets.	S cts.	8 ets.
48,680 00 . 9,000 00						· ::
					• • • • • • • • • • • • • • • • • • • •	
			50,500 00			
			116,000 00	116,000 00		
270,000 00			500 00	500 00		
			154,392 00	152,900 00	• · · · · · · · · · · · · · · · · · · ·	32,000 00
		• • • • • • • • • • • • • • • • • • • •	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 90		• • • • • • • • • • • • • • • • • • • •
		• • • • • • • • • • • • • • • • • • • •				
• 255,571 00			40,000 00	40,000 00		
1,072,800 00 .			50,000 00 20,000 00	50,000 00 20,000 00		
1,194,129 46 372,157 50 )		• • • • • • • • • • • • • • • • • • • •	72,000 00	72,000-00		200,000 00
37,500 00 J 1,479,000 00 .			572,500 00	464,761 29		42,500 00
350,076 82 .			• • • • • • • • • • • • • • • • • • • •			
472,500 00 .						
727,000 (9)		• • • • • • • • • • • • • • • • • • • •	25,000 00	25,000 00	771,644 62	
699,192 08 .						325,000 00
531,000 00			1 025 000 00	1 005 (00 00		
			80,000 00	,	• • • • • • • • • • • • • • • • • • • •	
* ***********	• • • • • • • • • • • • • • • • • • • •		31,000 00	31,000 00		193,000 00
		· · · · · · · · · · · · · · · · · · ·	73,000 00	73 000 00		
			215,600 00	215,600 00		
†This amoun	it was paid for	, 6,793,014 acre	es land relinquis	shed by Compar	ny.	

9-10 EDWARD VII., A. 1910
TABLE 5.—Statement of Aid granted and paid to Railways by

er.	Name of Railway.	Br Dox	HINION GOVER	NMENT.	Name of	
Number.		Bonus Granted.	Bonus Paid up.	Loan.	Provinces.	Bonus Granted.
	Canadian Pacific Ry Con.	\$ ets.	\$ ets.	s ets.		\$ cts.
51	Manitoba& Southwestern Colonization				Manitoba	
52	Montreal & Lake Mas- kinonge	41,280 00	41,280 00		Quebec	87,750 00
53	Montreal & Ottawa	192,000 00	192,000 00		Ontario	$\begin{array}{cccc} 100,000 & 00 \\ 182,210 & 00 \end{array}$
54 55	Nakusp & Slocan New Brunswick	121,600 00	117,760 00		British Columbia New Brunswick.	76,000 00
56 57	New Brunswick & Canada Nicola, Kamloops & Sim-	_				575,000 00
58	Northern Colonization	300,800 00: 202,080 00	300,800 00 202,080 00		Quebec	96,000 00
59 60	Ontario & Quebec Ottawa Northern & West-	196,000 00	196,000 00		Ontario	
61	ern Saskatchewan & Western	950,000 00	\$21,009 20		Quebec Manitoba	1,316,389 15
62 63	Shuswap & Okanagan St. John Bridge & Ry.	163,200 00	163,200 00	• • • • • • • • • • • • • • • • • • • •		
64	Extension				New Brunswick Ontario	5,181 81 880,000 00
65 66 67	St. Stephen & Milltown Tillsonburg, Lake Erie &	14,848 00	*14,848 00		New Brunswick.	13,920 00
68	Pacific	158,871 48 134,016 00	134,016 00		Ontario New Brunswlck.	38,564 00 70,000 00
69 70	Toronto, Grey & Bruce Vancouver & Lulu Island	14,656 00			Ontario	375,282 00
71 72 73	West Ontario Pacific Cape Breton Caraquet	$\begin{array}{c} 60,000 \ 00 \\ 192,000 \ 00 \\ 224,000 \ 00 \end{array}$	182,400 00		Nova Scotia New Brunswick.	99,200 00 180,000 00
7.1	Carillon & Grenville (nil) Central Ontario	179,466 00	179,466 00		Ontario	263,000 00
76	Colchester Coal & Ry. Co. Crowsnest Southern (ail)	12,800 00	12,800 00			
78	Cumberland Ry. & Coal Co. Dominion Atlantic, includ-	44,800 00	39,850 00		Nova Scotia	184,450 00
80		1,193,369 00				
81 82		44,800 00° 500,000 00°				44,800 00 679,197 45
83 84		399,060 40				185,600 00
	(nil)					
	fie (C.N.R.)	160,000 00 **82,652 82	91,200 00		New Brunswick.	107 500 00
87	Elgin & Havelock Esquimalt & Nanaimo Grand Trunk (in Canada)	750,000 00	750,000 00	15,142,633 33	New Drunswick.	107,500 00
89 90	including - Beauharnois Junction Brantford, Norfolk & Port	62,400 00			Quebec	179,073 00
91	Burwell Buffalo & Lake Huron					
92 93	mora				"	18,740 00
94	Jubilee Bridge	500,000 00	500,000 00			
95					Ontario	
.96	ville & North Hastings Owen Sound Branch	21,888 00 39,744 00	21,888 00 39,744 00		11	224,660 00

<sup>\*</sup> Includes \$9,635.89 used iron rails. 
\*\* Includes loan of used iron rails.

# Governments and Municipalities to June 30, 1909—Continued.

			- '4			
By Provincia	L GOVERNMENTS	s.		Br Weni	CIPALITIES.	
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonns Paid up.	Loan.	Subscription to Shares-
\$ ets.	\$ cts.	ŝ ets.	§ ets.	8 cts.	ŝ ets.	s ccs.
	900,000 00					
87,750 00 100,000 00				· · · · · · · · · · · · · · · · · · · ·		
182,210 00				5,300 00		• • • • • • • • • • • • • • • • • • • •
76,000-00 575,000-00				23,000 00 47,500 00		
96,000-00			***************************************	**********		
				52,500 00 150,000 00 100,000 00	}	
1,192,072 98			10,000 00	10,000 00		
5,181 81						***
880,000 00 13,920 00	• • • • • • • • • • • • • • • • • • • •	300,000 00			300,000 00	60,060 00 90,000 00
			75,000 00			
	• • • • • • • • • • • • • • • • • • • •		988,000 00	969,561 44		• • • • • • • • • • • • • • • • • • • •
99,200 00		• • • • • • • • • • • • • • • • • • • •	25,000 00 10,000 00,			
180,000 00					• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
263,000 00	••••		93,500 00	93,500 00		
173,650 00		• • • • • • • • • • • • • • • • • • • •				· · · · · · · · · · · · · · · · · · ·
				*****		
44,800 00 679,197 45			27,685 00 250,000 00 36,000 00			
185,510 40			90*(ww) (w)			••••••••••
107,500-00			13,1900 (0)			
179,073 60						
68,000-00			066 (444)	hat the an		
18,740 00	26.000.00		966,000 00	966,000 00		
					=	
336,000 00			929,000 00	929,000-00		
224,660 00.			213,000 00 85,500 00			50,000 00

9-10 EDWARD VII., A. 1910 TABLE 5.—STATEMENT of Aid granted and paid to Railways

-				•		
	Name of Railway.	Вт Do	MINION GOVER	NMENT.	Name of	
	Name of Harmay.	Bonus Granted.	Bonus Paid up.	Loan.	Province.	Bonus Granted.
	Grand Trunk—Con.	š ets.	8 ets.	š ets.		8 ets.
97	Great Western					
98	Hamilton & Northwest- tern				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	Junction	· · · · · · · · · · · · · · · · · · ·			Ontario	196,188 00
103	North Simcoe Northern Pacific Junction	1 320 000 00	1 320 000 001			83,300 00
105	South Norfolk	54,400 00	54,400 00		Ontario	
106	Toronto Belt Line				Ontonio	105,212 00
107 108	Toronto & Nipissing Lake Sincoe Junction					53,000 00
109	Victoria					312,000 00
110	Waterloo Junction	32,800 00	32,800 00			241,276 00
112	Whitby, Port Perry &					
110	Lindsay		017 900 00	• • • • • • • • • • • • • • • • • • • •	H	94,957 59 224,999 99
	*Grand Trunk Pacific Gulf Shore		53,699 20		New Brunswick.	41,950 00
	Halifax & Southwestern,		819,874 93		Nova Scotia	
116	including— Central of Nova Scotia &					
110	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
	Hampton & St. Martins	†83,612 54	83,612 54		New Brunswick.	145,600 00
120	Hereford	$\begin{array}{c} 170,560 \ 00 \\ 627,000 \ 00 \end{array}$	170,560 00		Nova Scotia	$\begin{array}{c} 103,000 \ 00 \\ 272,000 \ 00 \end{array}$
	Irondale, Bancroft &Ottawa	144,000 00	144,000 00		Ontario	315,000 00
123	* International of New	042.05= 4=	00.000.00		N. D.	
194	Brunswick	368,257 67				175,000 00
125	Kent Northern and	†58,334 27	58,334 27		New Brunswick.	135,000 00
126	St. Louis & Richibucto	$\begin{array}{c} 22,400 \ 00 \\ 97,771 \ 52 \end{array}$	22 400 00		lt	21,000 00
128	Kettle River Valley Kingston & Pembroke	48,000 00	48,000 00		Ontario,	456,493 00
129	Klondike Mines	197,184 00				
130	L'Assomption (road abandoned)	11,200 00	11 200 00			
	Lake Erie & Detroit River	571,851 00	571,851 00		Ontario	83,000 00
132	& London & Port Stanley.			· · · · · · · · · · · · · · · · · · ·		
199	Lenora Mt. Sicker (Van- couver Copper Co(nil).				11	
	Liverpoul & Milton(nil)					
	Lotbinière & Megantic Maganetawan River		96,000 00 3.552.00		Quebec	126,994 00 10,000 00
137	Marmora Ry. & Mining Co.	30,720 00	30,720 00		11	19,149 39
138	Manitoba (Canadian North-				face and	
139	ern Ry Manitoulin & North Shore.	32,000 00	32,000 00		Manitoba	641,575 25
	Maritime Coal, Railway &					
1.0	Power Co	40,700 00 5 376 00			Nova Scotia Quebec	
142	Massawippi Valley Minudie Coal & Ry. Co	5,376 00 18,544 00				
143	Montreal & Atlantic, in-	- (				
144	& St. Lawrence Junct.	1			Quebec	444,000 00 250,280 00
	Montreal & Province Line.	58,560 00	58,560 00			231,122 00
				**		

Under construction. | | Includes loan of used iron rails.

SESSIONAL PAPER No. 20b by Governments and Municipalities to June 30, 1909—Continued.

By Provincial	Governments.	٠.		By Munic	IPALITIES.	
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted,	Bonus Paid up.	Loan.	Subscription to Shares.
\$ cts.	8 cts.	\$ cts.	S ets.	8 cts.	\$ cts.	\$ cts.
			599,805 00 311,500 00 144,870 85	311,500 00		
196,188 00 .			21,774 00 241,980 00	21,774 00 241,980 00		
			65,000 00			
53,000 00 .			376,702 59 100,000 00 186,000 00	186,000 00		
241,276 00			47,000 00 682,000 00	47,000 00 682,000 00		••••
			222,094 93 150,000 00		1	
· · · · · · · · · · · · · · · · · · ·	••••		88,874 17 15,338 93			
84,226 36 . 233,000 00 .	· · · · · · · · · · · · · · · · · · ·		100,000 00	 δυ,000 09		
			5,000 00	5,000 00		
			509,320 00	509,320 00		
83,000 00				356,500 00		414,000 00
126,994 00 10,000 00						
19,149 39 641,575 25						
39,788 00						65,000 00
250,280 00			51,000 00	36,000 00	· · · · · · · · · · · · · · · · · · ·	528,000 00

9-10 EDWARD VII., A. 1910 TABLE 5.—Statement of Aid granted and Paid to Railways,

2	Name of Railway.	By Do	MINION GOVEL	CNMENT.	Name of	
Number.	Name of Ranway.	Bonus Granted.	Bonus Paid up.	Loan.	Province.	Bonus Granted.
		S ets.	8 cts.	8 ets.		S ets.
146	Montreal & Vermont June					
147	tion					
149	Moncton & Buctouche Napierville Junction Nelson & Fort Sheppard	102,400 00 173,440 00	101,600 00 173,440 00		New Brunswick. Quebec	96,000 00
152	New Brunswick & P.E I New Brunswick Southern	113,440 00	113,440 00	• • • • • • • • • • • • • • • • • • • •	New Brunswick.	99,708 90 413,000 00
	New Brunswick Coal & Ry. Co	190,400 00	190,400 00		n	224,000 00
155	ern (nil) Nosbonsing & Nipissing					
	North Shore Ry Co Nova Scotia Steel & Coal	27,616 00	27,616 00		New Brunswick.	16,200 00
158 159	Co's. Ry	40,000 00 192,942 50 262,384 00	192,942 50		Nova Scotia Quebec Ontario	40,000 00 138,884 92 35,000 00
161	Philipsburg Ry. & Quarry Co Pontiac & Renfrew Princeton Branch of Wash.	23,712 00 13.600 00			Quebec	25,667 00 17,433 60
164	Co. R'ly (nil) †\uebec Bridge & Ry. Co {\uebec Central	374,353 33 403,980 69			Quebec	250,000 00 1,076,123 14
	(C.N.R.)	1,454,695 00			0	2,533,000 00
167	Power Co †Quebec & New Brunswick. Quebec, Montreal & South-		96,000 00		New Brunswick.	306,945 50 45,000 00
169	ern, including. United Counties, East	232,230 55			Quebec	210,000 00
170 171	Richelieu Valley South Shore Red Mountain (nil)	69,952 00 296,993 38	296,998 38		0	115,215 00 276,645 00
172 173 174	Rutland & Noyan (nil) Salisbury & Harvey	29,665 45 48,000 00	‡ 29,391 01 46,144 00		New Brunswick.	455,000 00
176	Chambly	375,000 00	375,000 00	• • • • • • • • • • • • • • • • • • • •		
179 180	du Loup St. Lawrence & Adirondack St. Mary's & Western Ont St. Maurice Valley	149,481 60 67,344 00 112,640 00	67,344 00		Quebec Ontario	
181	Sydney & Louisburg (Dom. Coal Co.) Temiskaming & Northern	89,600 00	87,808 00		Nova Scotia	87,808 00
1	Ontario	645,950 00	645,950 00		Quebec	362,250 00
184	Thousand Islands Toronto, Hamilton & Buf-	61,200 00	29,840 00		Ontario	, 00,000 10
186	falo	57,600 00	57,600 00	• • • • • • • • • • • • • • • • • • • •		

<sup>†</sup> Under construction. ‡ Includes \$14,663.45 loan, used iron rails.

SESSIONAL PAPER No. 20b

by Government and Municipalities to June 30, 1909—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.	8 ets.	\$ ets.	\$ cts.	8 cts.	
			10,000 00				
99,708 90 413,000 00			3,000 00	3,000 00		• • • • • • • • • • • • • • • • • • • •	
224,000 00							
16,200 00							
40,000 00 138,884 92 35,000 00			4,000 00 3,000 00 85,000 00	\$,000.00	• • • • • • • • • • • • • • • • • • • •		
250,000 00 1,076,123 14			300,000 00 103,000 00	290,817 46 103,000 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			
455,000 00				70,000 00			
70,400 00				,			
82,000 00							
362,250 00 66,000 00			25,000 00	25,000 00			
	· · · · · · · · · · · · · · · · · · ·		10,000 00 268,000 00	10,000 00 265,500 00			
				•• • • • • • • • • • • • • • • • • • • •			

9-10 EDWARD VII., A. 1910 TABLE 5.—Statement of Aid granted and paid to Railways

Name of Railway.	By Do:	MINION GOVER	Name		
	Bonus Granted.	Bonus Paid up.	Loan.	of Province.	Bonus Granted
188 Victoria & Sidney, B.C 189 Victoria Terminal Ry. &				British Columbia	\$ ets. 101,635 00
Ferry Co	32,896 00	32,896 00		New Brunswick.	

SESSIONAL PAPER No. 20b by Governments and Municipalities to June 30, 1909--Concluded.

By Provincial Governments.		By Municipalities,				
Bonus Paid up.	Loan.	Subscription to Shares.	Bonus Granted.	Bonus Paid up.	Loan.	Subscription to Shares.
\$ cts.		\$ ets.			\$ ets.	
25,247 00 .						
32.538,496 15	2,750,030 00	300,000 00	12,829,679 55	12,580,824 98	2,404,498 62	2,839,500 00

TABLE 6.—INCOME Account of Railways for the Year ending June 30, 1909, including Comparative Statement of Net Earnings.

9-10 EDWARD VII., A. 1910 11 ets. Net Earnings. -7,228 Col. 5-6. 61,276-2,048 4.010 195,269 18,463 3.230, 472 449,535 -88,061 3,708,258 -45,660 9,563 121,606 58,80 1909 40 82252446884488284488 Operating 24,055 131,688 5,755 39,305 17,607 54,079 Expenses. 6,873,509 92,487 4,535,993 411,146 378,214 9,264,448 678,327 145,831 237,285 50,915 198, 107 93,76111,987 9,052,521 :0 including other Earnings from Cols. 3+4+A. Total Gross, Operation. 304,730 326,612 57,768 8,013 178,387 104,238 796,774 13,644 16,826 153,652 016,89 7,766,465 2,508 93,553 8,602,986 323,084 332,553 739,603 70,438,424 52,030 10,581,767 Other Earnings 25 25 \$228258 9 9 : 63 3 888. cts. 12,698 § 58,539 ( 16,475 ( 2,383 6,516 7,218 118 Operation. 3,314 33,384 937 985,996 288,991 9,149 -83 55,146 from -4 Earnings. 10,037 04
108,020 27
1,530 02
38,143 93
38,143 93
239,087 13 84
5,543 113 84
5,543 113 84
15,588 67
17,488,670 83
17,488,670 83
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18,488,570 83 30 82488 163,472 157,469 86,159 405,703 Freight, 882488 55465465888357671828719825 22,374,718 17,010 ( 29,070 81,012 32,192 2,240,967 Passenger, 18,079 388,686 80,991 31,199 166,308 2,107,100 1,532 84,815 19,10211,163 130,601 Prince Edward Island Canadian Northern. Atlantic and Lake Superior
Atlantic, Quebec and Western
Bay of Quinte.

Edington and Nelson Elgin and Havelock Eastern British Columbia Algona Central and Hudson Bay..... Bessener and Barry's Bay Brandon, Saskatchewan and Hudson Bay British Yukon Brockville, Westport and Northwestern Carallon and Grenville. Alberta Railway and Irrigation Co..... Canada Southern. Canada in Government Railways—Intercolonial. Cape Breton. ..... Name of Railway. Dominion Atlantic..... Cumberland Railway and Coal Co Canadian Pacific..... Cana lian Northern, Quebec. Crowsnest Southern..... Number.

8,623,942 30 181,647 48 16,104 20 2,152 54 16,293 86	190	192	88	222	H27	20 9	95	177	2 × 5	626	95.6	9 SE	<u> </u>		88	3.5											6,639 16			H,571 H
19,400,061 99 1,632,297 98 357,678 42 10,821 87 81,164 01																													106,690 84 973 490 68	116
28,024,007 29 1,813,945 46 372,782 62 12,974 41 64,870 15	187,220 22 26,958 44 17,010 29	17,431 40	179,350 14	11,858 81	110,628 77	41,239.24	178,729 05	68,749 85	90,610 03	134,097 43	77,282,82	13,892 16	73,068 46	82,110 73	41,401.84	03 500,53 00 500 50	3,080 17	5,776 50	08 017 081	4,351 63	21,911 76	1,000,389,31	631,389 06	57,193 07	234,933 25	162	30,836 81	350	199 939 51	287
313,797,79 52,765,33 3,281,32 14,31 248,93			Cr. 3,610 55		3,559 15		00 089						2	12,657 31					9 946 96				10,261 66				150 69		963 69	
17,602,990 52 1,320,882 82 181,056 70 8,175 56 45,828 68		027	926	Ξ	¥=			37.0	223	189	44.1	8	20:	101	8	200	$\frac{x}{2}$	527	9	155	200	2 3	226	8333	000	200	18,768 43	860	277,052 00	22 22
10,017,218 98 440,297 31 188,444 60 4,784 54 18,792 54	222																361 38		3 5								01 666,6	34,970 81	174.995.96	19,296 57
27 Grand Trunk 28 Grand Trunk (Ganada Atlantic) 29 Halfiax and Souli-western. 30 Hampton and St. Martins. 31 Hereford			37 Kingston and Pembroke 38 Klondike Mines.			12 Manitoulin and North Shore.		6) Martinal failwhy Co of Maintour		Montreal and Vermont Junction.	50 Moneton and Buctonehe		Nelson and Fort Sheppard	54 New Brunswick and Prince Edward Island	New Brunswick Southern		-	69 Nova Scotia Steel and Coal Co			53 Princeton Branch of Washington Co		66 Quebec and Lake St. John	_	68 Quebec, Montreal and Southern	by Red Mountain,		Schomberg and Aurora. Staustend, Shefford and Chumbly.	5 St. Claur Tunnet.	5 Sydney and Louisburg

TABLE 6.—INCOME Account of Railways for the Year ending June 30, 1909, including Comparative Statement of Net Earnings—Continued.

			9-10 EDWARD VII.,	A. 1910
1	Net Earnings.	1909. Col. 5—6.	8 cts. 89 90 62.295 78 502,946 51 7,700 54 274,384 42 274,384 42 274,384 42 12,589 90 477,763 55 477,763 55 47,763 55 47,763 55 40,456,251 76	
9		Operating Expenses.	S cts.  1,719 58 167,852 41 777,182 65 25,270 79 25,270 79 25,270 79 25,370 79 25,370 79 25,370 79 25,370 79 25,370 79 25,370 79 25,370 79 25,370 79 25,370 79 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370 70 25,370	
ي د		Total Gross, including other Earnings from Operation.	88 CUS 819 68 230,148 19 1,334,129 16 32,91,18 19 1,344,129 16 32,91,29 64 1,48,927 30 2,123,298 00 1,444 79 5,875 00 5,875 00 1,45,056,336 19	
V	mgs.	Other Barnings from Operation.	\$ cts.  \$ 3,496.29  \$7,599.17  \$2,199.17  \$2,923.14  \$2,923.14  \$7,703  \$3,281.95  \$30,889,993.69	
7	Karnings.	Preight.	\$ cts. 760 70 148,143 58 710,070 61 19,957 06 18,184 68 534,543 10 813,84 68 3,122 22 1,534,515 88 4,111 04 3,530 00 96,685,076 23	
cc		PassenBer.	88, 668. 88,568.32 78,568.32 78,568.32 10,84,839.01 20,247.18 20,247.18 5,553.75 1,845.00 45,282,326.27	
		Name of Railway.	Spokane and British Columbia  Tenisconata.  Teniskaming and Northern Ontario  Thousand Islands.  Toronto, Hanilton and Buffalo Victoria Terminal Rahway and Ferry Co Victoria and Sydney, B. C. Walwash in Camada.  Wellington Colliery Co.  Final Total.	
1.		Zumber.	58588888888 ·	

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1909.

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9

Proportion to Total Earnings.

160 × Col. 6. Col. 16.

			_ =!	1					
	-		Passenger Earnings per Train Mile, 10	<b>€</b> ≑	_	_	8786 8786 1.32543 1.35543	42857 77987 77987	
	9		Total Passenger Service Train Revenue	& cts.	80,991 99 17,510 02 31,199 40 6,174 72	41,163 97 162 09 29,070 96 81,012 52	2,240,967 19 3,004,490 57 166,308 82		14,747,80 1,532,85 84,815,61 19,102,46 18,679,57 388,686,60 3,521,54
	V	REVENUE FROM TRANSPORTATION	Exeess Baggage, Parlour and Chair Car— Revenue and other Items.	ets.	727 85 87 87 87 88 87 88 87 88 87 88 87 88 87 87	425 78 928 48 489 40	18,172 50 130,957 94 3,993 15	336,295 15 336,295 15 326,295 15	254 91 807 65 13,485 65 676 08
	10	EVENUE FROM T	Express,	ets.	6,203 88	2,216 78 49 83 780 48 2,400 70	305,526 180,526 1,816	7,031 22 11,884 15 1,680,440 02 238 67	6,534 96 577 26 2,487 93 27,954 74
delike to the set demonstrate median and the set	7	- B	Mail.	& ets.	553 57 3,605 76	6,611.76 1,748.88 4,500.00	121,329 23 180,518 33 24,331 90	740,068 62	2,532 60 6,638 61 1,296 00 1,114 88 13,346 32
1	ಣ		Revenue Per Passenger Por Mile.	Cents.	3: 698 3: 503 3: 503 6: 094	27.2.9 4.9.9.0 7.4.0.4.9 7.4.0.4.9 7.4.0.4.9	1.775	2.060	3.076 1.982 3.785 2.679 2.136
	का		Passenger Revenue.	* cts.	73,407 51 16,931 57 26,527 29 6,155 82	32,335 43 110 65 26,115 82 73,183 34 27,343 60	2,512,487 61 136,167 50		13,215 20 1,532 85 1,532 85 71,632 85 13,669 11 333,899 89 2,845 46
A.—Operating Revenues.			NAME OF RAILWAY.		1 Alberta Railway and Irrigation Co. 2 Algona Central and Hudson Bay. 3 Atlantic and Lake Superior 4 Atlantic, Quebec and Western.	5 Bay of Quinté. 6 Bedington and Nelson. 7 Brandon, Saskatckewan and Hudson Bay. 8 British Yukon. 9 Brockly Westhort and Northwestern.	10 Bessenner and Barry's Bay. 11 Canada Southern 12 Canadian Government Railways—Intercolonial 13 " P. E. Island	15 Canadian Northern, Ontario 16 Canadian Northern, Quebre 17 Canadian Pacifie.	20 Caratuper 21 Cantral Ontario 22 Contral Ontario 23 Convented Southern. 23 Cunherland Southern. 24 Dominion Atlantic. 25 Eighn and Havelock.
[]	20 <i>b</i>	7	Xumber.		H 21 22 41	<i></i> ⊕ 1 − ∞ ⊃	22223	133723	<sup>រ</sup> ត់ត្តតាតិតិតិ

Table 7.—Earnings and Income for the Year ending June 30, 1909—Concluded.

A.-Operating Revenues.

99 Eq.	)X.	Total Passenger Total Passenger Farmings Earnings.  Train Kevenue Train Mile. Col. 16.	cts.	1.23376 1.23376 67.927 67.927 67.927 67.927 67.927 1.2376 1.3609 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1.35002 1
	)N.			
	0N.	otal senger srvice Revenue	cts.	
<u> </u>	Z	Tan Pas	æ	10,017,218 98,424 7 31 18,424 7 31 18,424 7 31 18,424 7 31 18,732 54 17,75 54 17,75 54 17,75 54 17,55
	RANSPORTATIC	Excess Laggage, Parlour and Chair Carr Revenue and and other Items.	& cts.	243,287 09 1,59,504 14 5,50,504 14 65 00 180 54 884 2 2 20 2 20 145 57 4,88 19 1,121 49 1,121 49 1,121 49 1,121 49 1,121 49
10	REVENUE FROM TRANSPORTATION.	Express.	& cts.	28, 28, 28, 28, 28, 28, 28, 28, 28, 28,
4	RE	Mail.	& cts.	366, 750 26 2, 757 28 2, 757 28 2, 757 28 2, 113 13 2, 12 13 1, 13 4 1, 13 4
60		Revenue per per per Mile.	Cents.	5 · (50 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (34 ) 1 · (3
φ1		Passenger Revenue.	& cts.	8,413,069,94 378,817,36 16,949,91 14,949,91 15,833,93 21,714,65 6,576,59 13,685,49 13,424,10 6,272,13 6,528,59 16,929,99 4,494,10 16,929,99 4,494,10 16,929,99 4,494,10 16,929,99 4,494,10 16,929,99 4,494,10 16,929,99 4,494,10 16,929,99 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 17,988,98 1
-		NAME OF RAILWAY.		26 Eastern British Columbia. 27 Grand Trunk (Canada Atlantic). 28 Grand Trunk (Canada Atlantic). 39 Hailfax and Suthwestern. 30 Hampton and St. Martin s. 31 Hereford. 31 Inverness Railway and Coal Co. 32 Inverness Railway and Ottawa. 34 Kaslo and Slocan. 35 Kent Northern. 36 Ketle River Valley. 37 Kingston and Pembroke. 38 Klondike Mines. 38 Liverpool and Milton. 49 Lothinière and Megantic. 41 Lothondon and Port Stanley. 42 Manitoniin and North Stanley. 43 Maritine Coal, Railway and Power Co. 44 Massawippi Valley. 45 Minteral and Atlantic. 46 Montreal and Atlantic. 47 Montreal and Atlantic. 48 Montreal and Permont Junction. 49 Morrissey, Fernic and Michel.

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9,986 4,381 27,506 18,613 11,011 19,472 51,116	361 2,248 7,173 67,204	2,720 356,622 258,149 11,676	888.4 : # 888.9 : 9 69: 91: 91: 91: 91: 91: 91: 91: 91: 91: 9	20, 241 20, 245 20, 245 20, 245 20, 247 20, 20, 20, 20, 20, 20, 20, 20, 20, 20,	15, 282, 326
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Table 7.—Earnings and Income for the Year ending June 30, 1909—Continued.

A.-Operating Revenues.

						9.	-10 E	DWARD VII., A. 1910
17	WENUES.	Total Earn- ings per Train Mile.	& cts.		1.15742 .92876 1.38725	5.70541 1.00497	$6.17966 \\ 2.18313$	1.27224 96800 2.32600 2.32600 1.59533 1.59533 4.11872 4.11872 63878 29707
16	SUMMARY OF REVENUES.	Tolat Operating Revenues. Cols. 11+114+15.	s cts.		16,826 59 153,652 92 1,745 17	326,612 09 57,768 52 68,940 11	3,107 80 7,756,465 51	8,602,986 51 323,084 25 323,084 25 325,1767 93 322,533 88 73,603 44 70,438,424 42 52,043 61 2,2508 61 2,2508 61 2,268 61
15		Telegraph, Rents and other Sources.	& cts.	12,345 78 41,973 31 3,344 76	2,642 68	6,359 90	3,299 60	20,545 18 207,839 91 6,512 26 11,612 26 11,003,535 42 19,149 58
11	REVENUE FROM OPERA- TIONS OTHER THAN TRANSPORTATIONS.	Station and Train Privileges, Storage and Car Service.	es cts.	16,	14 83 1,826 00	156 65	30,084 88	34,601 09 669 26 20,156 37 706 48 4,689 219,455 64 118 40 897 60 670-91
51		Proportion to Total Earnings.	), C.	68°16 75°21 63°06	63.21 70.30 90.72	73.20 44.28 57.79	100.00	86.73 87.78 87.78 87.78 87.78 88.78 88.78
12		Freight Earn- ings per Trum Mile.	ets.	2.28335 3.19815 68503	_	4.21663 .84017 1.61206	2.70295	1.36651 45690 246189 1.42844 2.17511 2.30700 .03099 3.53065
п	REVENUE PROM TRANSPORTATION	Total Revenue from Trans- portation.	\$ cts.	281,580 00 246,191 26 90,208 42	16,811 76 149,184 24 1,745 17	320,005 54 57,768 52 68,914 89	3,107 80 7,733,081 03	8,547,840 322,147 10 9,595,771 65 325,335 14 723,127 7,925 47 7,925 47 7,925 47 1,610 10 17,6572 328
8	SNUE FROM T'S	Switching Revenue, Special Ser- vice, Train Revenue and Miscel- laneous,	ets.	1,498 00 90,647 03	946 10	372 60	59,383 00	72, 111, 91 3, 342, 42 118, 294, 55 683, 58 8, 584, 75 271, 839, 51
10	REVI	Revenue per Ten per Mile,	Cents.	2.700 1.669 4.330	7.451 6.459 6.459 6.459	11.196 3.890 1.347	5.508	5.75 3.929 7.36 1.112 1.250 7.66 2.436
<b>5.</b>		Freight Revenue.	ets.	19,909 01 138,534 21 59,009 02	9,690 94 108,626 27 1,583 08	239,083 02 25,575 54 39,471 33	3,107 80 5,432,730 84	5,491,237 76 152,495 86 7,370,376 28 194,049 85 489,665 31 46,502,875 28 2,666 15 37,282 64 163,472 16 163,472 16 163,472 16
		NAME OF RADWAY.		1 Alberta Railway and Irrigation Co. 2 Algoma Central and Hudson Bay. 3 Atlantic and Lake Superior.	4 Atlantic, Quebec and Western 5 Bay of Quinté 6 Bedlington and Nelson	7 I Standon, Saskatchewan and Hud- son Ray 8 British Yukon 9 Bessemer and Barry's Bay	U Brockville, Westport and North- Western	Canada Government Rallways- Lintercolonial Prince Edward Island Canadian Northern, Ontario Canadian Northern, Quebec Cape Breton Cape Breton Caraquet Sol Carillon and Grenville Chentral Ontario Cayonsest Southern
11		Number.		-3133	4,73,001	~ တဘာ	2 =	225455155 2595 2595 2595 2595 2595 2595 2595

### CORRECTION.

Through the displacement of decimal points in the second column of Table 7, on pages 100, 101 and 102, the revenue per ton per mile was changed in the case of fourteen railways. The correct figures with regard to the lines affected are as follows:—

		Kevenue
No.	RAILWAY.	per ton
		per mile.
11	Canada Southern	.545
12	Intercolonial	.575
14	Canadian Northern	.736
17	Canadian Pacific	. 756
27	Grand Trunk	. 666
28	do Canada Atlantic	.577
41	London & Port Stanley	.818
44	Massawippi Valley	
48	Montreal & Vermont Junction	
51	Napierville Junction	
64	Pere Marquette	
70	Rutland & Noyan	
76	Sydney & Louisburg	
85	Wabash (in Canada)	

J. L. PAYNE,

Comptroller of Statistics.

1909—20в—Раде 100.



RAILWAY STATISTICS
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27 Grand Trunk.
28 Grand Trunk.
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29 Halifax and Southwest and Ereford.
20 Inverness Railway and 31 Irondale, Bancroft and 31 Irondale, Bancroft and 32 Irondale, Bancroft and 32 Irondale, Bancroft and 32 Irondale, Bancroft and 32 Irondale, Bancroft and 41 Irondon and Port Stanl 42 Manitonin and North Stanl 42 Manitonin and North Stanl 43 Maritime Coal, Ry, and 44 Massawhipi Valley.
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71 Salisbury and Aurora.

TABLE 7.—EARNINGS and Income for the Year ending June 30, 1909—Concluded.

A.-Operating Revenues.

			9-10 EDWARD VI
17 EVENUES.	Total Earn- ings per Train Mile.	& cts.	87607 1 65096 1 97990 1 97990 1 97942 2 480280 9 2 2 2 9 2 2 2 3 4 3 4 3 6 5 3 4 3 6 6 5 1 1 6 2 1 3 0 6 6 3 3 6 6 5 1 1 6 2 1 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0 6 3 3 0
16 17 SUMMARY OF REVENUES.	Total Operating Revenues. Cols.	& cts.	44 87 73,350 55 49 00 277,093 00 70 06 422,093 00 40,000 31,267 60 21,105 05 32,971 33 4,698 36 796,429 16 2,106 03 6 2,106 03 6 2
1	Telegraph, Rents and other Sources.	ets.	
REVENUE FROM OPERA- TION OTHER THAN THANSPORTATION.	Station and Train Privileges, Storage and Car Service.	ets.	236 50 193 16 221 91 18,528 69 18,538 87 2,718 67 1,914 09 47 01 146 33 3,103 47
<u>n</u>	Proportion to Total Earnings.	). c.	11.2 120.8 120.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 100.8 1
63	Freight Earn ings per Train Mile,	S. Ct.	2. 44308 1. 88840 1. 88840 1. 88840 1. 88876 1. 46875 1. 48875 1. 88365 1. 8836 1. 88
B 11 REVENUE FROM TRANSPORTATION.	Total Revenue from Trans- portation.	s cts.	73,069 18 277,052 00 421,969 00 421,969 00 84,529 92 84,762 98 783,026 19 783,026 19 783,026 19 783,026 19 783,026 19 783,026 19 783,026 19 784,746 79 784,746 79
B SNUR FROM T	Switching Revenue, Special Service, Train Revenue and Miscel- lancous,	e cts.	96 94 277,062 00 2,826 20 166 59 178 00 21,685 33 1,158 04 1,158 04 3,216 20 3,216 20 1,217,314 82
Rieva	Revenue per Ton per Mile.	Cents.	1.280 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180 1.180
<b>o</b> .	Preight Revenue.	€.	38,001 43 247,500 13 324,817 15 594 20 142,965 58 685,386 19,957 08 504,711 77 312,521 14 1,521,299 68 44,111 04 3,530 00
	NAME OF RAHWAY.		Stanstead, Shefford and Chambly. 74 St. Clair Tunnel. 75 St. Lawrence and Adirondack. 76 Sydney and Louisburg. 77 Spokane and British Columbia. 78 Temiscounta. 79 Temiskaming and Northern Outario. 80 Thousand Islands. 81 Toronto, Hamilton and Brifato. 82 Vancouver, Victoria and Eastern. 83 Victoria Terminal Ry, and Ferstern. 83 Victoria and Sidney, B. C. 84 Victoria and Sidney, B. C. 85 Wabash Railroad Co. in Canada 86 Wabash Railroad Co. in Canada 86 Wabington Golliery Co. 87 York and Garleton.

### TABLE 8

SUMMARY OF OPERATING EXPENSES

9-10 EDWARD VII., A. 1910 TABLE 8.—Summary of Operating Expenses

	1.	5	3	4	5	6							
		Maintenance of Way											
No.	N. CD !!		1										
	Name of Railway,	Superin- tendence.	Ballast.	Ties.	Rails.	Other Track Material.							
		s ets.	8 ets.	s ets.	\$ cts.	8 ets.							
1 2 3	Alberta Ry. & Irrigation Co Algoma Central & Hudson Bay Atlantic and Lake Superior	3,000 00 4,598 10		25,995 29 2,212 95 4,698 23	385 84 32 37	4,295*32 1,485 38							
5 6	Atlantic, Quebec & Western Bay of Quinte Bedlington & Nelson Ry. Co Bessemer & Barrys Bay	1,082 56 890 00	378 90 0 50	4,129 11 147 32 128 70	Cr. 29 37 Cr. 12 11	118 27 2 14 12 00							
8 9 10	Brandon, Saskatchewan & Hudson Bay	3,658 96 328 56	$\begin{array}{c} 1 & 49 \\ 3,644 & 12 \end{array}$	36 12 3,781 58	Cr. 40 75	418 44 540 10							
11 12 13 14 15 16 17 18 19 20	Western. Canada Southern Canadian Govt, Rys.(Intercolonial) " " (P.E. Island). Canadian Northern. " Ontario. " " Quebec Canadian Pacific. Cape Breton Caraquet. Carillon and Grenville	720 00	66,953 63 3,730 00	1,870 50 117,861 80 280,399 16 13,573 69 248,745 65 1,927 58 29,203 55 920,799 74 1,353 02 3,087 15 539 00	101,535 49 65,018 05 2,068 80 6,601 53 0 68 Cr.1,486 00 .551,181 90	126,657 29 116,971 64 2,497 34 48,945 32 1,303 32 4,733 07 301,528 91							
21 22 23 24 25 26	Central Ontario Crowsnest Southern Cumberland Ry, & Coal Co. Dominion Atlantic Elgin & Havelock. Eastern British Columbia.	2,010 00 5,652 85 1,200 00 2,192 39	1,901 90 1 65 2,988 70 148 16	6,600 00 8,738 97 2,380 00 21,154 93 1,296 78 95 96	592 86 1,205 15 269 70 9,117 06	1,096 21 911 73 1,144 86 2,331 05 90 37							
27 28 29 30	Grand Trunk. Grand Trunk (Canada Atlantic). Halifax & Southwestern. Hampton & St. Martins	11,249 56 4,596 66	5,253 84	1,214 81	504,272 36 15,004 32 45 72	375,218 61 5,204 51 10,088 64 241 12							
31 32 33 34	Hereford			3,734 83 6,683 10 1,338 99 463 50	1,381 32	1,150 96 2,995 11 557 06 2 30							
35 36 37 38	Kent Northern. Kettle River Valley Kingston & Pembroke Klondike Mines. Liverpool & Milton	625 00 28 73 3,398 11		1,500 00 355 52 10,009 16	1 50	1,459 07							
39 40 41 42	Liverpool & Milton. Lotbinière & Megantic. London & Port Stanley. Manitoulin and North Shore.		1,218 92 142 91 33 15	1,185 53 9,857 72 1,407 11		1,935 18 504 11							
43 44 45 46	Maritime Coal. Ry, and Power Co. Massawippi Valley. Midland Ry. Co. of Manitoba Montreal and Atlantic	1,511 05 5,140 49 7,268 32	1 82 8,836 09	513 58 5,554 68 178 69 24,829 93	194 74 Cr. 51 29 12,687 26	1,302 02 227 95 7,337 64							
47 48 49	Montreal and Province Line Montreal and Vermont Junction Morrissey, Fernie and Michel	855 55 855 71	354 79 1 20	3,410 73 5.173 45 1,165 07	301 76 9 64	742 99 600 89 2,436 39							
50 51 52 53 54	Moncton and Buctouche Napierville Junction Nelson and Fort Sheppard New Brunswick Coal and Ry. Co., New Brunswick and P. E. Island.	3,779 43	1 15	1,793 16 30 99 5,702 67 6,075 01 2,367 92	Cr. 36 43 22 83	410 10 331 70 326 29 192 25 239 94							

# SESSIONAL PAPER No. 20b for the Year ending June 30, 1909.

7	8	9	10	11	12	13	
AND STRUCTUR	Es.						
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.	No.
\$ cts.	s ets.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.	
32,350 62 7,148 24 17,571 99 4,928 14 14,972 28 1,096 88 1,822 13	1,176 26 3,937 21 1,601 60 1,414 08 1,140 15 5 04 66 25		6,143 51 1,887 45 22 00 300 95 1,113 66	10 99	162 45 680 87 45 35 1,100 30 0 38	435 43 85 50	5
18,485 33 21,434 06	3,668 39 13,660 92		2,301 01 1,362 83	5 75	199 15 45 36		
4,599 17 207,874 68 555,407 29 64,870 80 61,520 82 54,504 97 4,228,032 33 3,451 18 10,120 00 24,284 05 73,927 49 16,064 04 44,158 20 2,715 67 3,840 22 1,081,388 73 144,771 38 61,458 22 1,085,660 22 18,968 20 7,039 40 4,596 28 1,005 28 1,005 28 1,005 29 1,069 21 26,631 41 10,765 92	1,978 88 6,668 35 5,422 54 241 53 234,560 91 24,650 71 607 66 2,300 92 417 70 3,037 88	8,312 11 Cr. 175 90	457 50 2,139 90 25 00	2,409 34 1,084 66 75 11 3,530 80 31 29 835 19 28,289 98 46 76	58,310 99 5,514 85 14,655 13 614 57 5,416 54 188,742 59 250 00 250 00 2,671 01 282 38 6,056 92 18 49 166,536 97 8,629 03 1,444 38	11,645 88 2,062 55 Cr. 5 03 94 99 1,816 15 59,052 36  28 36 39 00 595 42  7,827 27 752 04 56 32 1 10 28 80	15 16 16 17 18 19 20 21 22 24 25 26 27 28 29 30 31 32 33 34 35 36
5,448 63 10,317 86 3,534 54 4,765 19 20,200 05 25,879 85 64,176 98 9,293 53 5,006 91 3,728 03 4,842 79 2,735 62 27,042 99 12,735 09 4,500 34	501 09 407 85 259 78 917 27 946 14 11.766 98 3,333 60 2,343 37 3,082 92 970 00 2,046 98	995 17	9,469 07 311 87 12 11 2,040 51 198 70 45,067 53 11 00 633 19	309 02	950 73 80 57 255 20 129 53 4,622 70 912 81 477 48	76 67 3,942 85 70 28 116 51	41 42 43 44 45 46 47 48 49 50

9-10 EDWARD VII., A. 1910
Table 8.—Summary of Operating Expenses

	1	2	3	4	5	6
					Maintena	NCE OF WAY
No.	Name of Railway.	Superinten dence.	Ballast.	Ties.	Rails.	Other Track Material.
		\$ ets	. \$ cts.	\$ ets.	4 cts.	\$ cts.
55 56 57	New Brunswick Southern, New Westminster Southern, Nosbonsing and Nipissing	2,824 70 1,808 6	1,389 25 743 55	1,113 43 1,804 39	4,709 55 48 28	878 85 165 79
58 59 60 61 62 63 64 65 66 67 68 69 70	Nova Scotia Steel and Coal Co. Orford Mountain. Ottawa and New York. Phillipsburg Ry. and Quarry Co. Princeton Br'ch of Washington Co. Père Marquette. Quebec Central. Quebec and Lake St. John Quebec Ry., Light and Power Co. Quebec, Montreal and Southern. Red Mountain. Rutland and Noyan. Salisbury and Harvey.	1,136 8; 94 7; 8,411 5; 4,304 9; 5,164 8; 154 0; 5,294 2; 960 4; 113 6;	3 3,356 62 3 168 72 2,390 61 1 180 13 3 39 76 1 160 1 199 00	891 82 1,549 81 4,323 20 216 00 996 98 13,373 46 16,689 71 3,809 89 576 79 15,751 40 2,014 56	1,362 95  1,205 31 25,490 00 1,444 71  711 17 Cr. 6 01	14 88 103 11 388 89 54 17 5,525 11 4,077 77 3,945 37 16 66 2,072 71 419 39 17 44
72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87	Schomberg and Aurora. Stanstead, Shefford and Chambly. St. Clair Tunnel. St. Lawreuce and Adirondack Sydney and Louisburg. Spokane and British Columbia Temisconata. Temiskaming and Northern Ontario Thousand Islands. Toronto, Hamilton and Buffalo. Vancouver, Victoria and Eastern. Victoria Terminal Ry, and Ferry Co. Victoria and Sidney, B.C. Wabash Railroad Co. in Canada. Wellington Colliery Co. York and Carleton.	670 4 411 5 1,832 5 850 0 22 9 1,413 6 3,949 1 13 6 6,157 4 10,054 7 25 5 340 8;	6 1,545 95 62 10 55 557 83 65 252 71 18 05 7 4,873 65 7 772 84 6 30 63	2,517 40 302 04 9,179 05 8,070 16 209 18 10,094 27 2,026 29 393 10 11,592 95 7,271 67 123 08 1,635 12 142 78 2,175 80	629 68 1,198 79 1,351 97 786 72 1,140 39 5 70 20,215 97 10,903 60 Cr. 111 63 Cr. 201 98	2,363 76 5,044 10 2 50 1,181 95 1,335 36 443 22 8,948 29 15,942 46 4 32 57 42 246 07
	Total	759,240 98	198,796 80	2,678,384 80	1,343,471 77	1,084,342 40

SESSIONAL PAPER No. 20b for the Year ending June 30, 1909—Continued.

	7	8	9	10	11	12	13	
ND S	Structure	es-Continued.						
	way and rack.	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.	1
	\$ ets.	8 ets.	§ ets.	\$ ets.	\$ ets.	\$ ets.	\$ ets.	
	11,103 71 12,929 43	35 79		566 16			0 37 0 87	
	631 80 2,397 10 8,389 22 19,013 93					620 00	102 52	2
	1,630 11 46,364 19 73,885 92 48,097 22 2,265 62 20,066 88 6,477 00 712 19	1,814 97 2,632 20 24,498 42 306 96 7,832 49 1,508 41 105 35		9,966 26 12,778 86 4,178 96 382 31 4,754 94 2,386 18	123 61	106 24 6,788 67 1,390 41 6,487 77 344 87 4,929 80 8 43 53 28	429 19 585 74 66 91 383 38 0 04	) L
	7,338 49 4,657 48	2,282 66	9,190 99	4,229 44 38 15	80 00	462 24	56 50	1
3			90 90	19 39 180 76	338 90 5 93 2 54	1,127 94 417 63 651 81 150 87 3,401 39 731 03 42 60 693 62	109 68 3 53 0 76	3
	1,341 00					5 00		Ì
8,46	69,429 03	1,139,937 37	18,413 27	1,603,291 03	37,179 87	528,111 60	91,538 47	

9-10 EDWARD VII., A. 1910
TABLE S.—Summary of Operating Expenses

	14	15	16	17	18		
		Maintenance of Wa					
No.	Name of Railway,	Signals and interlocking plants.	Telegraph and telephone lines.	Electric power transmission	Buildings, fixtures and grounds,		
			mies.				
		\$ ets.	\$ cts.	\$ cts.	\$ cts		
1	Alberta Ry. & Irrigation Co		1,551 02		4,786 35		
	Algoma Central & Hudson Bay				1,047 64		
4	Atlantic, Quebec & Western		5 80		1,059 07 98 15		
5	Bay of Quinte	34 65	110 00		1,133 57		
6 7	Bedlington & Nelson	21 94	20 18		599,30		
8	Bessemer & Barry's Bay Brandon, Sask. & Hudson Bay		$\frac{4}{155} \frac{00}{40}$		1,936 80		
9	British Yukon		501 17		3,496 44		
10	Brockville, Westport & Northwestern	13 412 90	= 169 14		1,120 22		
12	Canadian Government Rys.—Intercolonial	41,448 38 6,405 50	7,463 14 1,500 13		32,708 15 159,597 64		
13	P.E. Island	46 60	6 91		8,661 18		
14 15	Canadian Northern	3,164 28	24,946 56		103,105 06		
16	Canadian Northern, Ontario	325 59 1,790 05	1,943 59 174 97		1,370 19 10,682 38		
17	Canadian Pacific		175,920 41		1,173,903 12		
18 19	Cape Breton		6 55		59 21		
20	Caraquet Carillon & Grenville.		435 00		50 0à		
21	CentralOntario		194 82		5,234 38		
	Crowsnest Southern		518 96		3,077 63		
24	Cumberland Ry. & Coal Co		73 50		9,101 84		
25	Elgin & Havelock				128 21		
26 27	Eastern British Columbia		20 15		50 74		
	Grand Trunk	24,344 52	12,378 70 7,766 55		558,613 97 46,194 54		
29	Halifax & Southwestern	65 68	SS7 66		8,210 46		
30	Hampton & St. Martin's Hereford		134 28		010 61		
31 32	Inverness Ry. & Coal Co		171 08		812 51 1,878 99		
33	Irondale, Bancroft & Ottawa						
34	Kaslo & Slocan						
35 36	Kent Northern Kettle River Valley						
37	Kingston & Pembroke		48 49				
38	Klondike Mines		30 S5		111 80		
39 40	Liverpool & MiltonLotbinière & Megantic		46 92		389 84		
41	London & Port Stanley	104 33	24 28		1,540 98		
42	Maintoulin & North Shore		59 15		195 19		
43 44	Maritime Coal, Railway & Power Co Massawippi Valley		39 49		49 44 4,488 25		
45	Midland Railway Co. of Manitoba	543 23	227 20		1,032 74		
46	Montreal & Atlantic	1.324 65	2.573 07		17,204 55		
47	Montreal and Province Line.  Montreal and Vermont Junction.		121 58 162 63		146 84 256 93		
49	Morrissey, Fernie & Michel		102 03		922 30		
50	Moncton & Buctouche				281 80		
51 52	Napierville Junction	51 82 87 70	27 42 273 01		37 65 674 41		
53	New Brunswick Coal & Railway Co	76 46	427 38		522 40		
54	New Brunswick & Prince Edward Island				529 72		
55 56	New Brunswick Southern.	47.00	Cn 202 17		1,157 21		
57	New Westminster Southern Nosbonsing & Nipissing	47 68	Cr. 303 47		85 39		

SESSIONAL PAPER No. 20b

for the Year ending June 30, 1909-Continued.

19	20	21	22	23	24	25	
and Structure	ES—Continued.						2
Docks and wharfs.	Roadway tools and supplies.	Work equipment— repairs.	Work equipment— renewals.	Work equipment—depreciation.	Injuries to persons.	Stationery and Printing.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	S ets.	-
5,106 52	749 40				22 13	75 05 163 31	
78 94	30 53 75 97				7 00	25 46	
18 07	553 56 826 55				37 21 123 52	114 63 7 00	
3,378 89 18,135 69 1,777 92 1,996 37	14,174 73 25,414 77 1,484 79 15,528 24 1,737 35				469 28 390 39 3,052 32	1,119 72 3,971 22 192 42 1,300 77 235 13	
105,985 68	1,674 71° 116,112 66 17 27				35 00 27,402 47	141 43 25,950 43	-
100 00	50 00 93 23	ment.	ment.	anent.	35 00	4 87	1
212 78	2,458 72 1,770 29 72 24	l equip	equip	of equil	649 95 2 50 247 18	131 88	1
46,133 43 179 46 11 47	52 56 27,223 31 3,787 12 1,471 68	Transferred to maintenance of equipment.	Transferred to maintenance of equipment.	Transferred to maintenance of equipment	7,494 97 76 59	23 47 4,396 06 333 66 91 11	
• • • • • • • • • • • • • • • • • • • •	52 21 599 01 389 96	o mair	o maii	to mai	15 38	5 60 81 14	-
17 20	25 47	rred t	rred t	erred			
716 09 82 40	0 93 720 55 71 75	ransfe	ransfe	Fransf		88 48	
62 17 459 81	213 46 100 51		-		625 50	0 90 22 08 13 82	
58 08	643 06 350 08 1,372 16 247 74 91 09				119 60 36 24 3 25	12 82 152 83 272 49 10 82 27 06	
	90 10 43 85					2 52	
555 61 7 95 155 44	1,063 80 215 65 967 83 135 82				30 00 12 40	89 14 30 00 37 12 38 20	-

## 9-10 EDWARD VII., A. 1910

TABLE 8 SUMMARY	of	Operating	Expenses
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	14	15	16	17	18
V.				MAINTEN	NANCE OF WA
No.	Name of Railway,	Signals and interlocking plants.	Telegraph and telephone lines.	Electric power transmission	Buildings, fixtures and grounds.
		8 ets.	Š ets.	\$ ets.	\$ ets
58	North Shore Railway Co			1	
59	Nova Scotia Steel & Coal Co				
60	Orford Mountain		157 78		189 55
31	Ottawa & New York	809 33	34 01		1,471 86
52 53	Princeton Branch of Washington Co				
54	Père Marquette	1,415 92	207 75		9,649 91
35	Quebec Central	1			8,349 0:1
66	Quebec & Lake St. John		198 26 65 80		9,316 94 340 64
57 58	Quebec Railway, Light & Power Co	500 51	13 32		4,172 51
ю 39	Red Mountain	19 14	203 95	1	406 68
70	Rutland & Novan	9 16			6 06
71	Salisbury & Harvey	,	· • · · · · · · · · · ·	•••	391 01
$\frac{72}{73}$	Schomberg & Aurora Stanstead, Shefford & Chambly	3 17	158 72		1,619 41
74	St Clair Tunnel	964 / 1	16.6	3,211 76	2,853 04
75	St. Lawrence & Adirondack	1,820 54	46 55		3,601 31
76	Sydney & Louisburg				1,677 33
77	Spokane & British Columbia		14 00		$\begin{array}{r} 19 & 35 \\ 3,722 & 50 \end{array}$
78 79	Temiscouata	482 55	2,770 58	1,434 60	6,317 53
30	Thousand Islands				590 65
31	Toronto Hamilton & Buffalo	3,640 44			8,834 48
2	Vancouver, Victoria & Eastern	355 10	807 88 2 85		5,736-77 33-61
33 34	Victoria Terminal Railway & Ferry Co Victoria & Sydney, B. C		37.87	[	447 01
85	Wahash Railroad Co in Canada				2,477 15
36	Wellington Colliery Co				
37	York & Carleton				· · · · · · · · · · · · · · · · · · ·
	Final total	191 410 50	246,934 48	4,646 36	2,241,319 79

# SESSIONAL PAPER No. 20b for the Year ending June 30, 1909.—Continued.

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	19	20	21	22	23	24	25
Docks and wharfs.   Social color and supplies.   Equipment renewals.   Equipment depreciation.   Social color and printing.   Soci	AND STRUCTUR	Es—Continued.					
360 94		tools and	equipment-	equipment-	equipment-		and
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	\$ ets.	\$ ets.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ ets.
	92 21 75 02 6 19 212 39 212 39 24 12 530 26 155 56	701 10 2,418 07 2,005 17 741 80 147 68 22 66 272 98 73 34 232 32 0 78 749 01 4,049 45 1,434 77 1,513 72 8 47 112 68	Transferred to maintenance of equipment.	Transferred to maintenance of equipment.	Transferred to maintenance of equipment.	100 00 26 00 5 00 96 32 0 95 5 26 25 00 636 20 192 88	9 87 3 00 0 19 4 21 249 51 130 39 236 69

TABLE S.—SUMMARY of Operating Expenses for the Year ending June 30, 1909.—Continued.

				9-10 EDWARD VII.; A. 1910
	36		Electric Loco- motives— Repairs.	& C C C C C C C C C C C C C C C C C C C
1	32	MAINTENANCE OF EQUIPMENT	Steam Locomo- tives Renewals.	8 cts. 142 19 142 19 1835 333 32 222, 331 95 7, 200 00
	34	INTENANCE O	Stean Liveomo- tives— Repairs.	8 cts. 11,354 17 13,454 36 8,366 66 8,366 66 90 19,803 55 81 21 4,515 39 5,577 97 6,53 40 1,57,413 40 1,973,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,417 56 1,54,54,417 56 1,54,54,417 56 1,54,54,417 56 1,54,54,417 56 1,54,54,417 56 1,54,54,417 56 1,54,54,417 56 1,54,54,417 56 1,54,54,54,54 1,54,54,54,54 1,54,54,54,54 1,54,54,54 1,54,54,54 1,54,54,54 1,54,54,54 1,54,54,54 1,54,54,54 1,54,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54,54 1,54
	333	MA	Super- intendence.	\$ cts.  1,182 86 3,238 44 1,232 45 1,532 45 1,686 96 54,170 49 54,170 49 6,388 35 1,652 27 1,200 90 1,200 90 1,200 90 2,270 66 70,833 24 8,567 76 70,833 24 8,567 76 70,833 24
	32		Total Maintenance of Way and Structures.	8, cts. 84, 286, 70 35, 054, 48 25, 361, 12 4, 128, 361, 12 4, 128, 38 11, 384, 61 11, 642, 388, 67 11, 642, 388, 67 11, 642, 388, 67 11, 642, 388, 67 11, 642, 388, 67 11, 642, 388, 67 11, 642, 388, 67 11, 642, 388, 67 11, 642, 388, 67 11, 643, 687, 687 11, 643, 687, 687 11, 643, 687, 687 11, 643, 687, 687 11, 643, 687, 687 11, 643, 687, 687 11, 643, 687, 687 11, 643, 687, 687 11, 644, 687 11, 647, 687 11, 647, 687 11, 647, 687
	31	D STRUCTURES.	Maintaining Joint Tracks, Vards and other Facilities, Cr.	\$ CLR. 90,671 77 9,677 08 1,887 75 36,944 17 860,174 83 1,662 34
	98	MAINTENANCE OF WAY AND STRUCTURES.	Maintaining Joint Tracks, Yands and other Facilities.	\$ cts. 389 32 50,887 66 75,605 10 6,239 56 65,789 16 65,789 16 31,901 09 3,032 96 575 44
	53	MAINTENAN	Total of Poregoing Accounts.	88, 83, 877, 88, 877, 88, 877, 88, 877, 88, 877, 88, 871, 878, 88, 711, 757, 740, 757, 740, 757, 740, 758, 758, 758, 758, 758, 758, 758, 758
	588		Other Expenses.	\$ cfs.  \$48 95 115 56 420 48 17 14 184 99 1 03 1 03 273 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04 573 04
	65		Name of Railway.	Alberta Ry. & Irrigation Co.  2 Algania Central & Hudson Bay.  3 Atlantic, & Lake Superior  4 Atlantic, Quebec & Western.  5 Bay of Quinté.  6 Bedington & Nelson.  7 Bessener & Barry, Bay.  8 Brandon, Sask, & Hudson Bay.  9 Britaly Yukon.  10 Brockville, Westport & Northwestern.  11 Canadian Orothern.  12 Canadian Northern.  13 Canadian Northern, Ontario.  14 Canadian Northern, Ontario.  15 Canadian Northern, Quebec.  16 Canadian Northern, Quebec.  17 Canadian Serfic.  18 Cape Breton.  19 Carraquet.  19 Carraquet.  22 Crow's Nest Southern.  22 Crow's Nest Southern.  23 Cumberland Atlantic.  24 Bouninion Atlantic.  25 Elgin & Havelock.  26 Eastern British Columbia.  27 Grand Trunk.  28 Grand Trunk.  28 Grand Trunk.  29 Halifax & Southwestern.
11	j		Xumber.	988888888888888888888888888888888888888

SESSIONAL PAPER No. 20b	
	11,000 83
2,520 50 2,520 50 127 29 2,520 60 17,000 00 17,000 00 1,56 52 1,56 52 1,56 52 1,56 52 1,56 52 1,56 52 1,56 52	
2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	
1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1, 187 1,	
4,23,89,24,23,89,24,24,24,24,24,24,24,24,24,24,24,24,24,	
1 49 4,209 27 360 00 60 00 60 00 732 02 732 02	
13 26 1,096 36 689 96 680 99 680 99 151 23 151 23 151 24 151 25 151 25 1	34 01
25	
25 25 25 25 25 25 25 25 25 25 25 25 25 2	298 86 0 14 3,379 32
30 Hampton & St. Martins. 31 Hereford 32 Invendes, Ry, & Coad Co. 32 Invendes, Bancroft & Ottawa. 32 Keath Northern. 33 Keath Northern. 34 Kingston & Penhvole. 35 Kingston & Penhvole. 38 Kingston & Penhvole. 38 Kingston & Penhvole. 38 Kingston & Penhvole. 39 Liveptool & Milton. 40 Lothinive & Megantic. 41 London & Port Stanley. 42 Maritine Coal Ry. & Power Co. 43 Maritine Coal Ry. & Power Co. 44 Marsawippi Valley. 45 Maritine Coal Ry. & Power Co. 46 Montreal & Province Line. 47 Montreal & Pernis & Michel. 48 Montreal & Penine Line. 49 Montreal & Penine Line. 40 Montreal & Penine & Michel. 52 New Brunswick Coal & Ry. Co. 53 New Brunswick Southern. 54 New Brunswick Southern. 55 New Westminster Southern. 56 New Vestminster Southern. 56 New Vestminster Southern. 56 Orford Mountain. 67 Quobec & Lake St. John. 67 Quobec & Lake St. John. 67 Quobec Railway, Light & Power Co. 68 Quobec Railway, Light & Southern. 65 Rud Mountain. 65 Rud Mountain.	71 Salishury & Harvey  22 Schomberg & Aurora  73 Stanstead, Shefford & Chambly  74 St. Clair Tunnel.  75 St. Lawrence & Adirondack  75 St. Lawrence & Rodinshurg  77 Spokane & Pritish Columba.  78 Temisconata.  78 Temisconata.

9-10 EDWARD VII., A. 1910

Table 8.—Summary of Operating Expenses for the Year ending June 30, 1909.—Continued.

98		Electric Locomo- tives— Repairs.	& cts.		11,060 55
35	MAINTENANCE OF EQUIPMENT	Steam Locomo- tives— Renewals.	\$ cts.	1,782 19 36,718 80 Cr. 1,007 25 21,548 54 70 16 936 73 4,148 01 25 00	411,781 23
34	AINTENANCE C	Steam Locomo- tives— Repairs.	& ets.	-	497,292 54 9,427,704 22
32 33 34	M	Super- intendence.	s cts.	4,396 37 2,168 37 11 09 147 80 8,200 30	497,292 54
32	inued.	Total—Maintenance of Way and Structures	& cts.	3,641 95 135,509 06 133,559 80 694 75 9,165 38 226,300 33 15,841 56 1,396 00	528,201 07 21,153,274 46
31	MAINTENANCE OF WAY AND STRUCTURES—Continued	Maintaining Joint Tracks, Yards and other Facilities.	& cts.	9,265 21	528,201 07
98	WAY AND STI	Maintaining Joint Tracks, Yards and other Facilities.	& cts.	563 68 236,525 65	561,185 64
29	AINTENANCE OF	Total Je Foregoing Accounts.	s cts.	3,641 95 144,210 59 133,559 80 694 75 9,684 75 3,726 62 15,841 56 1,396 00	25,741 90 21,120,289 89
28	M	Other Expenses	sto.	24 70 51 00 9 19	25,741 90
25.		Name of Railway.		80 Thousand Islands 81 Toronto, Hamilton & Buffalo. 82 Vancouver, Victoria & Bastem 82 Victoria, Terminal Ry. & Ferry Co. 84 Victoria & Sydney, B.C. 85 Wabash Railway Co. in Canada. 86 Wellington Colliery Co.	Total

TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1909.—Continued.

48		Floating Equipment— Repairs.	\$ cts 12.17.9 73 1,440 11 4,338 08
47		Work Equipment – Kenewals.	85 Ct8. 3 94 Ct8. 1, 688 00 Ct8. 2225 00 Gt8 Ct8.
91	-Continued.	Work Equipment - Repairs.	\$ C68.  \$ 2,241.17  21,435.43  21,435.43  21,435.43  21,435.43  21,537.13  22,338.66  333.88  56,990.63  13,379.66  13,379.66
45	Maintenance of Equipment—Continued	Freight Train Cars – Renewals.	\$ cts. 258 00 11,635 00 100,000 08 1,077 77
<u> </u>	Maintenånge	Freight Train Cars Repairs.	\$ 68. 68. 68. 68. 68. 68. 68. 68. 68. 68.
. <del>.</del>		Passenger Train Cars— Renewals,	66, 636, 636 9, 867 86 80, 631 96
57:		Passenger Train Carr Repairs.	\$ 66. 1,141 15 3,017 46 1,688 65 1,688 65 1,688 65 2,423 12 2,423 12 2,423 12 1,166 12
41		Name of Railway	Alberta Railway and Prigation Co Algonia Central and Hudson Bay Atlantic and Jaske Superior Atlantic and Jaske Superior Atlantic Quebe and Western Again of Quinté Bedlington and Nolson Besserier and Barry's Ray Besserier and Barry's Ray Brandon, Saskatediewan and Hudson Bay British Yukon Brockville, Westport and Northwest, Cansulian Government Railways (P. E. Island) Canadian Government Railways (P. E. Island) Canadian Northern Quebec Canadian Anthern Quebec Canadian Anthern Carel Daninion Atlantic Bestern British Columbia Grand Trunk Canad Trunk Canad Trunk
206	$-8\frac{1}{2}$	N.	

9-10 EDWARD VII., A. 1910

TABLE 8.—SUMMARY of Operating Expenses for the Year ending June 30, 1909—Continued.

	48		Floating Equipment— Repairs.	89 89
	47		Work Equipment— Renewals.	cts.
	46	T—Continued.	Work Equipment— Repairs.	\$ cts. 612 63 418 57 418 57 125 95 125 95 125 95 124 39 114 39 114 39 114 39 114 39
1 - +	45	Maintenance of Equipment—Continued	Freight Train Cars— Renewals.	\$ cts. 8383 48 109 76
	44	Maintenanci	Freight Train Cars— Repairs.	\$ 68. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25
V V	£		Passenger Train Cars— Renewals.	89 CB
	45	T commenced	Passenger Trein Cars Repairs.	48 ces 7,172 35 1,966 51 1,966 51 1,966 51 1,967 52 1,967 52 1,968 52
	41	No. Name of Railway.		Halifax and Southwestern Hampton and St. Martin's. Hampton and St. Martin's. Hampton and St. Martin's. Inverted and Coal Co. Irondale, Fancroft and Ottawa. Kaslo and Slocan. Kettle River Valley. Kingston and Penbroke. Martine Coal, Railway & Power Co. Montreal & Atlantic. Montreal & Vernont-Junction Mortreal & Vernont-Junction Montreal & Vernont-Junction Montreal & Port Sheppard. Montreal & Province Line. Montreal & Province Line. Montreal & Pervince Line.
			No.	28888888888888888888888888888888888888

SESSIONAL PAPER No. 20b	
11,907 17	44,111 84
000 099	87,618 41
Cr. 157 41 11 09 977 76 731 03 114 08 729 86 1,975 29 3,734 04 1,572 30 1,572 40 1,572 30	454,543 08
6,485 12 1,087 74 54 23 54 23 Cr. 263 39	879,717 84
49 34 183,942 03 183,942 03 44,903 93 1,635 41 1,635 41 1,635 41 1,227 35 1,227 35 1,237 39 1,237 39 1,23	5,893,635 61
8, 255 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	158,959 43
200 52 2,908 35 2,908 35 10,470 86 10,470 88 15,943 17 16,83 39 16,83 39 16,83 45 17,85 45 18,95 47 18,95 47 18	2,595,472 23
58 North Shore Railway Co. 60 Ortord Mountain 61 Ottawa & New York 62 Philipsburg Railway & Quarry Co. 62 Philipsburg Railway & Quarry Co. 63 Perinceton Branch of Washington Co. 63 Pere Manquette 63 Chuebec Centrail 64 Chuebec Railway, Light & Power Co. 65 Quebec Centrail 66 Quebec Railway, Light & Power Co. 67 Quebec Railway, Light & Power Co. 68 And Mountain 70 Ruland & Noyan 71 Salisbury & Harcya. 72 Schomberg & Anrora. 73 Stanstead, Shefford & Chambly 74 St. Clair Tunnel 75 St. Lawrence & Adirondack 76 Sydney & Louishurg 77 Stokane and British Columbia 78 Tennisousta. 79 Tennishaming & Northern Ontario 81 Trouto, Hamilton & Baffalo 82 Vancouver, Victoria & Eastern 83 Victoria Ceminal Railway & Ferry Co. 84 Victoria Ceminal Railway & Wabsah Railroad Co. in Canada. 85 Wellington Colliery Co. 86 Wellington Colliery Co.	Final total.

9-10 EDWARD VII., A. 1910
Table 8.— Summary of Operating Expenses

			SUMMART O		
	54	55	56	57	58
				Man	NTENANCE OF
No.	Name of Railway.	Shop Machinéry and Tools.	Power Plant Equipmen'.	Injuries to Persons.	Stationery and Printing.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
1 2 3	Alberta Railway and Irrigation Co.  Algoma Central and Hudson Bay  Atlantic and Lake Superior  Atlantic, Quebec and Western.	771 20 340 65 392 78			47 69 80 43
4 5 6 7	Atlantic, Quebec and Western. Bay of Quinté Bedlington and Nelson Bessemer and Barry's Bay	$\begin{array}{c} 13 & 22 \\ 42 & 39 \end{array}$			
8 9 10	Brandon, Saskatchewan and Hudson Bay British Yukon	296 40 852 16 1 75		70 94	30 53 7 93
11 12 13 14	Canada Southern Canadian Government Railway (Intercolonial). (P. E. Island) Canadian Northern	36,708 23 1,732 56 41 514 49			
15 16 17 18	Canadian Northern, Ontario Canadian Northern, Quebec Canadian Pacific Cape Breton	1,632 94 339,381 37		237 99 25,604 25	95 11 284 84 33,928 90
$\frac{19}{20}$	Caraquet Carillon and Grenville	1,105 00 45 00			75 00
21 22 23	Central Ontario	336 01		83 08	34 96
$\frac{24}{25}$ $\frac{26}{26}$	Dominion Atlantic. Elgin and Havelock. Eastern British Columbia				19 48
27 28 29	Grand Trunk. Grand Trunk (Canada Atlantic) Halifax and Southwestern. Hampton and St. Martins.	269,801 13 12,981 23 911 17		3,162 46 186 71 50 00	54 48 10,089 90 991 59 84 91
30 31 32 33	Inverness Railway and Coal Co	291 04 733 04		15 58	57 68 81 13
34 35	Irondale, Bancroft and Ottawa   Kaslo and Slocan   Kent Northern   Kent Nort	19 70			
36 37 38	Kettle River Valley Kingston and Pembroke Klondike Mines	19 75		4 00	0.50
39 40 41 42	Liverpool and Milton Lotbinière and Megantic London and Port Stanley. Manitoulin and North Shore.	142 22			28 48 29 22
43 44	Maritime Coal, Ry. and Power Co			15 00	14 19
45 46 47 48	Midland Railway Co. of Manitoba.  Montreal and Atlantic.  Montreal and Province Line.  Montreal and Vermont Junction.			27 03	12 13 364 58 29 60 74 02
49 50	Morrissey, Fernie and Michel.  Moncton and Buctouche.  Napier ville Junction.				7 35
52 53	Nelson and Fort Sheppard New Brunswick Coal and Railway Co	197 70 1,114 68		50 44	20 18
54 55	New Brunswick and P. E. Island	56 17			15 00 15 35

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.	N
\$ ets.	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ cts.	
2,179 71 3,189 92 708 65	21,291 29 49,825 91 12,859 47					29,868 34 52,341 73 20,300 26	
75 21	1,140 73 25,594 29					1,140 73 25,594 29	
0 36 3 98	228 98 148 67		1,327 08			228 98 1,475 75	
27 88 	$\begin{array}{r} 9,059 \ 22 \\ 16,028 \ 31 \\ 3,375 \ 52 \end{array}$					9,059 22 16,028 31 3,375 52	1
11 00 35,396 71	$\begin{array}{r} 3,979 \ 32 \\ 942,060 \ 97 \\ 2,037,998 \ 20 \end{array}$	4,110 30 2,825 49		183 55		945,987 72 2,040,823 69	1
7,276 17 $24$ 00	70 900 50					70,398 58 1,193,677 18	
8,000 50 4,126 25 144 35	$\begin{array}{r} 54,832 \ 27 \\ 95,363 \ 75 \\ 10,882,553 \ 74 \end{array}$	210 44	2,048 59 16,537 66	554 84 416 21	3,244 64 34,827 78	53,636 22 77,073 63 10,882,347 97	
30 71 84 00	1,640 09 8,699 25					1,640 09 8,699 25	
240 00	1,115 00 16,751 76					1,115 00 16,751 76	1
34 S5 532 19	17,272 97 12,394 87 60,164 98					17,272 97 12,394 87 60,164 98	
3 50	890 33 1 507 71					890 33 1,507 71	
1,434 88 661 99	3,921,219 62 282,054 48	6,921 98	1 200 54	49,181 07 15 24	011 16	3,878,960 53 282,039 24 41,246 68	
2,927 45 42 50 0 03	588 84 11,237 11	· · · · · · · · · · · · · · · · · · ·	1,290 51	46 49	911 10	588 84	
	25,953 55 5,015 77		1,616 40	46 49	184 80	27,385 15 5,015 77	
4 20	$2,747 01 \\ 300 00 \\ 160 00$					2,747 01 300 00	
4,397 84	160 83 21,344 91 2,671 96					160 83 21,344 91 2,671 96	
157 75	2,222 49 2,752 10					2,222 49 2,752 10	
13 12 0 53	18,396 79 5,543 29		68 28			18,396 79 5,611 57	1
10 18	5,167 26 14,736 96 7,082 64					5,167 26 14,736 96 7,082 64	4
	116,557 79 1,002 49					116,557 79 1,002 49	
	847 98 11,117 18		107 70			847 98 11,224 88	
53 72 17 70	2,336 27 1,726 24 8,622 32					2,336 27 1,726 24 8,622 32	
	14,758 09		924 92			14,758 09 4,964 85	
			5,672 36	·		10,213 67	

9-10 EDWARD VII., A. 1910
TABLE 8.—Summary of Operating Expenses

	54	55	56	57	58
No.				Mai	NTENANCE OF
.10.	Name of Railway.	Shop machinery and tools.	Power plant equipment.	Injuries to persons.	Stationery and printing.
		\$ ets.	\$ cts.	S ets.	\$ cts.
56 57 58 59	New Westminster Southern. Nosbonsing and Nipissing. North Shore Railway Co Nova Scotia Steel and Coal Co.				
60 61 62 63	Orford Mountain Ottawa and New York. Philipsburg Ry. and Quarry Co.	1,140 31		19 20	21 7
54 55 56	Princeton Branch of Washington Co	4,441 63 4,608 94	502 24	357 37 111 00	$egin{array}{cccc} 3 & 2 \\ 300 & 5 \\ 123 & 0 \\ 208 & 4 \\ \end{array}$
7 8 9 0	Quebec Railway, Light and Power Co. Quebec, Montreal and Southern. Red Mountain Rutland and Noyan	972 24 86 13		26 61 20 47	828 7 8 7
1 2 3	Salisbury and Harvey. Schomberg and Aurora. Stanstead, Shefford and Chambly.	1,253 44	†	3 00	29 6
4 5 6	St. Clair Tunnel St. Lawrence and Adirondack Sydney and Louisburg	95 70 10 00 780 02	3,954 98	1 35	
7 8 9	Spokane and British Columbia. Temisconata. Temiskaming and Northern Ontario Thousand Islands	2,694 25 20 19	959 24	25 00	50 ( 659 2
2	Toronto, Hamilton and Buffalo	3,969 98 165 38 6 76		240 70 · 184 10	133 5 74 1
1 3	Victoria and Sydney, B.C. Wabash Railway Co. in Canada Wellington Colliery Co York and Carleton	6,880 82		1,366 29	660 -
7	Final Total	761,738 82			64,883

for the Year ending June 30, 1909—Continued.

59	60	61	62	63	64	65						
Equipment-	Equipment—Continued.											
Other expenses.	Total of foregoing accounts.	Maintaining joint equipment at terminals.	Equipment borrowed.	Maintaining joint equipment at terminals.  CR.	Equipment loaned. Cr.	Total maintenance of equipment.						
\$ cts.	cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.	\$ cts.						
20 63 145 74 74 80 147 24 6,691 41 7,528 99 73 30 125 90 6 94 67 16 526 60 0 255 1,648 50 7,790 90 13,912 7 4 00 7,206 51 77 42. 3,265 24	7,114 58 3,494 95 137 99 2,018 30 2,665 81 16,469 12		31,866 46 23,992 31 419 94 733 75 3,107 94 9,161 76 37 38 499 02	4,985 61	22,835 54 7,939 05 212 89 2,235 24	7,114 58 3,494 95 137 99 2,018 30 2,665 81 16,492 97 1,220 12 329,704 31 138,103 60 111,091 12 6,337 34 33,768 55 4,178 96 1,749 15 7,069 80 2,808 52 22,521 65 31,027 11 99,652 90 140 39 31,022 45 126,868 82 2,960 53 71,637 28 36,489 04 4,431 81 360,000 93 9,275 01	56 57 58 59 60 61 62 63 64 65 66 69 70 77 77 77 77 77 80 81 82 83 84 86					
121,201 13	55 00	62,314 49	255 00	66,613 05	99,396 49	310 00	87					

9-10 EDWARD VII., A. 1910 TABLE No. 8.—Summary of Operating Expenses

68	69	70	71
			TRAFFIC
No. Name of Railway.	Superin- tendence.	Outside Agencies.	Advertising.
	\$ cts.	\$ cts.	\$ cts.
1 Alberta Ry. and Irrigation Co. 2 Algoma Central and Hudson Bay	. 1,844 59		228 11
4 Atlantic, Quebec and Western. 5 Bay of Quinté. 6 Bedlington and Nelson	2,691 22		152 75
7 Bessemer and Barry's Bay 8 Brandon, Saskatchewan and Hudson Bay 9 British Yukon	551 05 2,191 86	1,271 78 1,942 65	521 82 1,581 14
10 Brockville, Westport and Northwestern. 11 Canada Southern. 12 Canadian Government Rys.—Intercolonial. 13 "P.E. Island.	. 49,520 92 . 50,534 14	36,793 74 59,860 74	15,522 00 48,427 91 831 03
13 " P.E. Island. 14 Canadian Northern 15 Canadian Northern, Ontario 16 Canadian Northern, Quebec. 17 Canadian Pacific	44,112 70 6,832 55 5,128 89	44,033 76 660 53 739 33 1,049,041 45	21,291 63 6,453 35 2,459 44 408,841 87
18 Cape Breton 19 Caraquet. 20 Carillon and Grenville.	720 00		
21 Central Ontario 22 Crowsnest Southern 23 Cumberland Ry, and Coal Co 24 Dominion Atlantic 25 Elgin and Havelock	. 1,275 00 . 706 14 . 1,317 60 6,752 43	375 25 1,708 55 9,227 58	549 07 507 61 6,575 75
26 Eastern British Columbia 27 Grand Trunk. 28 Grand Trunk (Canada Atlantic) 29 Halifax and Southwestern. 30 Hampton and St. Martins.	. 138,998 77 15,148 84 3,458 91	338,900 38 6,594 88 168 16	141,172 33 10,290 86 4,435 84 146 40
31 Hereford 32 Inverness Ry. and Coal Co 33 Irondale, Bancroft and Ottawa	274 80 45 40	67 53	187 06 243 38
34 Kaslo and Slocan 35 Kent Northern 36 Kettle River Valley. 37 Kingston and Pembroke. 38 Klondike Mines. 39 Liverpool and Milton	10 14 1,144 42		25 00 1 48 298 35 472 50
40 Lotbinière and Megantic 41 London and Port Stanley 42 Manitoulin and North Shore	1,617 99 240 29		818 76
43 Maritime Coal, Railway and Power Co. 44 Massawippi Valley. 45 Midland Railway Co., of Manitoba	. 875 84 330 97	233 88 841 80	122 42
46 Montreal and Atlantic 47 Montreal and Province Line 48 Montreal and Vermont Junction 49 Morrissey, Fernie and Michel	381 46 953 67	464 33 1,690 45	209 30 531 53
50 Moncton and Buctouche. 71 Napierville Junction. 52 Nelson and Fort Sheppard 53 New Brunswick Coal and Railway Co	280 41 430 57	61 05 1,004 02	7 59 443 03
54 New Brunswick and Prince Edward Island 55 New Brunswick Southern 56 New Westminster Southern 57 Nosbonsing and Nipissing	. 453 74	1,008 96	178 73 415 86

SESSIONAL PAPER No. 20b for the Year ending June 30, 1909—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.	N
\$ cts.	\$ cts.	\$ ets.	\$ ets.	§ cts.	\$ cts.	
82 60			131 31	34 76	2,321 37	
			386 50	205 05	3,435 52	
19 65		168 21	243 11 107 19	15 57	2,791 19 5,822 84	
2,894 05 2,328 52 593 08 211 12 236 36	86,846 76	1,668 98 3,867 88 0 72	15,041 21 26,920 75 103 54 14,749 66 702 80 1,151 96	48 66 13 20 68 64 7 67 66 17	208,287 66 188,120 72 966 33 128,722 35 14,860 35 9,724 37	1 1 1 1 1 1 1 1
34,932 20	44,481 31	11,862 62	151,429 01 295 00	157 00	2,075,170 05 1,172 00	1 1 1
107 86 33 51 10 00		173 68	17 52 333 08 1,544 19	20 93 1,891 05	2,324 20 3,483 50 3,208 65 24,109 95	2 2 2 2
24,970 87 2,035 29 233 11	142,548 63 58 92	169 87 14 24	5 00	308 50 27 46 672 49	1 75 5 00 825,933 43 39,463 26 9,718 53	2222
13 06 9 43	18 44		98 23 40 57	1 11	146 40 660 23 338 78	00 00 00 00
93 37			50 00 27 41 193 66 23 01			000000000000000000000000000000000000000
102 52	280 71		501 79 10 71	0 42	4,955 00 251 00	4
20 04 12 60 11 26 26 15	8,903 75 1,817 84	71 98	252 65 168 87 126 13 315 33	15 57	1,367 37 1,571 65 8,917 10 1,192 53 5,334 97	4 4 4 4
1 46 13 77 22 92	1,017 04	136 06	28 71 189 12	277 45 10 45	277 45 379 22 2,227 02 22 92	- Ca Ca Ca Ca Ca
12 62		158 61	8 60 187 71	0 42	187 33 2,237 92	Ch Ch Ch

9-10 EDWARD VII., A. 1910
TABLE 8.—Summary of Operating Expenses

Superintendence.   Superintendence.	70	71
Superintendence.   Superintendence.		Traffic
58 North Shore Railway Co         59 Nova Scotia Steel and Coal Co.           60 Orford Mountain.         3,691 1           61 Ottawa and New York.         3,691 1           62 Philipsburg Railway and Quarry Co.         17,833 1           63 Princeton Branch of Washington Co.         83 2           64 Père Marquette.         17,833 1           65 Quebec Central.         6,481 2           66 Quebec Railway, Light and Power Co.         332 4           68 Quebec, Montreal and Southern.         2,901 3           69 Red Mountain.         141 3           70 Rutland and Noyan.         120 6           71 Salisbury and Harvey.         22 Schomberg and Aurora.           73 Stanstead, Shefford and Chambly.         381 4           74 St. Clair Tunnel.         381 4           75 Spokane and British Columbia.         8 2           77 Spokane and British Columbia.         8 2           78 Temiscounta.         1,766 3           79 Temscaming and Northern Ontario.         8,087 7           80 Thousand Islands.         178 1	Outside Agencies.	Advertising.
59 Nova Scotia Steel and Coal Co.         60 Orford Mountain.       3,691 1         62 Philipsburg Railway and Quarry Co.       3,691 1         63 Princeton Branch of Washington Co.       83 2         64 Père Marquette.       17,833 1         65 Quebec Central.       6,481 2         66 Quebec and Lake St. John.       5,341 9         67 Quebec Railway, Light and Power Co.       332 4         68 Quebec, Montreal and Southern.       2,901 3         69 Red Mountain       141 8         70 Rutland and Noyan       120 6         71 Salisbury and Harvey.       2         72 Schomberg and Aurora       381 4         74 St. Clair Tunnel       381 4         75 St. Lawrence and Adirondack       1,330 3         76 Sydney and Louisburg.       77         77 Spokane and British Columbia       8 2         78 Temiscouata       1,766 3         79 Temscaming and Northern Outario       8,087 7         80 Thousand Islands       178 1	ts. \$ ets.	\$ ets.
82 Vancouver, Victoria and Eastern       1,513 *         83 Victoria Terminal Railway and Ferry Co       54 0         84 Victoria and Sidney, B.C.       739 9         85 Wabash Railway Co. (in Canada)       16,583 5         86 Wellington Colliery Co.       87 York and Carleton	8 338 14 0 0 78 9 17,520 69 8 8,875 42 4 690 14 2 110 60 7 626 48 9 3 8 46 6 105 08  9 508 79 8 3,220 50 0 8 19 09 7 4 8 1,102 22 2 3,655 17	165 21  43 64 3,229 70 4,511 16 3,302 20 519 32 50 05 7 74 38 46 25 30  204 30  204 30  214 94 1 34 1,035 52 1,399 64 82 30 1,833 51 1,169 67 8 23

for the Year ending June 30, 1909—Continued.

72	73	74	75	76	77
XPENSES.					
Traffie Associa- tions.	Fast Freight Lines.	Industrial and Immigration Bureaus.	Stationery and Printing.	Other Expenses.	Total Traffic Expenses
§ cts.	ŝ ets.	s ets.	\$ ets.	\$ ets.	ŝ ets.
138 25 57 02			305 13 514 71	0 42	443 38 4,766 68
1,140 07 1,071 41 126 60 14 45 20 17 9 64 5 33	6,320 56 67 26	84 52 23 49	5,180 88 1,185 93 1,009 69 29 00 532 33 81 94 42 66 46 55	16 70 1 64 202 23 10 46 68 81 331 50 5 30 4 47	144 32 51,225 73 22,327 43 10,565 55 1,074 60 4,461 90 658 46 383 92 71 85
11 26	597 59	7 67	126 36	• • • • • • • • • • • • • • • • •	1,837 46
129 39 92 28			18 99 22 24 1,337 39	232 61	5,263 61 214 94 31 78 2,950 38 11,149 69
341 28 71 44	980 44	363 53	1,337 39 15 44 1,005 82 706 49	7 50 57 05	283 38 14,231 85 7,536 87 62 28 849 29
2,141 03	10,362 88	84 00	6,256 44	4 13	76,213 41
74,397 04	303.285 09	18,856 06	278,799 24	4,787 14	3,798,824 57

9-10 EDWARD VII., A. 1910 TABLE 8.—Summary of Operating Expenses for the

	81	82	83	84	85
		•		Tra	.nsportation
No.	Name of Railway.	Superintendence.	Despatching Trains.	Station Employees.	Weighing and Car Service Associations
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
1 2 3	Alberta Railway and Irrigation Co	2,161 76 5,555 94 985 41	690 10	11,245 05 7,475 77 4,269 45	224 04
4 5 6	Atlantic, Quebec and Western	2,656 76 20 58	650 30	1,669 65 8,950 07	14 21
8 9	Bedlington and Nelson.  Bessemer and Barry's Bay.  Brandon, Saskatchewan and Hudson Bay  British Yukon.	1,220 23	637 86	7,650 06	1,133 15 501 60
10 11	Brockville, Westport and Northwestern	2,469 67 49,220 09	2,515 12 14,620 61	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	I
12 13 14	Intercolonial	78,138 46 5,452 49 102,706 65	3,158 89	645,484 27 45,197 38 489,946 08	
15 16 17	Canadian Northern, Ontario Canadian Northern, Quebec Canadian Pacific	8,743 48 9,911 58 651,128 55	1,690 42 3,579 41	18,976 59 42,726 88	114 8- 228 89
18 19 20	Cape Breton. Caraquet. Carillon and Grenville.	800 00 560 00	550 00	871 00 2,710 00 200 00	
21 22 23	Central Ontario Crowsnest Southern. Cumberland Railway and Coal Co	1,110 00 1,734 74	816 25	12,219 60 5,204 68	99 54 1,043 50
24 25 26	Dominion Atlantic Elgin and Havelock Eastern British Columbia	3,962 56 25 00 793 77	1,979 65		
27 28 29	Grand Trunk Grand Trunk (Canada Atlantic) Halifax and Southwestern	186,942 27 25,346 31 8,736 11	82,525 58 9,743 21	1,802,297 06 145,165 26	8,318 3 693 2
30 31 32	Hampton and St. Martin's Hereford Inverness Railway and Coal Co.	375 89 180 40	167 30	165 00 5,324 21	
33 34 35	Irondale, Bancroft and Ottawa Kaslo and Slocan Kent Northern			1,204 62	1 6
36 37 38	Kettle River Valley. Kingston and Pembroke. Klondike Mines	31 94 1,468 93	1,097 33	30 40 11,871 18	78 0
39 40 41	Liverpool and Milton Lotbinière and Megantic London and Port Stanley			663 39	
42 43 44	Manitoulin and North Shore Maritime Coal Railway and Power Co Massawippi Valley	2,010 32		1,381 63 17,298 51	3
45 46 47	Midland Railway Co. of Manitoba.  Montreal and Atlantic.  Montreal and Province Line.	648 59 6,555 11 572 21	286 33 6,249 37	5,612 85 42,054 59	661 3
$\frac{48}{49}$ $50$	Montreal and Vermont Junction.  Morrissey, Fernie and Michel  Moncton and Buctouche.	1,129 18 1,830 00	729 47	3,486 98 1,752 48 1,210 20	
$51 \\ 52 \\ 53$	Napierville Junction Nelson and Fort Sheppard New Brunswick Coal and Railway Co	191 03 1,333 13	677 08	2,228 87 4,347 37 2,449 12	93 8
54 55	New Brunswick and P. E. Island	100 00 95 95	0	841 40	

Year ending June 30, 1909—Continued.

86	87	88	89	90	91	92				
Expenses.										
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.	No.			
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.				
22,872 61	914 15 385 51 314 06	331 21	,	320 23	65 74	3,695 83 13,812 98				
	427 50 2,025 11 6 18			123 00	1 21					
	1,423 08 1,184 95 349 70		591 44			493 45	10			
	13,745 88 97,768 23	45,168 40 35,368 62		11,658 62	15,393 04	64,428 58 111,002 88	3 1:			
	6,770 31 40,202 56 2,163 49 4,159 29 307,497 40	140,553 44	3,843 36 7,083 11 696,949 38	$\begin{array}{c} 2 & 00 \\ 610 & 17 \\ 62,832 & 67 \end{array}$	2,098 55 129 65 16,688 23	65,736 15 2,911 26 6,379 65 519,794 92	5 1 6 1 8 1 2 1			
	1.008 98					713 80 723 33	1			
		69 80 1,840 38	764 79	1 05		6,654 7-	2 2 2 2 2 2			
Ċr. 3,038 49	12,712 43	97,922 24 7,762 61	363,512 05 24,908 04	77,183 67 5,222 44	5,096 20 101 45	264,253 10 20,075 01 1 254 79	$\frac{2}{2}$			
	636 42 474 17 110 00		211 25 1,485 50	4 85	1 48	1,159 50 1,331 30	. 3 0 3 . 3			
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					1,315 95	. 3			
•••••	411 25 110 29 405 16				J.	3,954 37	. 3			
	4 47 1,163 49 1,074 83		1,710 13			1,663 9-	- 3			
	5,980 67 1,048 95 519 14	1,625 45 49 86					3 4 . 4			
	131 99 277 78 386 10				0 87		. 5 . 5			
	899 95									

9-10 EDWARD VII., A. 1910 TABLE 8.—Summary of Operating Expenses for the

	81	82	83	84	85
				Тта	NSPORTATION
No.	Name of Railway.	Superin- tendence.	Despatching Trains.	Station Employees.	Weighing and Car Service Associations
		\$ cts	\$ ets.	\$ cts.	\$ cts.
56	New Westminster Southern	1,329 63	790-66	3,401 84	44 93
57 58	Nosbonsing and Nipissing				
59	North Shore Railway Co.  Nova Scotia Steel and Coal Co.	300 00	)	900 00	
60	Orford Mountain		000 01	4,701 02	
62	Ottawa and New York	1,675 33	826 81	10,260 11	60 00
63	Princeton Branch of Washington Co	166 4			
64 65	Père Marquette. Quebec Central.	13,926 57 $5,750 18$		72,248 25 56,434 96	
66	Quebec and Lake St. John	10,338 96		25,575 78	
67 68	Quebec Railway, Light and Power Co	315 00		824 35	134 49
	Red Mountain	2,273 59 407 21		18,713 31 3,499 01	112 57
70	Rutland and Noyan	158 92	39 33	536 64	16 82
71 72	Salisbury and Harvey Schomberg and Aurora			1,212 00	
73	Stanstead, Shefford and Chambly	693 33	243 47	7,479 07	0 10
74 75	St. Clair Tunnel St. Lawrence and Adirondack	3,416 86		9 157 05	
76	Sydney and Louisburg	1,800 00	4,720 00	8,457 95 13,935 48	50 58 5,100 12
77	Spokane and British Columbia	19 60		22 97	110.00
	Temiscouata Temiskaming and Northern Ontario	5,010 27 9,549 18		9,271 12 $44,146 98$	113 29 276 50
80	Thousand Islands	567 50	15 08	3,027 60	
81 82	Toronto, Hamilton and Buffalo	11,794 74 4,308 34		$\begin{array}{c} 65,417 & 51 \\ 23,073 & 70 \end{array}$	$\begin{array}{r} 242 \ 31 \\ 1,352 \ 02 \end{array}$
33	Victoria Terminal Railway and Ferry Co	32 95		200 46	4 71
84 85	Victoria and Sydney, B.C	438 95		2,722 54	62 72
86	Wabash Railroad Co. in Canada Wellington Colliery Co.	14,109 12		18,728 54	4,087 83
87	York and Carleton				
	Final total	1 050 040 50	704 149 07	7,144,573 81	46,049 36

SESSIONAL PAPER No. 20b

Year ending June 30, 1909—Continued.

87	88	89	90	91	92	93	
Expenses-0	ontinued.						
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.	No.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
	253 50						56
		`					57 58
	90 00 512 14						59 60
	6,638 38	54 41	346 21	93 79		256 99	61
							62
	6,341 07	3,520 39		766 70	289 95	10,623 78	64
75 87	6,507 15 3,573 60		3 890 16		29 88	3,525 83	65
	580 18 3,764 83	455 30	357 65 417 46	675 24 304 62	4 00 25 67	1,144 55	
	288 38					1,301 08	69
	144 67 20 52	70 82	122 24	936 00	11 28	91 60	70 71
							72
	1,465 59 104 77	96 00		WWY BO	149 35	1,070 56	73
	2,016 55					****	75
	190 85 4 25	3,696 78		449 00			76 77
	951 62	1 070 88	0.007.10	1 041 05	* * * * * * * * * * * * * * * * * * * *	# 40F 0F	78
	7,278 91 600 34	1,856 75		1,641 05	548 11	7,185 25	79
	4,878 28	4,444 15 705 00	14,578 58 820 89	1,269 31 39 00	56 23	10,379 97	81
	2,524 75 10 84	109 00	820 89	39 00	3 50	1,125 41	82 83
	140 28 1,547 82		2,125 54				84
	1,547 82		2,123 34 11,433 10		5,848 90	1,670 20	86
							87
19,909 99	798,021 05	374,334 16	1,533,070 52	183,210 94	71,682 94	1,144,827 42	

9-10 EDWARD VII., A. 1910
TABLE 8.—SUMMARY of Operating Expenses for the

94	95	96	97	98
			Tra	NSPORTATION
NAME OF RAILWAY.	Enginehouse Expenses— Yard.	Yard	Water for Yard Locomotives	Lubricants for Yard Locomotives
200	\$ cts.	\$ ets.	\$ cts.	\$ cts.
1 Alberta Railway and Irrigation Co. 2 Algoma Central and Hudson Bay. 3 Atlantic and Lake Superior.	815 11 2,022 90	4,099 37 12,035 78	521 60 298 16	143 65 556 05
HAtlantic, Quebec and Western  Bay of Quinte  Bedlington and Nelson.				
7 Bessemer and Barry Bay. 8 Brandon, Saskatchewan and Hudson Bay. 9 British Yukon. 10 Brockville, Westport and Northwestern.		1,083 24		14 58
11 Canada Southern 12 Canadian Government Railways—Intercolonial 13 "—P. E. Island 14 Canadian Northern 15 Canadian Northern, Ontario 16 Canadian Northern, Quebec	22,430 42 26,850 67 1,060 77 18,420 69 486 07 10 46	80,350 18 171,310 48 4,736 67 107,117 25 2,703 67 17,136 30	4,888 79 9,563 18 58 00 6,237 32 28 20 330 04	2,635 4; 3,951 7; 106 3; 2,482 9; 105 6;
17 Canadian Pacific	195,285 85	250 00	100 00	65 0
20 Canillan and Chanvilla	,	1	72 57	105 1
23 Carrion and Grenvine. 24 Central Ontario. 25 Crowsnest Southern. 26 Cumberland Railway and Coal Co. 27 Dominion Atlantic. 28 Eastern British Columbia.	2,805 24	7,841 60	140 41	140 9
Grand Trunk	48,202 21	275,024 25	13,706 09	4,476 9
90 Halifax and Sonthwestern. 91 Hampton and St. Martin's 91 Hereford. 92 Inverness Railway and Coal Co. 93 Irondale, Bancroft and Ottawa	455 56 611 05	2,069 40 2,037 82	56 72 0 35	27 6 89 5
35 Kent Northern	25 00			
37 Kingston and Pembroke 38 Klondike Mines. 39 Liverpool and Wilton 40 Lotbinière and Megantic		1,102 40		
40 Lotbinière and Megantic 11 London and Port Stanley 12 Manitoulin and North Shore. 13 Maritime Coal, Railway and Power Co.	1,098 00			
44 Massawippi Valley	1,129 76		200 00	
47 Montreal and Province Line, 48 Montreal and Vermont Junction 49 Morrissey, Fernie and Michel."	4 60	9,874 67	53 96 281 26	
51 Napierville Junction. 52 Nelson and Fort Sheppard. 53 New Brunswick Coal and Railway Co.				
54 New Brunswick and P. E. Island. 55 New Brunswick Southern.				

Year ending June 30, 1909—Continued.

99	100	101	102	103	104	105	106
Expenses-	Continued.						
Other Supplies for Yard Locomotives	Fifteen	Operating Joint Yards and Terminals— Dr.	Operating Joint Yards and Terminals— Cr.	Total Station and Yard Expenses.	Motor- men.	Road Enginemen.	Enginehouse Expenses— Road.
\$ cts.	\$ cts.	\$ cts.	S cts.	8 cts.	8 ets.	8 cts.	8 ets.
30 13  7,241 73  805 93  5 56  18 93  14 75	25,625 16 74,807 33 4,583 51 2,097 15 11,099 39 1,133 15 9,574 74 16,740 68 3,279 91 550,712 66 1,261,647 10 66,228 01 867,822 23 31,368 70 78,939 73 5,747,608 95 871 00 17,191 30 9,025 60 3,327 60 4,567 00 200 00 17,191 30 9,025 60 3,327 36 6,956 30 408 00 17,191 30 9,025 60 3,327 36 11,051 36 21,969 95 3 3,196,215 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051 36 6 11,051	2,600 00  316,122 89 105,450 33  19,489 92  1,318 30 212,938 14  210 00  1,183 50  18,256 42 3,356 89 552 04  1,561 59  3,369 13  3,369 13  3,369 552  4,369 13  3,369 552  4,561 59	16,764 38 69,579 01 14,357 34 347 94 91,173 61 552 04 402,720 68 10,816 80 76 36	25,625 16 74,807 33 4,583 51 2,097 15 13,699 39 20 39 1,133 15 9,574 74 16,740 68 3,279 11 1,297,518 42 66,228 01 872,954 81 31,368 70 79,910 09 5,869,373 48 871 00 4,567 00 17,401 30 9,025 60 3,327 36 4,567 76 66,587 76 66,587 76 200 00 17,401 30 9,025 60 11,451 83 11,051 82 2,521 34 22,521 34 22,521 36 11,051 82 1,314 62 3,273 78 1,067 00 11,451 83 11,051 82 1,314 62 3,273 78 1,067 00 11,451 83 11,051 82 1,314 62 3,273 78 1,067 00 11,451 83 11,051 82 1,314 62 3,273 78 1,067 00 1,314 62 3,273 78 1,067 00 1,314 62 3,273 78 1,067 00 1,314 62 3,273 78 1,067 00 1,314 62 3,273 78 1,067 00 1,314 62 3,273 78 1,067 00 1,314 62 3,273 78 1,067 00 1,451 83 1,041 06 1,386 10 25,641 69 7,348 99 99,776 95 6,483 21 4,052 83 29,976 86 1,210 20 2,368 81 1,0454 55		3,705 27 3,214 10 244,280 28 484,255 81 23,115 15 484,124 68 21,144 90 38,656 63 3,099,045 14 1,957 12 1,220 00 280 00 8,838 66 11,454 28 27,790 43 415 12 1,364 12 1,364 12 1,125,476 20 97,770 06 17,768 41 967 22 4,694 39 5,026 21 1,240 87 1,399 78 1,095 00 126 76 7,919 80 2,483 05 1,067 25 1,492 02 6,052 85 2,016 84 14,143 62 4,227 70 48,591 73 3,562 70 4,996 71 1,874 29 1,744 70 4,793 92 4,793 92	2,021 71 1,960 83  720 00 28 25 12 21 370 25 1,749 60 3,064 31 175,879 771 248,481 35 1: 202,764 12 1: 9,703 861 12,346 79 1: 1,055,661 72 1 1,021 22 2 1,094 69 2 2,195 82 2 391 22 2 449 63 2 25,499 52 2 47,67 70 2 375 00 3 1,835 71 3 1,848 23 3 476 25 3 71 73 3 43 380 78 3 44 96 3 2 45 65 84 2 664 454 45 2 5,499 52 6 4 794 31 4 5,222 60 3,278 85 4 2,604 45 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,278 85 4 3,27

9-10 EDWARD VII., A. 1910
TABLE 8.—SUMMARY of Operating Expenses for the

94	95	96	97	98
			Tra	NSPORTATION
Name of Railway.	Enginehouse Expenses— Yard.	Fuel for Yard Locomotives	Water for Yard Locomotives	Lubricants for Yard Locomotives
	s ets.	\$ ets.	\$ ets.	\$ ets.
56 New Westminster Southern 57 Nosbonsing and Nipissing. 58 North Shore Railway Co. 59 Nova Scotia Steel and Coal Co. 60 Orford Mountain 61 Ottawa and New York. 62 Philipsburg Railway and Quarry Co. 63 Princeton Branch of Washington Co. 64 Père Marquette 65 Quebec Central. 66 Quebec Central. 66 Quebec Railway, Light and Power Co. 68 Quebec, Montreal and Southern. 69 Red Mountain. 70 Rutland and Noyan 71 Salisbury and Harvey 72 Schomberg and Aurora.	60 39 3,465 53 1 12 61 70 559 17 32 61	29,875 99 4,700 97 1,292 60 2,418 90 165 15	30 20 1,085 16 98 29 60 70 7 09 5 80	15 11 620 68 106 78 44 74 49 84 2 87
73 Stanstead, Shefford and Chambly. 74 St. Clair Tunnel. 75 St. Lawrence and Adirondack. 76 Sydney and Louisburg. 77 Spokane and British Columbia.	110 78 643 03 8 41	20 93 640 08	48 35 124 30	412 15
78 Temiskaming and Northern Ontario.  80 Thousand Islands.  81 Toronto, Hamilton and Buffalo  82 Vancouver, Victoria and Eastern.  83 Victoria Terminal Railway and Ferry Co.  84 Victoria and Sydney, B.C.  85 Wabash Railroad Co. in Canada.  86 Wellington Colliery Co.  87 York and Carleton.	2,039 01 285 15 5 74	18,783 29 808 62 2,702 85	965 41	281 59 31 65
87 York and Carleton		1,433,354 45		

SESSIONAL PAPER No. 20b

### Year ending June 30, 1909—Continued.

99	100	101	102	103	104	105	106
Expenses—	Continued.		_				
Other Supplies for Yard Locomotives	Fifteen		Joint Yards and	Total Station and Yard Expenses.	Motor-men.	Road Enginemen.	Enginehouse Expenses - Equation Road.
\$ ets.	\$ ets.	\$ cts.	S ets.	\$ cts.	\$ ets.	8 ets.	\$ cts.
*			, 			4,927 45	
15 10	990 00 5,213 16 18,446 99	1,588 21	53 33	990 00		1,480 00 3,319 68 6,251 11	1,387 88 61
84 91 34 49 11 60 96 73	145,141 30 63,484 59 41,795 57 5,647 10 27,658 70 3,899 96 2,136 50 1,232 52	1,030 00	44 37 1,921 28 483 59	176,139 60 63,484 59 39,874 29 5,647 10 28,205 11 3.899 96		1,354 57 83,221 40 43,352 90 32,687 60 2,961 20 9,239 83 3,171 28 776 13 2,318 30	7,195 52 65 14,151 64 66 248 23 67 4,931 76 68 715 52 69 212 25 70 126 44 71
207 35 94 52 192 53 23 00 0 07 1,274 22	30,792 69 216 01 2,925 54 30,869 59	7,877 90 780 00 27,745 07 7,153 03 4,779 26		9,703 99 3,903 09 18,209 07 24,152 23 27 22 10,336 03 120,066 83 3,627 94 86,487 81 35,571 95 216 01 2,925 54 301,550 33 22,348 22		3,625 41 16,678 27 29,358 30 32 32 8,288 20 45,485 33 2,272 05 27,157 48 26,936 95 176 95 2,379 55 84,660 18	30 42 77 78 12,634 13 79 8,156 32 81 3,756 60 82 24 27 83 322 47 84 17,799 53 85 86
34,274 79	13,233,396 40	1,079,080 91	654,136 19	13,658,350 12	10,599 40	6,305,369 08	2,075,177 82

9-10 EDWARD VII., A. 1910
TABLE 8.—Summary of Operating Expenses

-		ZABBB Q	OUMMAN	or Operani	ig Expenses
	107	108	109	110	111
				Т	RANSPORTATION
No.	Name of Railway.	Fuel for Road Locomotives	Water for Road Locomotives	Lubricants for Road Locomotives.	Other Supplies for Road Locomotives.
		\$ ets.	\$ ets.	cts.	\$ ets.
1 2 3 4 5 6 7 8 9 10	Alberta Ry. and Irrigation Co Algoma Central and Hudson Bay Atlantic and Lake Superior Atlantic, Quebec and Western Bay of Quinté. Bedlington and Nelson Bessemer and Barry's Bay. Brandon, Saskatchewan and Hudson Bay British Yukon Brockville, Westport and Northwestern. Canada Southern.	13,944 91 15,483 69 17,978 31 5,661 78 21,898 31 148 65 1,896 22 8,779 32 8,381 44 7,002 25 567,167 39	1,161 95 976 11 52 63 183 25 21 85  925 02 873 70 205 00 31,148 10	505 99 342 99 844 37 165 80 188 48 2 35 116 49 325 45 12,252 97	619 69
12 13 14 15 16 17 18 19 20	Canadian Government Railways—	1,534,673 51 46,329 80 1,212,092 79 54,063 34 157,348 07 7,013,011 58 2,125 66 8 086 00	48,096 01 2 481 72	24,254 07 1,121 64 28,619 12 2,254 00 3,665 00 96,764 61 158 68 365 00	14,279 22 963 04 27,026 33 877 94 1,147 86 166,217 77
21 22 23 24 25 26 27 28 29 30 31	Central Ontario Crowsn est Southern. Cumberland Ry. and Coal Co. Dominion Atlantic Elgin and Havelock Eastern British Columbia Grand Trunk. Grand Trunk (Canada Alantic) Halifax and Southwestern Hampton and St. Martins. Hereford.	22,609 35 16,590 00 8,570 00 77,584 23 21,116 92 693 35 3,437,024 38 295,614 90 67,095 60 2,058 60 11,026 56	465 62	509 75 268 62 64 49 1,429 41 185 96 48 16 32,207 21 5,880 27 1,351 99 46 58 117 92	417 25 14 60 195 86 1,088 58 339 57 76 94 96 18 46,763 01 3,882 25 307 33 35 22 161 14
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	Inverness Ry. and Coal Co. Irondale, Bancroft and Ottawa Kaslo and Slocan. Kent Northern. Kettle River Valley Kingston and Pembroke. Klondike Mines Liverpool and Milton. Lotbinière and Megantic. London and Port Stanley. Manitoulin and North Shore. Maritime Coal, Railway and Power Co. Massawippi Valley. Midland Railway Co. of Manitoba. Montreal and Atlantic. Montreal and Povince Line. Montreal and Vermont Junction.	13,313 83 5,561 34 1,877 45 2,000 00 91 84 10,123 49 7,367 46 1,740 71 3,988 40 23,208 46 3,489 94 7,032 95 27,191 73 5,790 14 126,180 67 17,398 78	297 37 119 35 25 00 10 52 729 00 344 72 25 00 22 50 1,101 07 185 75 171 97 259 12 791 09 1,930 94 1,069 66	647 05 298 26 61 73 100 00 2 17 493 63 277 35 65 03 222 13 363 59 51 69 713 95 434 57 58 30 1,558 71 208 98	265 28 766 06 26 18 100 00 20 12 272 61 45 05 51 15 10 83 243 54 12 77 133 86 149 40 59 95 2,398 29 155 18
49 50 51 52 53 54 55	Morrisey, Fernie and Michel Moncton and Buctouche. Napierville Junction. Nelson and Fort Sheppard New Brunswick Coal and Railway Co. New Brunswick and Prince Edward Island. New Brunswick Southern. New Westminster Southern	18,967 05 3,088 15 10,450 79 14,266 91 8,561 15 4,049 28 9,141 19 13,691 68	938 36 316 33 84 33 50 00 94 68 40 22	162 24 281 86 165 54 187 50 851 44 122 84 225 03 85 40	80 60 38 65 202 90 98 73 105 34

SESSIONAL PAPER No. 20b for the Year ending June 30, 1909—Continued.

112	113	114	115	116	117	118	
Expenses—Co	ontinued.	·					
Operating Power Plants.	Road Trainmen.	Train Supplies and _ Expenses.	Interlockers, Block and other Signals— Operation.	Crossing Flagmen and Gatemen.	Drawbridge Operation.	Clearing Wrecks.	7.
\$ cts.	\$ ets.	\$ ets.	\$ cts.	\$ cts.	\$ ets.	\$ ets.	
,	11,057 21 8,126 81	630 98 1,633 76				137 46 276 66	
	4,710 00 2,340 24	132 00 198 76				2 62 480 53	
	7,150 29 308 32 480 00	416 26				119 38	
	6,257 73 4,826 37	2,137 25 617 97	6,786 30			8 41 99 06	]
	$\begin{array}{c c} 3,270 & 42 \\ 258,621 & 39 \end{array}$	109 49 41,843 62		5,156 55	1,875 07	1,729 46	]
	639,795 54 32,468 58	182,843 91 5,884 42	15,019 86	5 60	703 75	19,160 92 99 41	1 1
	475,205 84 18,492 56	138,600 37 11,673 81	19,746 95 3,295 69	637 50	1,265 82	47,978 87 2.516 51 3,818 07	
	$ \begin{array}{r} 33,970 \ 36 \\ 3,209,990 \ 34 \\ 1,413 \ 25 \end{array} $	9,706 45 1,303,328 15 27 31	80,550 58		6,764 08	193,910 15	1
	2,160 00 206 75	374 00				125 00	2
	8,460 98 11,230 22	2,582 79		2,199 07		2,211 70	
	39,772 95 1,571 17		114 50		1,433 34	271 36	1 2
Cr. 16 00	999 45 1,091,790 44 99,022 73 16,133 57	16 32 297,182 11 28,168 97 6,698 80	21,280 92 Cr. 321 42	60,305 65 3,277 56 160 00	11,617 39 3,080 74 174 26	27,485 45 7,921 10 729 38	4 4 4 4
· · · · · · · · · · · · · · · · · · ·	1,457 78 6,193 00 5,932 76	782 12		0 01			
	1,270 21 2,132 30	260 29				33 57	6
· · · · · · · · · · · · · · · · · · ·	178 40						0 0 0
	9,125 67 2,247 15 883 50						6
	1,861 43 7,125 55	20 00 668 37		670 51		295 37	-
• • • • • • • • • • • • • • • • • • • •	2,100 09 3,760 35 15,391 20	133 19		1			
	4,400 37 44,809 36	1,168 43 7,701 96	7,085 04 2,449 56		315 00	104 47 1,682 10	
	4,109 72 2,871 46				240 00	83 95 502 62	
	1,608 40 1,788 91 5,315 32	305 14	842 64			140 81 409 87	
	6,577 54 2,008 40	201 33		102 00			
	4,467 47 5,808 93			4 31 16 00	153 15	805 76	

9-10 EDWARD VII., A. 1910
TABLE 8.—SUMMARY of Operating Expenses

	107	108	109	110	111
				Т	RANSPORTATION
No.	Name of Railway.	Fuel for Road Locomotives	Water for Road Locomotives	Lubricants for Road Locomotives.	Other Supplies for Road Locomotives.
		\$ cts.	\$ ets.	\$ ets.	S ets.
57 58 59 60 61	Nosbonsing and Nipissing North Shore Railway Co. Nova Scotia Steel and Coal Co. Orford Mountain. Ottawa and New York.	612 75	349 25 767 87	496 84	132 00 36 57
62 63 64 65 66 67 68	Philipsburg Railway and Quarry Co. Princeton Branch of Washington Co. Père Marquette. Quebec Central Quebec and Lake St. John Quebec Railway, Light and Power Co.	123,239 33 8,178 59	8,702 43 6,184 31 177 04	25 98 3,646 47 3,373 37 2,093 25 224 81	2,447 95 378 11 1,413 37 95 62
69 70 71 72	Quebec, Montreal and Southern. Red Mountain Rutland and Noyan Salisbury and Harvey Schomberg and Aurora	34,085 16 5,067 81 1,142 18 6,228 67	1,562 76 248 63 51 10	55 05	38 61 15 08
73 74 75 76 77	Stanstead, Shefford and Chambly St. Clair Tunnel. St. Lawrence and Adirondack. Sydney and Louisburg. Spokane and British Columbia.	15,889 86 8 00 53,481 19 31,781 02 83 24	404 51 3,802 52 10 34	751 20 1,915 22 1 76	Cr. 1 54 542 57 576 89 5 49
78 79 80 81 82 83	Temiscouata Temiskaming and Northern Ontario. Thousand Islands Toronto, Hamilton and Buffalo. Vancouver, Victoria and Eastern	31,457 70 148,746 82 4,461 65 64,204 62 58,197 31	11,193 87 21 16 3,222 65 2,717 53	729 59	1,370 41 101 89 728 32 619 21
83 84 85 86 87	Victoria Terminal Railway and Ferry Co Victoria and Sydney, B. C. Wabash Railroad Co. in Canada. Wellington Colliery Co. York and Carleton.		152 45	137 24	1 83 3,080 6
	Final Total	16,111,095 45	746,594 70	245,976 65	287,462 54

SESSIONAL PAPER No. 20b for the Year ending June 30, 1909—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.	No.			
\$ ets.	\$ ets.	§ ets.	\$ ets.	\$ cts.	8 ets.	8 ets.	1			
	1,007 00 2,542 80 7,396 54	30 80 265 64 1,231 96		79 30						
	798 83 87,860 26 42,222 00	176 13 24,921 65 7,945 09	2,864 41	1,413 61	406 72	1,484 11 658 86	62 63 64 65			
	34,774 69 2,671 66 9,423 89 3,623 93 677 31	9,987 37 615 69 9,284 44 430 02 201 29	1,814 71	1,129 68	1,166 56 180 58 592 90	506 37 26 67 252 29 172 41 12 85	67 68 69			
27,207 62	1,784 30 3,392 37 10,011 49	139 47 1,758 85			665 18	14 35 530 21				
	17,340 21 25,823 32 33 82 9,127 05	1,375 00 2,484 22 1,728 46	1,533 59				75 76 77			
1,323 53	46,70 · 81 1,185 69 28,116 93 25,695 92	11,172 08 142 47 15,466 72 5,502 63	2,085 13 613 83	3,943 42 921 00	1,754 56	5,322 76 4 35 1,176 00 1,503 94	80 81 82			
	136 16 1,806 24 86,553 63	21 97 296 70 32,072 48				13 55 180 08 2,004 73	84 85 86			
28,515 15	600 00 6,584,565 63		223,370 27	117,726 84	37,313 14	330,212 24	87			

9-10 EDWARD VII., A. 1910
TABLE 8.—Summary of Operating Expenses

120	121	122	123	124		
	TRANSPORTATION					
Name of Railway.	Telegraph and Telephone— Operation.	Operating Floating Equipment.	Express Service.	Stationery and Printing.		
	\$ ets.	\$ ets.	8 ets.	\$ ets.		
Alberta Ry. and Irrigation Co Algoma Central and Hudson Bay. Atlantic & Lake Superior Atlantic, Quebec & Western Bay of Quinté Bedlington & Nelson.	1,073 35 150 50 14 25 36 90			2,227 16 850 79 427 30 6 65 680 73		
7 Bessemer & Barry's Bay. 8 Brandon, Sask. & Hudson Bay. 9 British Yukon. 0 Brockville, Westport & Northwestern. 1 Canada Southern. 2 Canadian Govt. Rys.—Intercolonial.	214 34 1,443 54 144 80 19,954 71	124.036.90		276 07 567 09 366 71 18,687 97 55,991 57		
P.E. Island Canadian Northern Canadian Northern, Ontario Canadian Northern, Quebec Canadian Pacitic. Cape Breton	3 20 109,375 80	36,205 41		5,636 70 38,728 66 3,387 00 3,966 39 192,272 09 139 15		
9 Caraquet	15 42 355 42			215 00 545 43 350 13		
Dominion Atlantic.  Elgin & Hayelock.	54 59			2,992 56 42 90		
G Eastern British Columbia Grand Trunk Grand Trunk (Canada Atlantic) Halifax & Southwestern. Hampton & St. Martins	2 52 31,635 04 1,457 26	96,354 26		737 07 92,302 82 8,443 81 3,442 22		
2 Inverness Ry. & Coal Co.	76 66	0 08		221 25 243 67		
Kent Northern  Kettle River Valley.	63 91	75 00	120 00	59 31		
S Klondike Mines.				839 50 92 03  102 13		
Description of the Control of the Co	431 00 3 00			710 73 79 64 61 70		
Midland Railway Co. of Manitoba.  Montreal and Atlantic  Montreal and Province Line	83 83 120 99 71 03			634 54 152 72 3,645 56 329 29		
Montreal and Vermont Junction.  Morrissey, Fernie and Michel  Moncton and Buctouche.  Napierville Junction	448 53			30 92		
2 Nelson and Fort Sheppard 3 New Brunswick Coal and Railway Co. 4 New Brunswick and Prince Edward Island 5 New Brunswick Southern	454 61			201 88		
New Westminster Southern  Nosbonsing and Nipissing	113 60			222 03		

SESSIONAL PAPER No. 20b

for the Year ending June 30, 1909—Continued.

125	126	127	128	129	130	131	
Expenses—	Continued.						
Other Expenses.		Loss and Damage— Baggage.	Damage to Property.	Damage to Stock on Right of Way.	Injuries to Persons.	Total of Last Twenty-six Accounts.	1 24
S ets.	\$ cts.	\$ ets.	\$ ets.	\$ cts.	\$ cts	\$ cts.	
229 19 114 05	125 14 2 73	3 00	) 	170 00 0 87	63 00° 1 50°	42,760 42 35,934 18	
2,663 19 43 00	51 36 44 92				25 00	31,945 10 10,886 58	
5,138 87	220 07			13 00 103 80	25 00 0 36 272 60	46,027 76 991 46	
77 69 1,766 88	99 62	1 81	78 88	137 98	70 41 95 06	33,018 17	ľ
453 37 224 03	140 14 43,906 41	323 19	2,594,57	27 50 127 00		1 0 0 0 0	
22,076 83	32,776 93	Cr. 272 69 Cr. 0 25	4,851 93 62 88	2,771 99 80 50	19,569 14 277 41	3,414,917 67 137,671 59	1
2,328 06 459 40	47,631 99 396 53	488 42 74 07	7,118 74 2,334 58	2,028 78 2,005 03	16,197 40 413 24	2,821,207 75 138,481 14	
2,414 13 29,667 92	506,084 35	1,253 09 14,559 82	2,328 95 56,605 29	1,871 79 23,806 56	106 23 361,233 93	288,655 48 17,958,856 31	
17 43 525 00	53 20	516 62	30 00		27,472 52 19,569 14 277 41 16,197 40 413 24 106 23 361,233 93	6,385 22 13,438 20	
4,024 31 76 12	194 48 225 18	Cr. 7 39	485 06 686 57	33 00 952 71	282 54 970 00	904 00 51,514 92 49,597 08	
341 02 74 34	18 35 0 80	131 00	213 50 75 00	50 00	970 00	9,802 57 179,018 34 4,969 87	
95,835 20	2 52 246,063 60	3,255 45	21,016 39	13,741 65	137,806 50 6,117 03 1,035 05 826 69	4,461 08 7,276,920 14	Ŀ
2,515 26 4,819 45	16,916 40 1,697 42	31 79 161 50	3,533 39 15 91	1,362 23 20 00	6,117 03 1,035 05	622,293 86 134,732 47	
	247 02 7 91	7 59	578 34	27 32 10 00	826 69	,940 40 27,406 57 29,466 39	
951 99	12 15					10,825 20 5,995 18	)
1 09						5,686 00 496 73	,
156 25 340 44	596 22 14 05	·	72 75 96 00	112 00	134 25	47,205 28 14,205 64	į
1,939 42 15 68	33 75		900.0~	0= 01	1 00 7 90	3,951 35 10,115 44	Į
94 28	82 35	25.00	309 90	61 04	1,805 30 140 00	46,857 65 9,086 10 17,491 30	)
30 15	957 78 14 89	Cr. 1 43	65.12	99 29	140 00 274 02 74 38 4,221 23	64,757 01 25,055 03	
155 39	9,895 11 1,193 72	70 00					,
			567 60			1,754 62	)
314 41 32 37	37 43			9 00 5 00		7,213 54 18,153 46	)
56 49 4,673 73	418 97 81 93	Cr. 3 59	4 68 157 95		15 30	25,465 55	
15 27 70 86	25 57		56 15	130 28	248 43		
10 80			3,448 70	1,217 84		36,012 29	

9-10 EDWARD VII., A. 1910
Table No. 8.—Summary of Operating Expenses

=								
	120	121	122	123	124			
			Transportation					
Number.	Name of Railway.	Telegraph and Telephone— Operation.	Operating Floating Equipment.	Express Service.	Stationery and Printing.			
		\$ ets.	\$ ets.	\$ ets.	\$ ets.			
58 59 60 61 62 63 64 65 66 67 68 70 71 72 73 74 75	North Shore Railway Co. Nova Scotia Steel and Coal Co. Orford Mountain Ottawa and New York Philipsburg Railway and Quarry Co. Princeton Branch of Washington Co. Père Marquette. Quebec Central. Quebec Central. Quebec Railway, Light and Power Co. Quebec Railway, Light and Power Co. Quebec, Montreal and Southern Red Mountain Rutland and Noyan Salisbury and Harvey Schomberg aud Aurora Stanstead, Shefford and Chambly. St. Clair Tunnel. St. Lawrence and Adirondack Sydney and Louisburg.	1,871 88 5,016 80 2,420 95 382 71 13 63	19,332 34		344 18 946 16 1 88 7,348 56 3,388 69 2,399 28 488 61 1,947 93 77 81 55 57			
76 77 78 79 80 81 82 83 84 85 86 87	Temiskaming and Northern Ontario. Thousand Islands Toronto, Hamilton and Buffalo. Vancouver, Victoria and Eastern. Victoria Terminal Railway and Ferry Co Victoria and Sydney, B.C Wabash Railroad Co. in Canada. Wellington Colliery Co. York and Carleton.	17,285 19 50 80 481 85 1,373 04	10,975 22 3,119 83	102 60	14 93 1,441 18 7,279 12 130 25 4,982 19 744 09			
	Final total	216,322 74	331,446 35	- 6,532 66	479,151 53			

for the Year ending June 30, 1909—Continued.

126	127	128	129	130	131	132							
Expenses—	Expenses—Continued.												
Other Expenses.		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.	\$ ets.	\$ ets.	\$ cts.	S ets.	\$ cts-	\$ cts.							
32 73 38 28	29 74 801 63			70 95 118 34	579 50	1,759 06 4,336 43 12,395 96 42,590 01	59 60 61						
9,902 64 28,043 52 1,323 23 193 88 211 78 10 25 1 33 18 61	51 21 26,702 34 1,157 07 1,303 04 1,756 27 47 02 87 00 35 00	6 21 Cr. 14 77	2,640 85 363 60 1,455 00 9 63 3,800 95 27,382 64	1,094 36 483 50 61 00 37 61 120 15 36 59	18,639 65 1,144 50 451 60 3,314 15 77 34	4,827 60 556,019 27 276,937 38 234,699 78 16,109 82 83,913 11 41,537 62 3,295 25 10,837 42	64 65 66 67 68 69 70 71						
	388 09	2 80	727 62	153 00	442 19 3 00	29,809 56 47,987 99							
28 24 855 84	1,670 89	3 29	839 52	865 04	4,168 00	101,858 52 106,186 38	75 76						
\$9 50 3,191 87 1,761 69 287 63 186 26	7 50 3,284 52 482 78 3 91 42 26	Cr. 48 95	306 48 1,002 98 3,164 84		2,706 50 4,314 80 2,481 21 35,698 14		78 79 80 81 82 83 84 85 86						
238,914 58	1,004,774 74	21,973 64	163,483 71	59,626 02	657,011 14	38,484.765 20							

9-10 EDWARD VII., A. 1910 TABLE No. 8.—Summary of Operating Expenses

		,				
	133	134	135	136	138	139
		Tra	NSPORTATION ]	Expenses—Con	tinued.	
Number.	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.	\$ ets.	\$ cts.
2 3 4 5 6 7	Alberta Ry. and Irrigation Co Algoma Central and Hudson Bay Atlantic and Lake Superior Atlantic, Quebec and Western Bay of Quinté Bedlington and Nelson Bessemer and Barry's Bay	5,200 00		68,385 58 111,741 51 36,528 61 12,983 73 64,927 15 1,011 85 5,230 57	71,312 34 117,987 55 37,514 02 12,983 73 68,234 21 1,043 15 5,230 57	10,282 00 3,034 19 2,000 00 1,359 00 4,261 93 62 88 1,900 00
9	Brandon, Saskatchewan and Hudson Bay. British Yukon.			43,192 91 42,291 16	45,051 00 47,275 95	587 60 3,849 62
	Brockville, Westport and Northwestern	23,015 04	24,256 26	18,539 14 2,376,299 85	18,539 14 2,440,140 55	4,720 00 29,405 37
16 17 18 19 20 21 22 23 24 25 26	Intercolonial Prince Edward Island Canadian Northern. Canadian Northern, Ontario Canadian Northern, Quebec Canadian Pacific. Cape Bretou Caraquet Carillon and Grenville Central Octario Crowsnest Southern Cumberland Ry. and Coal Co Dominion Atlantic. Elgiu and Havelock Eastern British Columbia. Grand Trunk Grand Trunk Grand Trunk (Canada Atlantic). Halifax and Southwestern	12,928 12 16,446 00 300 00 22,942 21	302 45 5,914 05	4,725,364 21 203,899 60 3,694,162 56 186,295 84 368,563 12 23,845,257 7,256 22 18,005 20 1,104 00 68,916 22 58,622 68 13,129 92 245,606 10 5,377 87 4,986 80 9,950,767 75 54,664 51 157,254 30	4,959,207 22 212,510 98 3,837,588 04 196,729 74 382,054 11 24,917,141 33 7,256 22 19,355 20 1,664 00 70,842 47 61,175 69 14,129 22 251,548 31 5,402 87 5,780 57 10,220,235 60 889,754 03	17,375 65 1,599 26 29,703 36 4,134 75 5,173 73 282,276 80 2,792 80 3,330 00  3,237 30 750 04  15,475 27 382 76 24 05 171,419 10 7,850 76 5,259 26
31 32 33 34 35 36 37 38 39 40 41	Hampton and St. Martins. Hereford. Inverness Ry. and Coal Co. Irondale, Brancroft and Ottawa. Kaslo and Slocan Kent Northern. Kettle River Valley Kingston and Pembroke. Klondike Mines Liverpool and Milton. Lotbinière and Megantic London and Port Stanley.	82 49	2.436 44	5,105 40 38,859 82 40,518 21 12,139 82 9,268 96 6,753 00 527 13 67,586 10 17,448 49 4,587 94 10,889 12 74,052 18	5, 105 40 39,383 01 41,120 61 12,139 82 10,785 52 6,753 00 559 07 70,152 36 17,448 49 4,587 91 10,889 12 75,876 47	360 00 341 37 2,587 74 4,792 80 1,200 00 36 51 4,186 57 7,990 60 3,898 45 655 73
43 44 45 46 47 48 49 50	Manitoulin and North Shore Maritime Coal, Ry. & Power Co. Massawippi Valley Midland Railway Co. of Manitoba Montreal and Atlantic Montreal and Province Line Montreal and Vermont Junction. Morrissey, Fernie and Michel Moncton and Buctouche Napierville Junction Nelson and Fort Sheppard New Brunswick Coal and Ry. Co.	41 23	15 10	31,731 48	18,877 40' 90,623 70 33,338 94' 388,036 31 39,461 50 38,757 49 33,561 48: 8,423 74' 20,827 62'	1,561 71 2,674 00 579 88 249 07 371 14 1,048 42 3,478 11 1,800 00 735 64 460 62 3,264 57

# SESSIONAL PAPER No. 20b for the Year ending June 30, 1909—Continued.

140	141	142	143	144	145	146
		Geni	ERAL EXPENSE	es.		
Salaries and Expenses Clerks and ttendants.	General Office Supplies and Expenses.	Law Expenses.	Insurance.	Relief Department Expenses.	Pensions.	Stationery and Printing.
\$ ets.	\$ cts.	\$ cts.	\$ cts.	ets.	\$ ets.	\$ cts.
3,772 23 2,981 06 1,839 80 881 45 729 37 12 94	2,033 31 482 39 539 28 170 55	1,504 80 236 59 129 10	3,394 82 391 35 211 97 2,516 95 162 34	445 38		55 60
1,194 59 3,326 66		197 14 1,075 57	1,240 06 1,299 50			133 07 299 1s
445 00 50,914 58	840 40 2,365 95	1,125 00 29,573 51	178 50 3,693 94		140 00	105 95 4,789 41
98,261 79 5,440 96 96,440 29 7,468 73 8,696 34 427,016 27	3,554 26 382 20 12,835 66 1,723 56 2,687 55 77,944 67	8,630 21 151 39 41,241 02 2,296 03 9,421 05 206,414 63			69,682 14	11,618 88 613 31 13,854 79 987 98 1,646 57 71,201 83
974 76 1,537 03	86 48 510 00 10 00 1,185 90 96 03	30.00 1,850 79	996 34 2,054 98		•••••••	204 39 20 00 108 59 163 59
8,115 66 120 57 220,850 95 18,763 52 6,948 38	3,808 92 31 68 3 25 45,637 76 2,230 91 730 92	2,736 67 75 00 107,859 70 6,330 03 3,206 79	80.236 66	17.226 50	110,961 90 1,958 00	1,336 78 54 06 136 06 26,972 26 1,673 06 1,003 35
360 00 598 34 2,904 24 399 81 360 00	36 79 1,099 54 80 00	343 46 112 64	\$\$4 \$1 600 96	0.70	18 12	191 25 101 52 439 72 125 00 31 07
391 00 25 99 514 04 2,422 50 300 00	26 46 17 03 815 66 97 00	1 78 604 32 57 00				33 89 117 45 161 06
920 91 2,422 15 1,533 67	19 63 172 49 717 10	38 60 696 67 1,433 00	754 19 363 26	180 00		68 31 188 10 174 88
2,055 66 645 29 17,855 23 861 71 2,027 54 2,080 80	53 76 34 98 40 00 98 93 38 50	1,720 09 110 42 3,681 43 134 78 212 38 8 75	1,148 02 2,972 63 282 03			114 56 65 54 106 11 265 01 175 62
658 13 887 62	271 13 168 62 59 11	62 88 1,085 84	450 32			178 20 154 17 90 77

9-10 EDWARD VII., A. 1910
TABLE 8.—Summary of Operating Expenses

	133	134	135	136	137	138
		TR	ANSPORTATI <b>ON</b>	Expenses-Co	ontinued.	
Number.	IE OF RAILWAY.	Operating Joint Tracks. Dr.	Operating Joint Tracks. Cr.	Total Movement Expenses.	Total— Transporta- tion Expenses.	Salaries and Expenses of General Officers.
		\$ ets.	\$ cts.	s cts.	\$ cts	\$ cts.
55 New Brun 56 New West 57 Nosbonsin 58 North Sho 59 Nova Scot 60 Orford Mc 61 Ottawa an 62 Philipsbur 63 Princeton	swick and P. E. Island swick Southern. minster Southern. g and Nipissing. re Railway Co. ia Steel and Coal Co. untain d New York. g Ry, and Quarry Co. Branch of Washington	1,602 56			17,609 12 66,676 60	2,590 00 975 56 25 00
64 Père Marc 65 Quebec Ce 66 Quebec an 67 Quebec Ry 68 Quebec, M 69 Red Moun 70 Rutland a: 71 Salisbury :	quette ntral d Lake St. John ,, Light & Power Co. ontreal and Southern tain nd Noyan and Harvey	22,396 55 331 00 2 70	399 66 2,660 14	4,827 60 754,542 99 340,421 97 274,505 41 21,756 92 109,460 78 45,437 58 5,431 75 12,069 94	5,074 15 774,305 33 350,933 33 288,211 58 22,406 35 112,843 07 46,029 61 5,030 00 12,069 94	6 36 6,866 12 16,250 81 4,169 69 823 90 6,744 82 184 53 181 94 1,578 80
72 Schomberg 73 Stanstead, 74 St. Clair T 75 St. Lawren 76 Sydney an 77 Spokane a: 78 Temiscoua 79 Temiskam 80 Thousand 81 Toronto, E 82 Vancouver 84 Victoria as 85 Wabash R 86 Wellingtor	g and Aurora Shefford & Chambly, 'unnel 'ce and Adirondack d Louisburg nd British Columbia ta ing & Northern Ontario	41,045 23 999 42 103,880 06	463 74	39,512 43 51,991 08 161,112 82 130,338 61 240 47 65,828 35 442,591 72 13,962 81 256,313 44 182,933 58 4,039 82 12,982 32 891,712 25 22,348 22 2,470 00	40,449 23 57,862 94 161,305 57 136,858 61 260 07 72,130 32 456,388 87 14,545 39 274,094 43 189,478 17 4,122 77 13,421 27 905,851 37 22,348 22 2,470 00	374 69 1,195 54 52 85 5,559 39 8,246 13 2,876 53 9,902 78 1,604 31
Fi	nal Total	264,552 33	187,823 64	52,232,192 78	54,284,587 41	739,028 29

for the Year euding June 30, 1909.—Continued.

139	140	141	142	143	144	145	

#### 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.			
\$ ets.	\$ ets.	\$ ets.	\$ ets.	\$ cts.	8 ots.	ŝ ets.				
250 00 650 92 959 19	149 90 70 60		429 44		277 20	100 31 3	55			
	63 66						58			
275 00 1,643 06 6 00	646 31	1,412 04				184 44 (				
182 63 27,092 68 7,452 55 8,199 23 989 94 6,039 69 380 78 147 35	1,772 63 1,759 26 1,708 42 346 67 1,635 62 24 44	89 18 7,224 69 302 75 2,961 75 32 95 596 25 2,809 73 78 50 226 10	6,610 29 7,200 00 3,163 84 1,173 73 1,416 00 - 287 85	}	5,244 90	1,9 6 62 6 562 12 6 877 70 6 151 20 6 885 64 6 41 61 8	64 65 66 67 68 70			
819 95 50 00 3,682 96 1,967 00	405 71 39,784 00	1,196 99	282 03 3,135 90 288 80			142 46	73 74 75 76			
20 95 1,384 50 11,087 61 301 85 9,377 38 3,289 61 120 05	972 79 2,600 86 24 95 806 85 200 32 19 95	315 14	1,428 44 16,732 99 496 76 1,899 50 4,042 74			310 13 7 1,120 41 7 2 97 8 526 76 8 544 03 8 44 68 8	78 79 80 81 82 83			
1,595 50 30,584 09		0 23 14,636 18				593 96 8 2,525 73 8	85			
			25 00			25 00 8	86 87			
1,126,730 58	227,096 50	480,924 76	593,060 31	29,941 71	188,282 26	152,910 01				

9-10 EDWARD VII., A. 1910
TABLE 8.—Summary of Operating Expenses

	147	148	149	150	151
			GENERAL ]	Expenses—Co	ontinued.
No.	NAME OF RAILWAY.	Other Expenses.	Total of Foregoing Accounts.	General Administra- tion, Joint Tracks, Yards and Terminals. Dr.	General Administra- tion, Joint Tracks, Yards and Terminals. Cr.
		\$ ets.	S ets.	S cts.	S cts.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 33 34 35 36 37 38 39 39	Alberta Railway and Irrigation Co. Algoma Central and Hudson Bay. Atlantic and Lake Superior Atlantic Quebec and Western Bedlington and Nelson Bay of Quinte. Bessemer and Barry's Bay Brandon, Saskatchewan and Hudson Bay. British Yukon Brockville, Westport and Northwestern Canada Southern Canadian Gov't. Railways (Intercolonial). (P. E. Island). Canadian Northern Canadian Northern, Ontario Canadian Northern, Quebec Canadian Pacific. Cape Breton Caraquet Carillon and Grenville. CentralOntario. Crowsnest Southern Cumberland Railway and Coal Co. Dominion Atlantic Elgin and Havelock. Eastern British Columbia Grand Trunk Grand Trunk (Canada Atlantic) Halifax and Southwestern. Hampton and St. Martin's Hereford Inverness Railway and Coal Co. Irondale, Bancroft and Ottawa Kaslo and Slocan Kettle River Valley. Kingston and Pembroke Klondike Mines. Liverpool and Milton	271 07 3,103 47 2,391 89 352 82 3 00 126 87 50 00 263 84 81 01 45 25 2,159 81 4,849 35 20,537 40 15 53 6,725 76 21,639 08 2,357 89 4,967 18 100 07 846 84 116 41 5 00 14 33 1,798 69 703 49	21,029 91 17,535 67 7,586 06 3,400 12 9,314 47 2,146 90 3,701 34 11,903 77 7,460 07 123,042 60 221,972 28 12,186 25 308,308 83 24,276 13 47,067 89 1,514,137 89 3,266 80 4,085 30 4,5 53 6,532 80 13,178 15	1,200 00	462 S8 12 57
40 41 42	Lotbinière and Megantic.  London and Port Stanley  Manitoulin and North Shore.  Maritime Coal, Reilway and Power Co	1,168 93 192 66 1,891 75	7,855 37		,
44 45 46 47 48 49 50 51 52 53	Maritime Coal, Railway and Power Co.  Massawippi Vailey.  Midland Railway Co. of Manitoba.  Montreal and Atlantic.  Montreal and Province Line.  Montreal and Vermont Junction.  Morrissey, Fernie and Michel.  Moncton and Buctouche.  Napierville Junction  Nelson and Fort Sheppard.  New Brunswick Coal and Railway Co.	2,590 88 647 23 263 10 186 28 4,970 89	4,875 20 2,398 06 25,309 29 1,825 43 4,441 04 8,531 65 2,896 56 2,942 51 3,220 56 10,104 54	11,741 30	
54 55	New Brunswick and Prince Edward Island New Brunswick Southern		1,617 86		

SESSIONAL PAPER No. 20b

for the Year ending June 30, 1909—Continued.

153	154	155	156	157	158	160	
		R	ECAPITULATIO	n of Expenses.		-	
Total General Expenses.	Maintenance of Way and Structures.	Maintenance of Equipment.	Traffic Expenses.	Transporta- tion Expenses.	General Expenses.	Total Operating Expenses.	No.
\$ ets.	8 cts.	\$ ets.	s ets.	8 cts.	\$ ets.	\$ cts.	
21,029 91 17,535 67 7,556 66 3,400 12 477 75 9,314 47 2,146 90 3,701 34 11,903 77 7,460 07 124,242 60 221,972 28 12,186 25 308,308 53 24,276 13 47,067 89 1,514,239 30 4,955 39 13,178 15 45,070 25 791 87 802,341 03 43,290 46 24,906 46 24,906 46 24,906 46 24,906 46 24,906 46 24,906 46 25,539 29 1,514,239 1,514,239 1,514,239 1,514,239 1,514,239 1,514,239 1,515 2,245 18 8,591 68 5,514 02 7,855 37 2,881 57 4,875 20 1,385 36 2,388 06 25,309 29 1,825 43 4,411 04 20,272 95 2,886 56 2,509 29 1,825 66 10,104 54 1,617 86 4,804 19	1,817 35 47,717 35 47,717 35 4,16,238 36 873 12 9,941 67 33,323 65 7,781 64 5,720 16 37,664 50 35,129 65 213,446 68 20,809 19 15,736 06 11,227 46 8,410 33 5,446 84 53,109 71 23,174 26 10,555 08	5,611 57	3,435 52 2,791 19 5,822 84 208,287 66 188,120 72 966 33 128,722 35 14,860 35 9,724 37 2,075,170 05 1,172 00 2,324 70 3,483 50 3,208 65 24,109 95 5 00 825,933 43 39,463 26 9,718 53 146 40 660 23 338 78 77 00 30 1,729 80 1,729 80 1,729 80 515 51 510 4,955 06 251 00 1,367 37 1,571 65 8,917 10 1,192 53 5,334 97 277 45 379 22 2,227 02 22 92	71,312 34 117,987 55 37,514 02 12,983 73 1,043 15 68,234 21 5,230 57 45,051 00 47,275 95 4,959,207 22 212,510 98 3,837,588 04 196,729 74 38,2,054 11 24,917,141 33 7,256 22 19,355 20 1,664 00 70,842 47 61,175 69 14,129 22 251,548 31 5,402 84 5,780 57 10,220,235 60 889,754 03 167,759 07 6,152 36 17,484 91 4,587 94 4,587 94 10,889 12 75,876 47 11,120 61 12,139 82 10,785 52 6,753 07 70,152 36 17,484 94 4,587 94 10,889 12 75,876 47 12,137 48 18,877 40 90,623 79 33,338 94 388,036 31 39,461 50 38,757 49 33,561 48 8,423 74 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64 20,827 64	21,029 91 17,535 67 7,586 06 3,400 12 477 75 9,314 47 2,146 90 3,701 34 11,903 77 7,460 07 124,242 60 221,972 28 12,186 23 308,308 83 24,276 13 47,067 89 1,514,239 30 3,266 80 4,085 39 45,532 89 13,178 15 791 87 284 47 802,341 03 43,290 46 24,906 46 25,591 68 5,514 02 704 54 1,591 00 168 79 9,201 60 12,465 31 3,97 00 6,124 83 4,917 32 7,885 37 2,881 57 4,875 20 2,398 06 25,399 29 1,825 43 4,411 64 4,917 32 7,885 37 2,881 57 4,875 20 2,398 06 25,399 29 1,825 43 4,441 64 4,917 32 7,885 57 4,875 20 2,398 06 25,399 29 1,825 43 4,441 64 4,917 32 6,917 64 6,917 6	206,477 29 225,240 78 93,761 46 24,055 24 5,755 67 131,688 47 11,987 67 131,342 98 39,305 24 4,535,993 13 9,052,521 98 411,146 16 6,873,359 9 08 378,214 19 678,327 22 49,264,448 98 17,607 18 54,079 28 12,524 38 12,527 68 12,524 38 12,527 78 115,128 63 32,977 80 24,656 15 12,639 09 2,745 07 150,146 21 49,330 35 8,930 55 29,707 72 137,519 29 33,637 66 32,946 39 149,267 77 150,146 21 49,330 36 8,930 55 29,707 72 137,519 94 752,267 17 64,291 14 65,117 54 76,286 77 22,344 31 10,091 52 75,574 48 26,785 67	288 299 300 311 322 333 344 355 366 411 425 466 511 523 534 556 54

9-10 EDWARD VII., A. 1910
TABLE 8.—Summary of Operating Expenses

19,338 15

967 67

296,749 50 3,834,723 92

	147	148	149	150	151
			GENE	RAL EXPENSES	- Continued.
No.	NAME OF RAILWAY.	Other Expenses.	Total of Foregoing Accounts.	General Administra- tion Joint Tracks, Yards, and Terminals. Dr.	General Administra- tion Joint Tracks, Yards, and Terminals. CR.
		\$ cts.	\$ cts.	\$ ets.	\$ cts.
56	New Westminster Southern	243 33	2,827 73		[
57 58	Nosbonsing and Nipissing. North Shore Railway.				
59 60	Nova Scotia Steel and Coal Co Orford Mountain.		3,222 54		
61 62	Ottawa and New York	127 74	5,742 70 31 00		
63	Princeton Branch of Washington Co. Ry. (U.S.)	13 89	328 08		
64 65	Père Marquette. Quebec Central.	1,990 15 22,111 07		0 29	
66	Quebec and Lake St. John	12,664 28	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
67	Quebec Railway, Light and Power Co	3,661 43			
68 69	Quebec, Montreal and Southern	481 15	$17,799  17 \ 3.812  35$		
70	Rutland and Noyan	9 88	460 37		
$\frac{71}{72}$	Salisbury and Harvey	45 68	1,913 58		
73	Stanstead, Shefford and Chambly	29 75	1,816 66		
74	St. Clair Tunnel	107 50	3,15 90		
$\frac{75}{76}$	St. Lawrence and Adirondack	127 53	7,039 99 41,751 00		
77	Spokane and British Columbia	20 54	170 26		
78 79	Temiscouata. Temiskaming and Northern Ontario.	45 60 1,098 55	10,119 70	540 00	
80	Thousand Islands	64 27			
81	Toronto, Hamilton and Buffalo	1,032 26	26,584 11		
82 83	Vancouver, Victoria and Eastern	690 72 17 45	14,95 † 30 517 27		
84	Victoria and Sydney, B.C	5 00	2,459 65		
85 86	Wabash Railway Company in Canada	913 40	71,384 73	5,693 68	
87	York and Carleton		60 00		

Final Total.....

11 Ween anding Tune 30 1909—Contin

for the Year ending June 30, 1909—Continued.											
153	156	155	156	157	158	160					
Recapitulation of Expenses.											
Total General Expenses.	Maintenance of Way and Structures.	Maintenance of Equipment.	Traffic Expenses.	Transportation Expenses.	General Expenses.	Total Operating Expenses.	No.				
\$ ets.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.					
2,827 73 	18,268 54 7,455 88 631 80 3,923 80 14,055 97 97,251 05 216 00 3,059 40 167,930 32 152,669 43 19,506 99 4,902 37 60,437 73 14,668 11 1,297 22 16,340 78	7,114 58 3,494 95 137 99 2,018 30 2,665 81 16,492 97 1,220 12 329,704 31 138,103 60 111,091 12 6,337 34 33,768 55 4,178 06 1,749 15 7,069 80	2,237 92 443 38 4,766 68 144 32 51,226 73 22,327 43 10,565 55 1,074 60 4,461 90 658 46 383 92 71 85	41,832 87 12,348 77 2,059 06 5,326 43 17,609 12 66,676 60 5,074 15 774,305 33 350,933 33 288,211 58 22,406 35 112,843 07 46,029 61 5,630 00 12,069 94	2,827 73	72,281 64 23,299 60 2,892 51 11,268 53 37,996 82 190,930 98 247 00 9,826 07 1,376,282 07 724,918 25 553,210 15 41,950 97 229,310 42 69,347 29 9,520 66 37,465 95	58 59 60 61 62 63 64 65				
1,816 66 3,185 90 7,039 99 41,751 00 170 26 10,659 70 43,610 10 3,839 54 26,584 11 14,954 30 517 27 2,459 65 77,078 41	22,919 42 23,120 35 68,849 40 54,239 21 1,117 08 51,082 56 133,165 17 3,641 95 135,509 06 133,559 80 694 75 9,165 38 226,300 33 15,841 56 1,396 00	2,808 52 22,521 65 31,027 11 99,652 90 31,029 45 126,868 82 2,960 53 71,637 28 36,489 04 332 49 4,431 81 360,000 93 9,275 01 310 00	1,837 46  5,268 61 214 94 31 78 2,950 38 11,149 69 283 38 14,231 85 7,536 87 62 28 849 29 76,213 41	40,449 23 57,862 94 161,305 57 136,858 61 260 07 72,130 32 456,388 87 14,545 39 274,094 43 189,478 17 4,122 77 13,421 27 13,421 27 905,851 37 22,348 22 2,470 00	1,816 66 3,185 90 7,039 99 41,751 00 170 26 10,659 70 43,610 10 3,839 54 26,584 11 14,954 30 517 27 2,459 65 77,078 41	69,831 29 106,690 84 273,490 68 332,716 66 1,719 58 167,852 41 771,182 65 25,270 79 522,056 73 382,018 18 5,729 56 30,327 40 1,645,444 45 47,464 79 4,236 00	73 74 75 76 77 78 79 80 81 82 83 84 85 86				

3,853,094 40 21,153,274 46 21,510,303 59 3,798,824 57 54,284.587 41 3,853,094 40 104.600,084 43

9-10 EDWARD VII., A. 1910

Table 9.—Summary of Passengers and Tons Carried, Earnings, Expenses, Train Mileage and Mileage Operated for the Year ending June 30, 1909.

1-	Total Passenger Earnings.	ets.	80,991 99 17,010 02 31,101 02 31,101 02 31,101 02 31,101 02 32,101 02 32,101 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,102 02 32,103 02 32,103 02 32,103 02 32,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 33,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103 02 34,103
9	Total Passenger Revenue.	& ets.	1, 2407 51 1, 521 52 2, 521 52 2, 525 52 3, 235 54 1, 25, 328 43 1, 25, 328 73 1, 25, 328 66 1, 35, 35, 35 1, 35, 35 1, 35, 35 1, 35, 35 1, 35, 35 1, 35, 35
žQ.	Mileage of Revenue Mixed Trains.	Miles.	68,931 16,456 16,456 17,758 17,758 17,758 17,758 17,758 17,758 17,758 17,758 17,758 17,758 18,669 18,669 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18,569 18
<del></del>	Mileage of Revenue Passenger Trains.	Miles.	2, 450 9, 500 1, 521, 040 2, 705, 492 1, 523, 800 2, 705, 492 1, 523, 800 2, 705, 492 1, 403 1, 403
ಣ	Passengers Carried One Mile,	No.	1,984,906 497,149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149 77149
n	Passengers Carried,	No.	46,379 14,086 14,086 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 14,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18,096 18
	NAME OF RAILWAY.		Alberta Railway and Irrigation Co Algona Central and Hudson Bay. Atlantic and Lake Superior Atlantic Quebee and Western. Bay of Quinte Bay of Quinte Bessener and Barry's Bay. Brailway and Barry's Bay. Braindon, Suskatchewan and Hudson Bay British Yukon British Yukon British Yukon British Yukon British Yukon Canadian Government—Intercolonial Canadian Rovernment——P. E. Island Canadian Northern. Canadian Northern, Quebee Canadian Northern, Quebee Canadian Northern, Quebee Canadian Pacific Caraquet Caraque
	No.		-9247277200152775772591527272729528

S	FSS	ION	Δ1	PA	PFR	No.	20h

6,716 94 3,140 12 7,702 17																			67,204.22		7,720 82						11,917 69	0.000		174,295 26					
5,5716 23 - 5,5716 23 - 5,576 23 - 5,576 23			30, 123 69													CC 100			59,320 34								9,079 10	05 050 40		163,423 81					
31,300	210°96	5,100	11,797	6,925	18,474	32,400	22,208	161,890	600	25,977	10,000 000,000 000,000	68,914	25,080	1000	25,5,5		15,650	28,240	. 9	C 10	6,335	239,208	43,531	27.5	000,411	0,00,0	37,116	10 010	10,810			70,134	11,077	45,001	35,865
	48,309		69,221	97	100000	1 250		136, 120	64,538		960 28		4.370	- 1	66,789	4,000		782,787	16,809	211,101	3,762	21.1,607	221,768	21.00	270,00	4 688		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	45,075	154,359	55,712	74.208	276,353	620 956	74,781
190,140 39,160 221,400	1,407,729	21,000	2,683,345	33,447	195,333	365,538	428,011	7,473,903	2,571,382	686,250	611.247	588, 450	411,615	686,558	1,120,5501	14,400	45,872	243,776	2,701,413	0,4004,103	400,319	15,076,611	11,805,355	583,811	4,220,680	260,050	323,504	4 2001 1007	1,201,167	9,435,146	670,050 9,241	2,848,690	19,785,303	11 210 210	2,421,464
10,751	74,091	006,4	153,701	5,768	191. 191. 191.	12,638	20, 151	200 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 20	121,005	112,500	015,010	21,219	23,700	16,882	20,050	10e'l	8,234	15,236	109,223	102,708	78,191	3 (3,487	352,619	113,582	200,018	11.1 02.1	11,627		EDS, 822	286,095	25,000 25,000 25,000	84,578	574,963	31,161	122,153
331 rondale, Baueroft and Ottawa. 34 Kaslo and Sloem. 35 Kont Northern.	36 Kettle Kryer Valley.	39 Liverpool and Milton	40 London and Port Stanley	42 Manitoulin and North Shore	43 Maritime Coul, Railway and Power Co	44 Maland Railway of Manitolus	46 Moneton and Buctouche.	47 Montreal and Atlantic	49 Montreal and Vernont June;	50 Morrissey, Fernie and Michel	51 Napierville Junction Kallway	53 New Brunswick Coal and Railway Co	54 New Brunswick and Prince Edward Island.	55 New Brunswick Southern	56 New Westminster Southern	5g North Shore	59 Nova Scotia Steel and Coal Co.	60 Orford Monntain	61 Ottawa and New York	62 Fere Marquette (in Canada),	64 Princeton Branch of Washington Co. Railway	65 Quebec Central	66 Quebec and Lake St. John	67 Quebec Railway, Light and Power Co	68 (Inches, Montreal and Southern	69 Red Mountain	71 Salishury and Harvey	2 Schomberg and Aurora	73 Stanstend, Sheflord and Chambly	75 St. Lawrence and Adirondack.	76 Sydney and Louisburg (Dom. Coul Co.)	78 Temisconada	79 Temiscanning and Northern Ontario.	80 Thousand Islands	82 Vancouver, Victoria and Bastern

Table 9.—Summary of Passengers and Tons Carried, Barnings, Expenses, Train Mileage, and Mileage Operated, for the Year ending June 30, 1909—Continued.

NAV. Passengers Carried One mile. Trains.  No. No. No. Miles.  (88,428	6	Mileage of Rotal Passenger Revenue. Revenue.	Miles. \$ cts. \$ cts.	15,211     19,822     05     20,247     18       1,081     2,057     08     2,089     11       12,333     556,135     42     595,410     17       31,200     3,093     75     3,553     75       8,490     1,600     00     1,845     00	7,061,580 39,073,488 84 45,282,326 27
NAV. Passengers Carried One mile.  No. No. No. No. No. 18,008  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,428  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438  68,438	4		Miles.	7,046 494 683,134	32,295,730
NAY. D	က	Passengers Carried one mile.	No.	841,231 78,008 34,743,601 57,942 56,175	2,033,001,225
toria and Sydney, B. C. shash Railway Co. (in Canada). allington Colliery Co. rk and Carleton. Total.	53	Passengers Carried.	No.	68, 428 68, 428 567,304 5,390 5,350	32,683,309
K & K Z Z Z Z	1			83] Victoria and Sydney, B.C. 84] Victoria Terminal and Ferry Co. 85] Wabash Railway Co. (in Canada). 86] Wellington Colliery Co. 87] York and Carleton.	Total

TABLE 9.—SUMMARY of Passengers and Tons Carried, Earnings, Expenses, Train Mileage and Mileage Operated for the Year ending June 30, 1909—Continued

84.78 3,006.42 332.73 266.80 89.64 89.64 100.00 20.50 89.37 69.45 90.32 ,450.37 269.33 9,608.30 149.73 74.18 32.00 278.87 28.00 14.00 30.00 5.00 382.19 on June 30 Operated Mileage 18 8855224888 cts. Operating Expenses. 29,305 225,240 93,761 21,055 131,688 5,755 11,987 92,487 131,312 17,607 51,079 4,775 145,831 237,285 50,915 12,924 12,307 ,632,297 9,052,521378,214 264,448 198,407 400,004 678,327 Total 17 e f 294,278 38 304,730 91 93,553 18 16,826 59 153,652 92 1,745 17 3,107 80 68,940 11 326,612 09 32 cts. 7,766,465 Gross Karnings. 10,581,767 178,387 104,238 796,774 13,644 6,959 70,438,424 8.013 52,030 5003 ,813,945 372,782 8,602,986 739,603 8,024,007 323.081 91 413,165 19,530 309,992 68,599 18,720 87,192 45,767 95,640 14,538 165,438 4,080 2,522 81,624 57,246 3,555,968 34, 198, 180 4.570,041 900,211 676,020 555,884 780,281 Sevenue Villeage. Train Total 12 ,548,349 67 155,838 29 388,670 83 194,733 43 478,250 06 2,606 15 37,282 61 78 16 86, 159 03 405,703 82 10,118 07 5,000 93 320,852 82 181,056 70 8,175 50 45,828 68 2482228888 <u> 3</u> & = 5 cts. 59,009 ( 10,637 ( 108,020 ( 25,575 F 7,488,670 163,472 Total Freight Earnings. 200,588 (229,181; 39,843 3,107 1,583 239,083 14 199,090 01 138,534 21 59,009 02 9,690 94 108,020 27 1,583 08 3,107 80 39,471 33 239,083 02 448%2858 588888888 运录 cts. 25,575 F 5,432,730 S 900 6 37,282 4,725 Total Freight Revenue. 7,370,376 194,049 489,665 28 63, 172 57,025 SG 159 105,541 10,118 7,454,561 1,301,216 33 Milenge of Revenue 18,271 10,926 31,600 4.080 24,485 18,381,652 623,469 56,763 642,566 20,011 2,544,380 624,597 1.900,138 3.568,680 108,430172,030 Freight Trains. Miles. 12 223, t11 6,500 21,062 27,700 132,279 27,800 53,092 191,240 18,720 2,952 489,585 140,649 Revenue Mixed Trains. 19,530 Mileage of 68,921 32,391 54,540 113,758 165,438 1,253 55,800 187,881 194,479 775,683 614,615 35, 129 333,764 Ξ 657,390 996,611,016 10,003,175 7,374,129) 8,299,286 1,362,797 217,685 4,321,255 2,929,920 6,257,427 213,542 17,335 106,845 954,639,260 ,000,875,386 3,069,787,049 1,115,6856,709,57813,575,8491 2,619,838,880 3,888,055 39,158,817 64,913 225,532,097 Tons Carried 17,478,374 One Mile. Number. 2 2,958,802 201,296 3,496 24,793 55 212,492 378,431 334,588 15,253 150,985 362,808 37,931 13,270 141,775 2,550 21,369 23,953 185,819 5,701,276 ,518,691 21,913 3,552,739 231,431 258,587 185,063 5,955,251 Number. Tons Carried. c 4 Atlantic, Quebec and Western. 5 Bay of Quinté 6 Bedington and Nelson. 7 Bessenor and Barry's Bay. 8 Brandon, Sask., & Hudson Bay. 9 British Yukon. Alberta Ry. and Irrigation Co 2 Algoma Centraland HudsonBay 3 Atlantic and Lake Superior... 10 Brockville, Westport and Northwestern. .... 11 Canada Southern.... Canadian Government-NAME OF RAILWAY.  $\infty$ Number.

Table 9.—Summary of Passengers and Tons Carried, Earnings, Expenses, Train Mileage, and Mileage Operated for the Year ending June 30, 1909—Continued.

	od 0.		8.8	37	8 8	88	28 18 18 18 18 18 18 18 18 18 18 18 18 18	99	00	£ 3	46	-1-	999	2.9			0 8 E	ED								191 23	
65	Mileage Operated on June 30.	Miles.	_	93.37													10.									26.5	
~	ting nses.	cts.		21,656 15														110,091 52								190,930 98	
की अ	Total Operating Expenses.	Se.	115	हैं की	212	1503	6 <del>7</del>	157	8	F 2	149	67		9	65	1	308	110	a:	( ) ( ) ( ) ( )	(G	17	วงั	<u> </u>	11,	18.5	Danit b
	ss ngs.	ets.		010													200 000	73,068 46	0.00	110 73	101 84	652 99	080	290 60	950 103	139,410 80	4000
27	Total Gross Earnings	¥;	187.	17,010	-,-	179,	4.1	110,	200	4T,	178,	6,	815,	95.	134,	ŧ	£#	73,	02	, e.	<u> </u>	36	95	er e	ာ် ငွ	139,	C. 61mm
56	Total Revenue Train Mileage.	Miles.	501,405	7,187	6,838 8.38	145,856	9,920	125,615	19,980	13,653	62,162	36,974	20,203	94.200	95,726	110	90,658	55,293	69 01 6	48 010	77,091	57,711	14,400	8,155	50,000	115,827	0000
	Re Richard	cts M	70 5	17	S 2											- 1	2.0	25.								- 52	,
18	Total Freight Farnings.	<i>S</i>		13,861												000		0.98									
	Fari																										9
_	ght nue.	cts.		13,826 17													984 80 984 80	42,013 TU								69,152 35	
ତ୍ୟ	Total Preight Revenue	ᢒ₽	162	3 22 :	S) -	108	<u>8</u> =	625	<u>.</u>	X 55	107	70	0.59	37	78	6.0	2 7	<u>ci</u>	06	9 9	ি	0+	วร์	£3°	e e	68	0 100
ee ee	Mileage of Rovenue Freight Trains.	Miles.	55,249		:	1,505	:	44,537		6,303	78,380	4,342	224 666	856.45	31,188		3 940			18 760	24,770	11,494	4,800	:	108	39,018	1 011 570
	N SECTION OF THE SECT		95.3	72	× 5	23	2.5	12	: E:	3.7	00	9 9	2 2	200		1		: :		: :	7.7	27	0				_
573	Mileage of Revenue Mixed Trains.	Miles.	42,156	7.75	x6x,0 x6x,0		9,920						_	16,198			16,956		62 01					38,155		:	0.150
1	arried Hile.	ber.	14,888,307	215,596	241,623	84,048	151,857	93,852	777,535	95,572	918,189	395,832	53 613 488	1,703,431	361,541	007 00	283 681	1,398,508	9 500 177	183 SEC.	394,326	356,905	54,376	89,705	60,000 860,000 860,000	4,079,198	WO 4 4 4 PM
12	Tons Carried One Mile.	Number	1+													G	र्भ <del>च</del>	1,:									
20	Ton; Carried.	Number.	275,100	11,645	9,00 3,00 3,00 1,00 1,00 1,00 1,00 1,00 1	99,485	6,093	63,206	52,056	29,432	04,970	95,902	28,040	63,908	08,715	000 600	62,882	41,712	200 53	34.813	12,130	85,862	6,797	16,310	35,093	125,600	110 011
	C C	Z														_							_				_
	AY.		32 Inverness Ry, and Coal Co	*	Kettle River Valley	 •	Klondike Mines	London and Port Stanley	Lotbiniere and Megantic	Manitime Coal. Ry & Power Co.		Midland Ry. Co. of Manitoba.	Moncton and Enctorche,	Montreal and Province Line.	let.	Morrissey, Ferme and Michel,	Nanierville Function By	ard.	New Briniswick Coad and Ry.	New Brunswick and P. E. Island	New Brunswick Southern	New Westminster Southern		Nosbonsing and Nipissing,	) Inco	61 Ottawa and New York.	(19 1) the Management of the Company
	NAME OF RAILWAY.		id Con		low.	Kingston and Pembroke	ilton	Stanl	legant	V. & P.	Massawippi Valley	of Ma	lantic	ovince	Montreal and Vermont Jet.	e and	tion B	Nelson and Fort Sheppard.	Coard	nd P. I	Southe	r Sout	::	50 Nosbonsing and Nipissing.	nus 1	York	-
19	E OF 1		Ry, an	Slocan	nern er Val	nd Pe	fines.	1 Port	and N	Cal. R	i Vall	y. Co.	nd bij	nd Pr	nd Ve	Ferm	Inne	Fort	WICK	wicka	wick a	ninste	re	s and	mtain	New	
	NAM		rness 1	Kaslo and Slocan.	c North	rston a	idike M	lon an	iniere	timeC	awipp	and R	cton a	treal a	treal a	rissey,	erville.	on and	Isrnins	Bruns	Bruns	West	ods d	duisuo	rd Mos	wa and	4 4
	Zamber.		32 Inversion	34 Kasle			38 Klon 39 Live		41 Lotb	43 Marri		45 Midl	47 Mont	48 Mon	Mon	TOIN DO	51 Nami			51 New	55 New	56 New	Nort	Solvosb	Orfo	Otta	1 2 2 1

SESS	IONAL	PAPER	No. 20b
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6.00	5.10 222.00 286.50	191.91 9.59 8.39 50.00	43.00 2.25 46.12	62.99 3.70 113.00 264.74 6.33	83 67 178.49 16.26	1.14	
247 00	826 918 210	229,310 42 229,3310 42 69,347 29 9,520 66 37,465 95	69,831 29 106,690 84 273,490 68	332,716 66 1,719 58 167,852 41 771,182 (5 25,270 79	522,056 73 382,018 18 30,327 40	5,729 56 1,645,414 45 47,464 79 4,236 00	104,600,084 43
4,351 63	24,914 1,020,482 631,389	234, 133 25 234, 933 25 22, 162 27 12, 403 72 30,836 81	73,350 55 277,093 00 422,232 51	349,287 80 819 68 230,118 19 1,324,129 16 32,971 33	796,443 15 402,539 64 42,927 30	5,488 33 2,123,208 00 47,464 79 5,375 00	145,056,336 19
3,144	10,183 620,246 433,429	20,319 210,130 15,004 6,863 37,206	83,726	210,699 414 160,551 533,861 33,664	429,837 176,586 22,400	1,501,944 31,200 8,490	79,853,028
4,351 63	193 010 977	124,290 55 17,834 14 3,520 56 18,768 43	38,098 37 277,052 00 247,674 03	327,143 35 760 70 143,143 58 710,070 61 19,957 08	534,543 11 313,184 68 22,533 79	3,192 21 1,524,515 8~ 44,111 04 3,530 00	96,685,076 23
4,351 63	193 010 753	122,914 62 122,914 62 17,243 14 3,520 56 18,768 43	38,001 43 277,052 00 247,500 13	324,817 15 594 20 142,965 58 685,385 28 19,957 08	504,711 7 312,625 65 22,521 14	1,964 17 1,521,299 68 14,111 94 3,539	95,714,783 41
	, ,	2,208 6,508 8,296 2,175	21,244	176,987 16,205 243,158	167,632 65,732 152	805,692	40,304,906
3,144	6,335 229,208 43,534 977	144.550 6,570 37,116	16,816	407 70,134 11,077 33,664	35,865	12,333 31,200 8,490	7,061,580
154,452	767,779 46,796,780 22,102,833	10,651,287 739,550 472,559 441,329	2,945,031	52,625,111 15,814 6,639,697 45,708,866 185,072	48,020,980 25,286,084 124,231	34,130 287,921,368 3,535,900 93,670	13,160,567,550
25,742	150 220 320	235,746 82,942 139,398 43,661	1,082,479	3, 456, 463 4, 274 136, 375 535, 242 30, 512	1,284,303 927,936 30,003	29,942 1,225,487 328,921 8,921	66,842,258
Philipsburg Ry. and Quarry Co.	65 (unbec Central) 66 (unbec Central) 67 (unbec and Take St. John	or gliebee Moutreal and Southern (8) Red Mountain. 70 Rutland and Nayan. 71 Salisbury and Harvey.	73 Stanstead, Shefford & Chambly 74 St. Clair Tunnel. 75 St. Lawrence and Adrondack.	75 Spokane and Brit. Columbia Ry 77 Spokane and Brit. Columbia Ry 78 Temiscounta and North'n Ont. 80 Thousand Islands.	2 Johnney, Hammeon and Darlessen. 82 VancouverVictoria and Bastern. 83 Victoria and Sydney, B.C 84 Victoria Taminol and Johnney.	85 Wabash Ry. Co., in Canada Si Wellington Colliery Co	Final Total

Table 10.—Summary of Train Mileage for the Year ending June 30, 1909.

Second   S
Mileage of Revenue Special Train- Mixed Prints.  Misca Prains.  Miles, 21  Mixed Prints.  Miles, 21  Miles, 22  Miles, 23  Miles, 24  Miles, 25  Miles, 25
Mileage of Revenue Special Trains.  Mixed Preight Mileage (S. 22, 321 16, 456 175, 891 172, 892 172, 893 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 390 191, 3
Mileage of Ramins Mileage of R
of Miles
800 000 000 000 000 000 000 000 000 000
Alibage of Revenue Passenger Trains. Miles.  Miles. 2,450 9,560 1,521,040 2,715,492 11,528,299 76,935 276,935 276,935 276,935 276,935 276,935 276,935 276,935 276,935 276,935 276,935 276,935 276,935 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772 276,772
Alberta Railway and Irrigation Co. Algorna Central and Indison Bay. Atlantic and Lake Superior. Bay of Quinte. Bedinityon and Lake Superior. Bedinityon and Nelson. Bessemer and Barry's Bay Braidon, Salsatchewan and Hudson Bay Braidon, Salsatchewan and Hudson Bartist Yukon. Breskville, Westport and Northwestern Canadian Soverment—Intercolonial. Brockville, Westport and Korthwestern Canadian Northern Onterio Canadian Northern Quebec. Canadian Northern Quebec. Canadian Pacific Canadian Pacific Canadian Pacific Canadian Pacific Capandian Pacific Capandian Pacific Capandian Pacific Capandian Pacific Capandian Southern Caraquet. Caraduet. Caraquet. Caraq
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SESSIONAL PAPER No. 20b	
337 1,027 343 4,327 4,327 6,282 6,282 6,282 9,802 9,802 1,277 4,277 4,277 4,277 4,277 4,277 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117 9,117	3,521,894
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1, 060 1, 080 1, 080 96 56 87 87 87 87 87 87 87 87 87 87 87 87 87	190,812
6,583 6,583 6,583 78,380 78,380 3,240 11,494 4,800 11,494 1,011,570 167,787 116,787 116,209 21,244 21,244 101,340 116,209 24,158 116,209 24,158 116,209 24,158 116,209 24,158 21,244	40,304,906
11, 28, 28, 28, 28, 28, 28, 28, 28, 28, 28	7,061,580
445 445 138, 420 138, 420 138, 420 137, 020 4, 370 4, 370 10, 742 10, 743 10, 744 10, 744	32,295,730
London and Port Stanley Lothiniere and Megantic. Manifoulin and North Shore Maritime Coal, Railway and Power Co. Massawippi Valley Midland Railway of Manitoba Montreal and Atlantic. Montreal and Province Line Montreal and Vernon Junction. Morrissey, Fernie and Michel. Montreal and Vernon Railway Nelson and Fort Sheppard Navierville Junction Railway Co. Morrissey, Fernie and Michel. Navierville Junction Railway Nelson and Fort Sheppard New Brunswick Coal and Railway Co. New Brunswick Southern North Stores North Shore North Stores North Stores North Stores North Stores North Store North St	Total

9-10 EDWARD VII., A. 1910

TABLE 11.—SUMMARY of Freight Traffic

		LADLE II.		ART OF	Freight	
1	2	3	4	5	6	7
					PRODUC	OTS OF
		GRAIN.			FLOUR.	
Name of Railway.	Tonnage Originat- ing on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Ton- nage.	Tonnage Origi- nating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Ton- nage.
1 Alberta Railway and Irrigation Co	911 211 6 1,336	54 113 322 199 295	27,618 1,024 533 205 1,631	155 19		468 194 2,223 781 2,750
7 Bessemer and Barry's Bay. 8 Irandon, Saskatchewan and Hudson Bay. 9 British Yukon. 10 Brockville, Westport and Southwestern. 11 Canada Southern. 12 Canadian Government—Intercolonial. 13 Canadian Government—P. E. Island. 14 Canadian Northern. 15 Canadian Northern, Ontario. 16 Canadian Northern, Quebec. 17 Canadian Pacific. 18 Cape Breton.	54,787 120 40,336 20,184 14,219 780,592 6,617 676 2,186,893	649,904 85,935 306 8,576 611 13,572 93,733	54,809 1,890 2,830 690,240 106,119 14,525 789,168 7,228 14,248 2,280,626	720 21,102 24,186 3,185 52,970 1,195 227 499,053 8	1,044 1,946 690 15,253 73,165 315	1,360 174,518 146,269 4,229 54,916 1,885 15,480 572,218 323
19 Caraquet 20 Carillon and Grenville 21 Central Ontario 22 Crowsnest Southern 23 Cumberland Railway and Coal Co 24 Dominion Atlantic 25 Elgin and Havelock 26 Eastern British Columbia 27 Grand Trunk 28 Grand Trunk—Canada Atlantic 29 Halifax and Southwestern 30 Hampton and St. Martins 31 Hereford	4,021 180 2,180 63 33 432,328 5,144 497	297 774 1,421 103 1,026,820 388,071 920 100	393,215 1,417 100	313 59 212,111 9,152 3,629	3,534 200	83 9,177 785 353,309 76,777 7,163 200
32 Inverness Railway and Coal Co 33 Irondale, Bancroft and Ottawa. 34 Kaslo and Slocan 35 Kent Northern 36 Kettle River Valley, 37 Kingston and Pembroke 38 Klondike Mines. 39 Liverpool and Milton 40 London and Port Stanley.	44 6,673	124 80 15 5,128	168 80 15 4 11,801 28,672	2,267 2,919	2,012 302 851 2,280	2,179 302 851 4,547
41 Lotbinière and Megantio. 42 Manitoulin and North Shore. 43 Maritime Coal, Railway and Power Co 44 Massawippi Valley. 45 Midland Railway of Manitoba. 46 Moncton and Buctouche. 47 Montreal and Atlantic. 48 Montreal and Province Line.	30 131 441 29,045 514 180	97 27,975 10,254 68,558 946	30 228 28,416 39,299 69,072 1,126	21 47 182 219 928 42	$ \begin{array}{c} 135 \\ 1,699 \\ 76 \\ 124,579 \\ 1,420 \end{array} $	21 182 1,881 295 125,507 1,462
49 Montreal and Vermont Junction	46	58		J		392

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Movement for the Year ending June 30, 1909.

		10		10	10			
8	9	10	11	12	13	14	15	16
AGRICUI	LTURE.							
Отне	R MILL PROI	oucts.		Нач.			Товассо.	
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.	Tonnage Originat- ing on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
5,056 117	15	5,071 117	578 807	1 551	579 1,358	5	1	6
12	8 62	8 74	40 304	272 15 9	312 319 9	1	19	20
138 510 11,046	15 223 780 173,971	153 223 1,290 185,017	22 90 8,930	2,058 830 59,953	22 2,058 920 68,883	5 437	10 5,739	15 6,176
11,036 881 11,895 769	19,993 121 2,198 645	31,029 1,092 14,093 1,414	37,788 1,991 25,191 1,742 1,928	$ \begin{array}{r}                                     $	30,444 1,993 27,223 1,996 15,434	143	32	1,300
266,413	34,391	300,804	208,273 1 210	22,295 27 600	230,568 28 810	6,619	2,246	
269 87 7,975	1,031 158 486 17,153 365	1,300 245 486 25,128 365	95 110 4,109 21	1,502 435 325 119	1,597 545 325 4,228	62		89
66,969 5,952 1,968	89,539 100,620 2,161	156,508 106,572 4,129	$ \begin{array}{r} 36\\61,569\\10,155\\1,621 \end{array} $	82,278 40,760 1,395	36 143,847 50,915 3,016	822 2	4,830 326	5,652 328
54 56	148 10 431	202 66 431	401 42	60 59 519 120 45	60 460 561 120 45		9	13 1
1,269	727	1,996	617	240	1 857	64	5	69
2,205	4,095 12	6,300 12 19	7,782 100 124	3,335 60	11,117 160 124	5	232	232 5
116 505 516	65 2,488 151	181 2,993 667	710 67 22	580 1,123 22	1,290 1,190 44	1	8	9
363 112 20	55,329 372 88,900	55,692 484 88,920	18,288 3,642 1,995	1,610 1,187 44,100	19,898 4,829 46,095			774
70	97	70 104	1,270 39	91 1,157	1,361 1,196			

9-10 EDWARD VII., A. 1910
TABLE 11.—SUMMARY of Freight Traffic Movement

	1	2	3	4	5	6	7
						PRODU	CTS OF
			GRAIN.		)	FLOUR.	
Number:	Name of Railway.	Tonnage Originat- ing on Road.	Tounage Received from Connecting Roads and Other Carriers.	Total Freight Ton- nage.	Tonnage Origi- nating on Road	ge l Con ds an iers.	Total Freight Ton- nage.
54 Ne 55 Ne 56 Ne 57 No	w Brunswick Coal and Railway Co w Brunswick and P.E. Island w Brunswick Southern. w Westminster Southern rth Shore.	390 80		605 464		433 991 31 710	433 991 293 710
58 No. 59 No. 60 Orf 61 Ott 62 Pèr	sbonsing and Nipissing.  va Scotia Steel and Coal Co  ord Mountain.  awa and New York  e Marquette, in Canada.  dilpsburg Railway and Quarry Co	17 639 71,872	202 891 654 77,862	202 908 1,293 149,734	173	103 702 1,116 17,896	103 730 1,289 33,140
65 Que 66 Que 67 Que 68 Que 69 Rec 70 Ru	neeton Branch of Washington Co. Ry.ebec Central.ebec and Lake St. John.ebec Railway, Light and Power Co.ebec, Montreal and Southern d Mountain tland and Noyan isbury and Harvey.	2,540 4,415 480	774 7,220 4,565 305 2,178 16 650 400	7,105 4,720 2,658 16	1,027 1,168	129 25,459 5,326 20 4,158 83 20 500	129 25,459 6,353 1,188 4,168 83 20 527
73 Sta	nstead, Shefford and Chambly	194	237,212	237,406	1,060	35,087	36,147
75 St. 76 Syd 77 Spc 78 Ter 79 Ter 80 Tho 81 Tor 82 Van	Clair Tunnel Lawrence and Adirondack hey and Louisburg (Dom. Coal Co.) okane and British Columbia Railway nisconata niskaming and Northern Ontario. ousand Islands. onto, Hamilton and Buffalo. ncouver, Victoria and Eastern ttoria and Sydney, B.C. ttoria Terminal and Ferry Co bash Railway Co., in Canada llington Colliery Co. rk and Carleton.	267 96 7 264 5,024 2,378 2,090	\$67 1,961 121 6,546 3,407	7 1,131 6,985	3,561	633 1,000 75 1,084 1,522 886 1,190 1,396 1,396	1,424 1,000 75 1,532 5,083 886 1,654 1,421 216 216 23,850 340
	Final total		3,000,352	6,837.506	884,732	874,162	1,758,894

for the Year ending June 30, 1909-Continued.

8	9	10	11	12	13	14	15	16
							-	

AGRICULTURE-Continued.

Отнев	MILL PROF	oucts.		HAY.			Товассо.	
Tonnage Originat- ing 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 Originat- ing on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
470	789	470 789	4,110 171 78	42 4,743 30		6	1 90	
225 11,514	122 1,257 1,353 21,384	122 1,257 1,578 32,898	10 30 572 40,639	$ \begin{array}{r} 14 \\ 561 \\ 68 \\ 17,416 \end{array} $	24 591 640 58,055	1 48	$\begin{array}{c} 1 \\ 5 \\ 4 \\ 1,162 \end{array}$	1 5
	19	19		110	110			66
	106 144 172	497 144 172	895 438 14,546 13 257	4,902 105 209 512 856	5,797 543 14,755 512 869 257	19	2	21 6 21 6 6 6 7
39	89,100	89,139	1,278	44,826	46,104			$\frac{7}{7}$
1,046	1,508 42	2,554 42	676	1,149 2,400	1 00%		964	964.7
47 264	156 128 112	203 392 119	51 1,540 3,829	64 6,948 55	1,604 10,777 55			1 70 70 73 80
298 269	2,208 1,035	2,506 1,304	186 6,008	255 1.124	7,132	70	420 104	490 8 104 8
28,106	190	28,106	12,840	800	12,840 800	439		439 8 8
			160	605	765			8'
439,094	716,977	1,156,071	489,038	372,227	861,265	8,878	17,584	26,462

9-10 EDWARD VII., A. 1910
TABLE 11.—Summary of Freight Traffic

	. 17	18	19	20	21	. 22	23			
		PRODUCTS OF								
	·	Соттом.			FRUITS AND VEGETABLES.					
Number.	Name of Railway.	Tonnage Originat- ing on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Ton- nage.	Tonnage Origi- nating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Ton- nage.			
1 2 3	Alberta Railway and Irrigation Co		6		6,381 191		7,182 211			
4 5 6	Atlantic, Quebec and Western Bay of Quinté Bedlington and Nelson Bessener and Barry's Bay Brandon, Saskatchewan and Hudson Bay British Yukon		ō	5	350 1,835	65	415 1,835			
	Bessemer and Barry's Bay Brandon, Saskatchewan and Hudson Bay British Yukon Brockville, Westport and Northwestern					1,411	1,309 1,471 179			
11 12 13	Canada Southern. Canadian Government—Intercolonial Canadian Government—P. E. Island Canadian Northern	2,587	45,899 1,492 38	45,899 4.079 49	9,123 46,377 8,968	96,635 6,890 157	105,758 53,267 9,125			
1.0	Canadian Northern, Ontario				11,653 1,039 254 148,385	$\begin{array}{c} 48 \\ 2653 \end{array}$	25,016 1,087 2,907 199,095			
20	Carillon and Grenville				1 25		25			
22 23	Central Ontario				7,377 56 76,046	356 300 1,009	7,733 356 77,055			
25 26 27	Dominion Atlantic. Elgin and Havelock. Eastern British Columbia Grand Trunk. Grand Trunk—Canada Atlantic	1,621	10,416	12,037	450 80,708	86,449	450 167,157			
30 31	Hannat and Southwestern				1,342 3,664 320	386	24,047 4,050			
32 33 34	Inverness Railway and Coal Co				31	112 45	143 45			
36	Kent Northern. Kettle River Valley. Kingston and Pembroke. Klondike Mines						452			
40 41	London and Port StanleyLotbinière and Mégantic.		463	463		6,776 28	14,730 146			
42 43 44	Manitoulin and North Shore. Maritime Coal Railway and Power Co Massawippi Valley Midland Railway of Manitoba		•••		34 13 253 28	133 265 265	34 146 518 293			
46 47	Montreal and Atlantic		8,572	- 8,572	584	8,626	9,210			
48	Montreal and Province Line				107	2,996	3,103			
51	Morissey, Fernie and Michel. Napierville Jct. Ry Nelson and Port Sheppard				27	262 418	262 445			

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Movement for the Year ending June 30, 1909—Continued.

24	25	26	27	28	29	30	31	32		
AGRICUI	LTURE—Con	ntinued.	PRODUCTS OF ANIMALS.							
OTHER PRODUCTS OF AGRICULTURE.			Live Stock.			Dressed Meats.				
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 Roarls and Other Carriers.	Total Freight Tonnage.	Tonnage Originat- ing on Road.	Tournage Received from Connecting Foads and Other Carriers.	Total Freight Tonnage.		
2,559	24		6,749 679 22. 204 173	65	7,388 679 87 371 173	2	30 62	64		
15,076	82,696	97,772	418 6	137 3,130 52 204.559 4,228 17 2,553 167	555 3,136 1,463 228,981 20,140 3,265	878 3,995 2,219	56 159,489 14,014 4	56 160,367 18,009 2,223		
200	139	200	317,470 30 5 5,096 148	37,167 4 	170	11	112,684 10 127	127		
25,442	19,483 6,688	44,925 6,688	2,162 64 11 277,341 9,764 311	104,374 11,755 58	2,314 64 11 381,715 21,519	1,186 64 24,500 404	37 16,443 45,588	1,188 101 40,943 45,992		
• • • • • • • • • • • • • • • • • • • •	1		223 191	17 16	344 239 191	7 9	31 10 36	38 19 36		
9,625			3,307	538 8	3,845 8 2	1,574 16 1	3,197	4,771 16 1 37		
2,935	43,795	2,935	706 8 3,643 847 153	1,026 51 9,646 96	1,732 59 13,289 943	16	83,898	83,914		
	47		429	40	469		70			

9-10 EDWARD VII., A. 1910 Table 11.—Summary of Freight Traffic

	. 17	18	19	20	21	22	23		
			PRODUCTS OF						
			Cotton.		FRUIT AND VEGETABLES.				
Number.	Name of Railway.	Tonnage Originat- ing on Road.	Tomage Received from Connecting Roads and Other Carriers.	Total Freight Ton- nage.	Tounage Origi- nating on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Ton- nage.		
54 New Bruns	swick Coal and Railway Coswick and P. E. Islandswick Southernminster Southernre.						213 1,550		
58 Nosbonsing	g and Nipissing a Steel and Coal Co. untain I New York uette in Canada g Railway and Quarry Co Branch of Washington Co. Ry. utral I Lake St. John ilway Light and Power Co. putreal and Southern. tain d Novan								
64 Princeton 1 65 Quebec Cer	Branch of Washington Co. Ry					812	812		
66 Quebec and 67 Quebec Ra 68 Quebec, Mo 69 Red Mount	l Lake St. John		3,369	3,369	2,373 260 339	1,096	2,373 266 1,433 190		
71 Salishury a	nd Harvey		^ *						
72 Schomberg 73 Stanstead,	and Aurora				133	5,772	5,905		
75 St. Lawren 76 Sydney and	and Aurora Shefford and Chambly unnel uce and Adirondack Louisburg (Dom. Coal Co)	16	1,227	1,243	122	2,969 210	3,091 210		
77 Spokane ar 78 Temiscouat	nd British Columbia Ry	1	18	19					
80 Thousand 3 81 Toronto, H 82 Vancouver, 83 Victoria an	A Louisburg (Dom. Coal Co) do British Columbia Ry ng and Northern Ontario Islands amilton and Buffalo , Victoria and Eastern d Sydney, B.C rminal and Ferry Co ulway Co. in Canada		489 12	489 12	80 1,918 986	\$68 129 4,203 1,112	868 209 6.121 2,098		
86 Wellington	erminal and Ferry Co. ailway Co. in Canada Colliery Co. Larleton.	2,011		-, ., .,	20,000	. 156	156		
	Final total	17,681	104,619	122,300	478,926	367,004	845,930		

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Movement for the Year ending June 30, 1909—Continued.

24	25	26	27	28	29	30	31	32	
AGRICUI	LTURE—Co	ntinued.		PRODUCT	S OF AN	IMALS—	Continued.		
OTHER PRO	DDUCTS OF AG	RICULTURE.		Live Stock.		Dressed Meats.			
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.	Tonnage Originat- ing on Road.	Total Freight! Tonnage.		
	45	45	170 122 134	452	170 122 586	67	66	66	
775 65 50,262	51 9,729	3 775 116 59,991	1 346 1,479 17,266	77 2,811	$ \begin{array}{c} 1\\347\\1,556\\20,977 \end{array} $	1 2 32 8,222	8	18 40 24,915	
5,199	1,185 3	121	4,456 2,029 390 1,443 23	49 245 78	4,456 2,755 439 1,688 101 28	85	518	518 85	
	43,795	43,795	126		126 14,255				
28	634	634 28	494 72	215	709 274	10 40	4,060	10 4,100	
5,349 563	114 3,550	5,463 4,113	137	537 5,957	674 5,957 769	88	97 3,357	185 3,357	
508 446	4,505 604	5,013 1,050	1,584 313 130	4;841 2,347 94	6,425 2,660 224	11	13 56	13 67	
5,795	131	5,795 131	34,960	195 72	$   \begin{array}{r}     224 \\     34,960 \\     72   \end{array} $	24.035		24,035	
135,697	219,138	354,835	779,594	426,627	1,206,221	93,339	461,645	554,984	

9-10 EDWARD VII., A. 1910
TABLE 11.—SUMMARY of Freight Traffic

	33	34	35	36	37	38	39
						PRODU	CTS OF
			Packing-H Products.	OUSE	POULTRY	r, Game an	D Fish.
Number.	Name of Railway,	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.	Tonnage Origin- ating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.
1 2	Alberta Railway and Irrigation Co Algoma Central and Hudson Bay	10	230	240	11		11
3	Atlantic and Lake Superior Atlantic, Quebec and Western Bay of Quinte.						1,477
6	Bedlington and Nelson Bessemer and Barry's Bay Brandon, Saskatchewan and Hudson Bay						
8 9	Brandon, Saskatchewan and Hudson Bay. British Yukon		477	477		33	33
10 11	British Yukon Brockville, Westport and Northwestern Cana ta Southern	9,982	61,120	71,102	84	10	
12 13 14 15	Canadian Government Railways— Intercolonial P. E. Island Canadian Northern Canadian Northern, Ontario Canadian Northern, Quebec Canadian Pacific Cape Breton	2,229 4,025 710	25 1,251 119	2,254 5,276 829	27,487 3,217 4,370 22	138	3,376 4,508
16 17	Canadian Northern, Quebec	21,663	$\frac{1.471}{67,275}$	1,471 88,938	24,292	10,729	35,021
20	Carillon and Grenville		40	40			126 2,420
21 22	Central Ontario. Crowsnest Southern. Cumberland Railway and Coal Co	21		21	75		76
25 25	Elgin and Havelock	433 86	32	465 86	1,205 99	811 45	2,010 144
27 28 29	Grand Trunk Grand Trunk (Canada Atlantic) Halifax and Southwestern Hampton and St. Martin's	26,369 122 79	35,854 5,656 27	62,223 5,778 106	55 3,158	4,624	19,337 4,679 3,259
32	Inverness Railway and Coal Co	32 42	5 10	47 10	7		666
34	Kaslo and Slocan						
37 38	Kettle River Valley Kingston and Pembroke Klondike Mines Liverpool and Wilton	27	13	40	6	64	
$\frac{40}{41}$	London and Port Stanley	2,464	1,936	4,400	72 8	160	232
43	Manitoulin and North Shore	276	, 43 76	43 352		16 2	10
46	Moncton and Buctouche Montreal and Atlantic.	139	37,328	37,467	22	7,644	7,666
49	Montreal and Province Line		49,641	49,641		17,543	17,543
51	Napierville Junction Railway. Nelson and Fort Sheppard.				18		18
51 52	Napierville Junction Railway				18		

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40	41	42	43	44	45	46	47	48
ANIMAL	S—Continued	<i>l</i> .						
	Wool.		Hibi	ES AND LEAT	HER.	OTHER PI	RODUCTS OF	ANIMALS.
Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Tonnage Originat- ing on Road.	Originating on & z = Treight Originating on & z = Treight Originating on & z = z = Treight Originating on S = z = z = z = z = z = z = z = z = z =				
117		117	·	5			2	51
i	1	1 1	9	4	13 16			
4	13.386	4	250	 54	304	52	755	52 755
	178	13,481 1,298 52	1,401 5,139 464	1,104 11	6,243 475	0,521	48,841	96,362
2,029	3,133	5,162	153	75 2 391 21,395	260 508 42,3 t <sup>7</sup> 153		2,638	3,872
		3	1,072	25	1,097	325	 55	325 55
20		20	910	47	296	 		
1,501	2,883 2,561	4,384 2,561	22,332 1,037 81	13,787 15,307	16,344 81	4,305		57,087 24,143
13	······································	15 1			85 7	191 38		38
6	8	14	287	432	719			
79	60		257,	1,457	1,714	993 188	489	1,482 188
1 11	32		179	207	$\begin{array}{c} 2\\386\end{array}$	,		
16	2.481	2.497	1.617		14.123			
				47	47		158	158 8

9-10 EDWARD VII., A. 1910 TABLE 11.—SUMMARY of Freight Traffic

	33	34	35	36	37	38	39
						PRODUC	CTS OF
			Packing-H Products,	OUSE	POULTES	, GAME AN	D Fish.
Number.	Name of Railway.	Tonnage Originating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.	Tonnage Origi- nating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.
53; 54; 55; 56; 57;	New Brunswick Coal and Railway Co New Brunswick and P. E. Island New Brunswick Southern New Westminster Southern North Shore	366 19	142	366 19 142	209 1,048	224	209 1,272
50	Nosbonsing and Nipissing. Nova Scotia Steel and Coal Co Orford Mountain. Ottawa and New York. Père Marquette (in Canada). Philipsburg Railway and Quarry Co Princeton Branch of Washington Co. Ry					5 15 7 835	5 15 55 1,210
66 67 68 69	Quebec Central. Quebec and Lake St. John. Quebec Railway, Light and Power Co Quebec, Montreal and Southern. Red Mountain.	637 95	28 17	637 123 17	26 68	14	
71 72 73	Rutland and Noyan Salisbury and Harvey Schomberg and Aurora Stanstead, Shefford and Chambly	134	49,641	49,775	260	17,542	17,802
74 75 76 77	Salisbury and Harvey. Schomberg and Aurora. Stanstead, Shefford and Chambly. St. Clair Tunnel. St. Lawrence and Adirondack. Sydney and Louisburg (Dom. Coal Co.). Spokane and British Columbia Railway. Temiscouata Temiskaming and Northern Ontario. Thousand Islands	11	17 520	28 520	27 20	3,697	3,724 30
8.3	Toronto, Hamilton and Buffalo. Vancouver, Victoria and Eastern Victoria and Sydney, B.C. Victoria Terminal and Ferry Co.					- 150 202	
86 87	Wabash Railway Co. (in Canada). Wellington Colliery Co. York and Carleton	26,662				5 73	2,468 5 173
	Final total	112,255	324,274	436,529	83,637	91,444	175,081

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40 ,	41	42	43	44	45	46	47	48
ANIMALS	S Concluded	l.						
	Wool.		Hm	es and Leat	HER.	Отні	ER PRODUCT ANIMALS.	rs of
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.	Tonnage Originat- ing on Road.	Total Freight Tonnage.	
3	21	3	11		122 11		752	752
2 1 1 414	25	$\begin{array}{c} 2 \\ 1 \\ 26 \end{array}$	3 29 1,689 1,342	164 7,608	3 29 1,853 8,950	552	2,555	
5		5	280 170 53	41 479	280 211 532	187 140	1,354	1,541 140
• • • • • • • • •	••••••			159	159			1
	2,491 72		154	16,957	17,111 2,588		14,138	
10	72	82	S3 2 26	2,505	5		570	
2	2	4	26	46	72			
128	59 53	61 181			229 16		1,911 1,089	2,356 1,121
1,302	20	1,302	7,165	11	7,165	6,400		6,400
6,965	30,271	37,236	70,604	132,364	202,968	69,558	124,910	194.468

9-10 EDWARD VII., A. 1910 TABLE 11.—SUMMARY of Freight Traffic

_							
-	49	50	51	52	53	54	55
						PR	ODUCTS
		Ant	HRACITE C	OAL,	Віт	uminous Co	)AL.
Number.	Name of Railway.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.
1 2	Alberta Ry. and Irrigation Co Algoma Central and Hudson Bay Atlantic and Lake Superior	83 95		83 95	34,311 7,558	2,817 212	37,128 7,770
5 6	Bay of Quinté Bedlington and Nelson		10,164	10,164	43	1,751 25,681 80 1,474	1,760 25,681 123 1,474
9	Bessemer and Barry's Bay Brandon, Saskatchewan and Hudson Bay British Yukon Brockville, Westport and North- Western Canada Southern	15	7,021	7,036		995 193	995 193
11	Western Canada Southern Canadian Government Railways—		575 1,043,805	575 1,043,805		220 370,315	$     \begin{array}{r}       220 \\       370,315     \end{array} $
12 13 14 15 16 17	Canadian Government Railways— Intercolonial. Prince Edward Island. Canadian Northern Canadian Northern, Ontario. Canadian Northern, Quebee Canadian Pacific. Cape Breton Caraquet. Carillon and Granville	1,627 138 111,467	45,974 5,541 4,276 603,207	1,627 45,974 5,679 4,276 714,674	1,010,781 6,450 50,690 1,646 	8,739 331 229,198 11,906 29,939 654,415 230	1,019,520 6,781 279,888 13,552 29,939 1,401,399 360
19 20 21	Caraquet. Carillon and Grenville. Central Ontario.	652	125 3,542	125 4,194	9,625	38,121	50
22 23 24	Carillon and Grenville Central Ontario . Crowsnest Southern Cumberland Ry. and Coal Co. Dominion Atlantic. Elgin and Havelock	2,510	28,398	30,908	339,574	38,121 21,345	
27 28 29 20	Grand Trunk (Canada Atlantic) Halifax and South Western	68,539 295	1,685,557 70,692	1,754,086 70,987	60,356 129 1,158	1,614,416 79,402 4,501 220	$ \begin{array}{r} 342\\ 17,255\\ 1,674,772\\ 79,531\\ 5,659\\ 220 \end{array} $
32 33 31	Inverness Ry. and Coal Co		53 40	53 40	256,482	22 1,105 117	256, 504 1,105 117
36 37	Kent and Northern Kettle River Valley. Kingston and Pembroke. Klondike Mines.	252			339		339
$\frac{40}{41}$	Liverpool and Milton London and Port Stanley Lotbinière and Megantic Manitoulin and North Shore			20,474		113,951 624 1,169	113,951 624 1,169
43 44	Maritime Coal Ry. and Power Co  Massawippi Valley		3,542 2,985	3,542 2,985	121,783	3,460 43,821	121,790 3,460 43,827
48	Midland Ry. of Manitoba.  Moncton and Buctouche.  Montreal and Atlantic  Montreal and Province Line (E)  Montreal and Vermont Junction		7,184 670 7,214	670	3,533	4,469 13,180 1,145	3,533 4,476 13,180 1,145

56	57	58	59	60	61	62	763	64
OF MINE	S.							
	Соке.			Ores.			Sand and ike Articl	
Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Originating on Solution Ton- ling on Solution				Total Freight Ton- nage.
1	31,498	31,499	225,220		225,220	174 10,555	762	936 10,555
· · · · · · · · · · · · · · · · · · ·			1,024	501	1,525	3,068	5 706	3,774
· · · · · · · · · · · · · · · · · · ·	113	113	18,750		18,750		247	247
				28,781				
165,133	729	1 729	2,892	33 47	2,925	157,272 4,902 87,325	803 <sup>i</sup> 59 <sup>c</sup> 5,211	158,075 4,961 92,536
961	641 71,791 1,560 97,033 130,054	2,521	17,320	2,011	19,331	1,025	617	1,025
88,274	91,033	185,307	128	70	198	3,072	75	3,072 27,235
59,263 20	130,054 651	189,317 671	22,922 1,438 45	234,077 426	256,999 1,864 45	683,730 8,624 2	82,156 80,029	765,886 88,653 2 4,980
						4,980 120 46	70	4,980 190 46
			10,307  1,977 24,659	23,	10,307 1,977 24,682	67	· · · · · · · · · · · · · · · · · · ·	67
	1,436	1,436			1,529 56 207,479	16,420 13,536	12,901	29,321 13,536 1,351 1,522
	60	60	36,856	1,587	38,443	27,912 30 3,781	27,682 16	55,594 46 3,781
4	485	489	4.32	3,356	3,788	1,175 2,640 109	35,064 519 67,430	36,239 3,159 67,539

9-10 EDWARD VII., A. 1910 Table 11.—Summary Freight Traffic

=								
	49	50	51	52	53	54	55	
						PI	RODUCTS	
		Ann	THRACITE CO	OAL.	BITUMINOUS COAL.			
Number.	Name of Railway,	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.	
50 51 52 53 54 55 56 57	Morrisscy, Fernie and Michel. Napierville Junction Ry Nelson and Fort Sheppard. New Brunswick: Coal and Ry. Co. New Brunswick and P. E. Island. New Brunswick Southern. New Westminster Southern. North Shore. Nosbonsing and Nipissing. Nova Scotia Steel and Coal Co. Orford Mountain.	158	89,995	89,995	377,788 19 32,619 2 6 ,557	8,413 380 2,815 11,124	377,788 8,413 399 32,619 2,815 2 11,124 6,557	
61 62 63	Père Marquette in Canada	21,383	20 27,328 85,535	20 27,328 106,918	5 77,359	406 15 14,567 517,708 2,739	406 20 14,567 595,067 2,739	
65 66 67 68	Railway	249	4,939 1,800 4,220 32 15,606	4,939 1,800 4,220 281 15,606	9,996	29,484 7,500 19,868	19,868 9,996 11,509	
70 71	Red Mountain Rutland and Noyan Salisbury and Harvey Sahoubary and Apper		130	130		111 2,642	2,642	
73 74 75	Stanstead, Shefford and Chambly St. Clair Tunnel St. Lawrence and Adirondack		189,392	189,392		147,713	147,713	
77 78 79	Sydney and Louisburg (Dom. Coal Co) Spokane and Brit. Columbia Ry. Co. Temiscouata. Temiskaming and Northern Ontario. Thousand Islands. Toronto, Hamilton and Buffalo Vancouver, Victoria and Eastern Victoria and Sydney. B.C.		137 10,049	139 10,049	3,303,341	23 1,175 89,278	$ \begin{array}{r} 3,303,341 \\ 23 \\ 1,249 \\ 89,278 \\ 420 \end{array} $	
80 81 82 83	Thousand Islands.  Toronto, Hamilton and Buffalo  Vancouver, Victoria and Eastern  Victoria and Sydney, B.C		364,412	364,412	108	346,648 3,740 29		
84 85 86 87	Victoria and Sydney, B.C. Victoria Terminal and Ferry Co. Wabash Ry. Co. in Canada. Wellington Colliery Co. York and Carleton.	35,065		35,065	342,782 324,738		29 342,782 324,738	
	Final total		4,357,917				11,647,728	

SESSIONAL PAPER No. 20b

56	57	58	59	60	61	62	63	64
OF MINE	CS—Continue	<i>l</i> .						
	Соке			ORE.	1		Sand, and	
Fonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- age.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tomage received from connecting Roads and other Carriers.	Total Freight Ton- age.
	401 27		4,270	111 7,253	111 11,523		37	1,260 37
	33	33				134	231	
3,075	231 4,424		5 1,118		5 23 7,983	32 85 2,769	50 19,020 67,373 1,440	32 135 21,789 153,121
			5,000		5,000	920 24		1,996
10	,150 60			15,220 69	36 62,215 69	49,445 11,489	146 3,597 24 7,531	15,086
				136	136	72	66,438	66,510
	15,077	15,077		136	183		3,363	3,363
3		31	2,830 46,732		2,830 46,732	446 6,399		1,812 6,399
	31 115,567 120,497	31 115,567 120,497	651,402	5,998 35,790	5,998 687,192	4,255 20,015 74		4,830
1,553	26	1,553	12,832		12,832	44,545		44,545
318,298		1,061,829	2,706,273			2,278,055		

. 9-10 EDWARD VII., A. 1910
TABLE 11.—Summary of Freight Traffic

	65	66	67	68	69	70	71
		PRODUC	TS OF MI	NES-Con.		PROD	UCTS OF
		OTHER 1	PRODUCTS OF	F MINES.	Lumber.		
Number.	Name of Railway.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.
23 4 5 6 7	Alberta Railway and Irrigation Co. Algoma Central and Hudson Bay Atlantic and Lake Superior Atlantic, Quebec and Western Bay of Quinte. Bedlington and Nelson Bessemer and Barry's Bay				3,340 804 5,328 1,491 8,768 60 45	8,893 27 137 878 4,242 55	12,233 831 5,465 2,369 13,010 115 45
	Brandon, Saskatchewan and Hudson Bay British Yukon Breekville Westport and North				519	660 637	1,179 637
15 16 17 18 19	British Yukon. Brockville, Westport and Northwestern. Canada Southern Canadian Govt.—Intercolonial " — P. E. Island. Canadian Northern Canadian Northern, Ontario. Canadian Northern, Quebec. Canadian Pacific. Cape Breton Carallon and Grenville.	3,852	3,126	6,978	$\begin{array}{c} 95 \\ 10,027 \\ 352,660 \\ 13,570 \\ 720,089 \\ 60,230 \\ 41,750 \\ 2,079,631 \\ 55 \\ 14,250 \end{array}$	448 149,209 9,155 114 72,718 693 10,408 489,708	543 159,236 361,715 13,684 792,807 60,923 52,158 2,569,339 102 14,250
23 24 25	Carillon and Grenville Central Ontario. Crowsnest Southern. Crowsnest Southern. Cumberland Railway and Coal Co Dominion Atlantic. Elgin and Havelock				27,482 18,659 19,446 82,595 9,977	5,375 595 2,185	32,857 19,254 19,446 84,780 9,977
28 29 30	Eastern British Columbia Grand Trunk (Grand Trunk (Canada Atlantic) Halifax and Southwestern Hampton and St. Martin's	38,245	21,658 4,160	59,903	595,544 254,038 74,004 5,325 17,534	1,083,986 64,988 711	1,679,530 319,026 74,715 5,325 17,874
35	Hereford Inverness Railway and Coal Co Irondale, Bancroft and Ottawa Kaslo and Slocan Kent Northern Kettle River Valley.				421 5,452 308 879		2,536 5,452 308 879 42
38 39	Kingston and Pembroke. Klondike Mines Liverpool and Milton London and Port Stanley. Lotbinière and Atlantic			6,346	16,798 119	6,221 26,401 148	23,019 119 5,840 35,202 15,754
42 43 44 45	Manitoulin and North Shore. Maritime Coal, Rly. and Power Co. Massawippi Valley. Midland Railway of Manitoba. Moncton and Buctouche.		15(	15	114 634 8,077 39 4,578		114 2,038 55,495 896 4,578
47	Montreal and Atlantic.  Montreal and Province Line.  Montreal and Vermont Junction			ì	70,616 462 167	76,869 13,190 36,293	147,485 13,652 36,460

SESSIONAL PAPER No. 20b

Movement for the Year ending June 30, 1909—Continued.

72	73	74	<b>7</b> 5	76	77	78	79	80	
FORESTS	5.			N	IANUFAC	CTURES.		-	
OTHER F	RODUCTS OF	Forests.	Petrole	CUM AND OTHE	er Oils.	Stgar.			
Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Touringe received from connecting Roads and other carriers.	Total Freight Ton- nage.	
3	858	1,425 112,407 3	223 48 6	140 560 132	363 48 560 138	2,526 54 3	1,122 15	3,648 1 54 2 3 3 4 5 5	
1,944 69	608	69						7	
1,358	241	1,599		28	28		47 303	47. 8 303. 9	
	59,760 1,789 182 116,999 35		617	720 54,786 8,465 198 6,054 60 1,792	61,384 25,261 815 16,140 610	11,521 604	7,320 64	668 15	
. 689 1,000	35	724 1,000	36,429	80,821 1 65	117,250 1 65	107,602	41,435 60	149,037 17 18 60 19	
28,830 1,526	2,563 150	31,393 1,676	1,515	588 119	2,103 119	1	383	384 21 20 384 22 22	
7,762	255	8,017	1,564	233 95				2,101 24 153 25	
548,676 124,428 64,803		$   \begin{array}{r}     1,577 \\     1,073,928 \\     199,311 \\     64,956 \\     140   \end{array} $	71,883 2,072 761	71,466 11,302	143,349 13,374 836	36,105 135	47,047 108,784 46	83,152 27 108,919 28	
$91,207 \\ 2,577$	30	91,237 2,577 22,795	23 67	56 209 49	79 276 49	92	42 83 69	134 31 92 32 69 33	
		2,691 $270$						2,309 37	
4,252 37,772		4,252 37,772	71		911			38	
27,428 15,506	10,601	38,029 15,506 15,754	1,465	3,260 190	4,725 190 12	1,001	3,353 11	4,354 $40$ $11$ $41$ $7$ $42$	
20,644	140.755	161,399 1,097		3,260 190 137 585, 3,984 22 3,228	137 585	2	399	399 44	
		10,343	86	3,984 22	4,070	687	11,923	12,610 47 72 48 65,713 49	
2,382	9,409	11,791		3,228	3,228		65,713	65,713 49	

9-10 EDWARD VII., A. 1910 TABLE 11.—SUMMARY of Freight Traffic

PRODUCTS OF MINES								
Name of Railway.		65	66	67	68	69	70	71
Tonnage Originating on Road   Tonnage Originating or			PRODUC	rs of MI	NES – Con.		PROD	UCTS OF
50   Morrissey   Fernie and Miche    51   Napierville Junction Railway   9,85   49,826   49,411   52   Nelson and Fort Sheppard   9,946   460   10,406   30   New Brunswick Coal and Rv. Co   7,472   7,472   7,472   7,472   54   New Brunswick Coal and Rv. Co   7,472   7,472   7,472   7,472   7,472   7,472   7,472   7,472   7,468   16   7,484   55   New Brunswick Southern   7,468   16   7,484   55   New Brunswick Southern   26,428   4,972   31,400   57   North Shore   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   190   19			OTHER P	RODUCTS OF	Mines.		LUMBER.	
51 Napierville Junction Railway.       85       49,326       49,411         52 Nelson and Fort Sheppard       9,446       460       10,466         53 New Brunswick Coal and Ry. Co.       7,472       7,472       7,472         54 New Brunswick Southern       17,678       310       17,988         55 New Brunswick Southern       26,428       4,972       31,400         57 North Shore       190       190       24       5,724         60 Orford Mountain       833       833       14,027       37       14,064         61 Ottawa and New York       22       439       461       1,715       4,175       5,890         62 Pere Marquette, in Canada       10,185       22,955       33,140       45,960       137,882       183,842         63 Philinsburg Ry, and Quarry Co.       265       265       265       265       265         64 Princeton Br. of Washington Co. Ry       3,521       3,521       6,143       6,143         65 Quebec Central       58,322       79,532       79,532       79,532         66 Quebec and Lake St. John       54,250       8,969       63,219         67 Quebec Ry. Light and Power Co       5,031       138       5,169         68 Quebec, Montre	Number.	Name of Railway.	Originat- ing on	Tonnage received from connecting Roads and other carriers.	Freight Ton-	Originat- ing on	Tonnage received from connecting Roads and other carriers.	Freight Ton-
59 Nova Scotia Steel and Coal Co.         5,700         24         5,720           60 Orford Mountain.         833         14,027         37         14,664           61 Ottawa and New York.         22         439         461         1,715         4,175         5,890           62 Pere Marquette, in Canada         10,185         22,955         33,140         45,960         137,882         183,842           63 Philiosburg Ry. and Quarry Co.         265         265         265         265         265           64 Princeton Br. of Washington Co. Ry.         3,521         3,521         6,143         6,143           65 Quebec Central         58,322         58,322         79,532         79,532         79,532           67 Quebec Ry. Light and Power Co.         5,031         138         5,169         68,219           68 Quebec, Montreal and Southern         4,811         4,807         125,087         129,894           79 Red Mountain.         4,811         4,811         437         861         1,298           70 Rutland and Noyan.         17,747         17,747         14,682         19,159         19,159           71 Salisbury and Harvey         17,747         17,747         14,682         2,874         38,000	51 52 53 54 55 56 57	Napierville Junction Railway.  Nelson and Fort Sheppard.  New Brunswick Coal and Ry. Co.  New Brunswick and P.E. Island.  New Brunswick Southern  New Westminster Southern  North Shore.				9,946 7,472 17,678 7,468 26,428	310 16	10,406 7,472 17,988 7,484 31,400
70 Rutland and Noyan       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       11,582       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,492       14,682       14,492       13,580       14,583       14,592       13,580       28,572       28       14,692       13,580       28,572       28       14,662       3,372       28       14,662       3,372	58 59 60 61 62	Nosbonsing and Nipissing  Nova Scotia Steel and Coal Co  Orford Mountain.  Ottawa and New York  Père Marquette, in Canada  Pilli when Ry and Openy Co	833 22 10,185	439 22,955	833 461 33,140	14,027 1,715 45,960	37 4,175 137,882	14,064 5,890 183,842
70 Rutland and Noyan       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       19,159       11,582       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,682       14,492       14,682       14,492       13,580       14,583       14,592       13,580       28,572       28       14,692       13,580       28,572       28       14,662       3,372       28       14,662       3,372	64 65 66 67 68	Princeton Br. of Washington Co. Ry Quebec Ceutral Quebec and Lake St. John Quebec Ry. Light and Power Co Quebec, Montreal and Southern	58,322	3,521	3,521 58,322	79,532 54,250 5,031	6,143  8,969 138	6,143 79,532 63,219 5,169
73 Stanstead, Shefford and Chambly. 26,027 2,874 38,000 40,874 4 St. Clair Tunnel	79 70 71	Red Mountain. Rutland and Noyan. Salisbury and Harvey.	17,747	4,811	4,811			19,159
76 Sydney & Louisburg (Dom. Coal Co.)	72 73	Schomberg and Aurora		26,027	26,027	2,874	38,000	10,874
79 Temiskaming and Northern Ontario.     47,247     4,453     51,700       80 Thousand Islands.     599     2,759     3,358       81 Toronto, Hamilton and Buffalo.     205     6,164     6,369     1,796     6,748     8,544       82 Vancouver, Victoria and Eastern.     6,622     15     6,637     14,992     13,580     28,572       83 Victoria and Sydney, B.C.     2,310     1,062     3,372       84 Victoria Terminal and Ferry Co     211     3,161     3,372       85 Wabash Co., in Canada     6,654     6,654     66,066     66,066       86 Wellington Colliery Co.     1,833     1,833       87 York and Co.     6,189     5     6,194	76	St. Lawrence and Adirondack Sydney & Louisburg (Dom. Coal Co.)		2,360	2,365	20,160		48,320
84 Victoria and Ferry Co       5,762         85 Wabash Co., in Canada       6,654       6,654       66,066       66,066         86 Wellington Colliery Co.       1,833       1,833         87 York and Co.       6,189       5       6,194	7.0	Tomickaming and Northern Ontario				99,486 47,247	4,453	99,553 51,700
5/ Fork and Co. 0,1841 5 0,194	81 82 83 84	Toronto, Hamilton and Buffalo Vancouver, Victoria and Eastern Victoria and Sydney, B.C Victoria Terminal and Ferry Co	205 6,622	6,164 15	6,369 6,637	1,796 14,992 2,310 211	6,748 13,580 1,062 3,161	8,544 28,572 3,372 3,372
Final total	85 86 87	Wabash Co., in Canada Wellington Colliery Co. York and Co.	6,654		6,654		1,833	1,833
		Final total	205,745	171,342	377,087	5,114,910	2,644,483	7,759,393

SESSIONAL PAPER No. 20b

72	73	74	75	76	77	78	79	80				
FORESTS	8.			MANUFACTURES.								
OTHER E	PRODUCTS OF I	Forests.	PETROL	EUM AND OTHI	ER OILS.		SUGAR.					
Tonnage Originat- ing on Road.	Tonnage received   From connecting   Roads and other carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other cauriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.				
12,935	76	13,011		85 29			21					
2,016 866		2,016 866	99	88			600	600 83				
1,112 15	641	$1,753 \\ 15 \\ 16,310$		748	748		166	166				
12,704 1,259 143,237	15		1 253 7,649	18 59 175 17,025	18 60 428 24,674	44 91 5,230	19 129 79 17,508	179				
252,767 108,592 13,500	30,645 23,741	30,645 252,767 132,333 13,682	107	184 4,231 434 2	434 109	218	38 3,077 423	38 3,077 423				
1,377 5,384	7,836 103,940	9,213 103,940 5,384		856 151	856 151							
44	9,178	9.222		3,313	3,313	• • • • • • • •	65,802	65.809				
362	20,804			1,903 1,040	1,903 1,040	5	44,472	44,477				
186,424		186 424	247	260 2,527	507 2,527	230	119	349				
886 2,463	223 3,818 2,334	223 4,704 4,797 11,132	742 186	103 4,244 897	103 4,986 1,083	14 285	310	354 285				
11,115 22,643	17 11,132 159	11,132 11,132 22,643 159		73	15,354 73	7,931	14	7,931 14				
2,613,481	1,222,133	3,835,614			464,953		472,887	701,319				

9-10 EDWARD VII., A. 1910
TABLE No. 11—Summary of Freight Traffic

		TABLE I			or Freign	t Traine
81	82	83	84	83	86	87
					M	ANUFAC
	N.	AVAL STORE	es.	Iron,	Pig and B	LOOM.
NAME OF RAILWAY.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.	Tounage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.
1 Alberta Railway and Irrigation Co 2 Algoma Central and Hudson Bay				5	20	25
3 Atlantic and Lake Superior 4 Atlantic, Quebec and Western 5 Bay of Quinté				2,236	136 28	137 2,264
6 Bedlington and Nelson  Bessemer and Barry's Bay  8 Brandon, Saskatchewan and Hudson Bay  9 British Yukon  10 Brockville, Westport and Northwestern  11 Canada Southern  Canadian Gayt Railwys—					16	16
9 British Yukon. 10 Brockville, Westport and North- western.		350	350	2.038	26,244	28,282
Canadian Govt. Railwys—  12 Intercolonial	8		8	108,264 381	687 154	108,951 535
14 Canadian Northern, Ontario	9	14,218	14,218	65.811	3,079	3,073
18 Cape Breton 19 Caraquet' 20 Carillon and Grenville					45	45
20 Carillon and Grenville 21 Central Ontario 22 Crowsnest Southern			0.45	2,411	300	2,711
24 Dominion Atlantic	346	387	340	5 89 187	84	684 84 84 182,001
23 Grand Trunk (Canada Atlantic) 29 Halifax and Southwestern	0,10	10	10	610	7,094	7,70
30 Hampton and St. Martin's 31 Hereford 32 Inverness Railway and Coal Co 33 Irondale, Bancroft and Ottawa 34 Kaslo and Slocan		15	15	5	14	14 18
34 Kaslo and Slocan 35 Kent Northern 36 Kettle River Valley 37 Kingston and Pembroke				10		96
38 Klondike Mines	249	45	3	489	2,568	3,057
41 Lotbinière and Megantic			1	1 136 3 31	18	15-
44 Massawippi Valley 45 Midland Railway of Manitoba 46 Moneton and Buctouche. 47 Montreal and Atlantic						
48 Montreal and Province Line 49 Montreal and Vermont Junction						

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88	89	90	91	92	93	94	95	96	
TURES-	Continued.								
Iron	and Steel I	Rails.	OTHER CAS	STINGS AND M	IACHINERY.	BAR A	ND SHEET	Метаг	
Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonuage received from connecting Roads and other carriers.	Total Freight Ton- nage.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other curriers.	Total Freight Ton- nage.	Number,
23	1,497 1,39	42 587 1,497 23 139	227 225 2,011 68 741		624 225 7,862 2,581 821 15		8		1 2 3 4 5 6 7
	• • • • • • • • • • • • • • • • • • • •		20	167 2,473	187 2,473		45 88		
1,525	9,246	10,771	150 26,909	710 131,926	860 158,835		730 114,592		
90,309 459 295	1,089 180 101,935 1,475 2,318 47,201	91,398 639 101,935 1,770 2,318 100,287	240,973 497 9,109 444 672 65,243	10,784 384 9,313, 261 5,921 98,729	251,757 881 18,422 705 6,593 163,972	12,758 101 1,505 202 37,416	487 30 1,557 45 27,151	13,245 131 3,062 247 64,567	12 13 14 15 16 17
			• • • • • • • • • • • • • • • • • • • •	50	50				18 19 20
157	659 803	659 960	382 31	866 1,0 <b>33</b>	1,248 1,064	18	35 382	53 382	21 22
85		85	700	956	1,656	183 10	449	632	23 24 25
27,016 110	28,454 11,369 542	55,470 11,479 545	59,607 553 418	57,325 8,975 549	116,932 9,528 967	27,872 209	15,996 3,068	43,868 3,277	26 27 28 29
15	78 20	78 35	50 53 20	120 44 134 56	120 94 187 76	5	20 124 44	20 129 44	30 31 32 33
5	7	12	12 45 89	389	10 12 45 478	21	126		34 35 36 37
53	551 2,495	556 2,495 53	1,425 229 48	6,959 433	8,384 662 48	96	506	602	39 40 41
119 67	130 629 70	130 748 137	84 310 10	219 571 354	303 881 364	39	27 135 2,308	$\begin{array}{c} 27 \\ 174 \\ 2,308 \end{array}$	43 44 45
i	1,228 116	1,229 116	548	7,771	8,319	14	159	173	
20	$b-12\frac{1}{2}$		23	12,926	12,949				

9-10 EDWARD VII., A. 1910 Table No. 11—Summary of Freight Traffic

	81	82	83	84	85	86	87	
						М	ÁNUFAC	
		N	AVAL STOR	Es.	IRON, PIG AND BLOOM.			
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.	
51 52 53 54 55	Morrissey, Fernie and Michel. Napierville Junction Railway. Nelson and Fort Sheppard. New Brunswick Coal and Ry. Co. New Brunswick and P. E. Island. New Brunswick Southern New Westminster Southern North Shore.				16		16	
58 59 60	Nosbonsing and Nipissing Nova Scotia Steel and Coal Co Orford Mountain	17	87	104		136	136	
	Ottawa and New York Père Marquette, in Canada Phillipsburg Railway and Quarry Co. Princeton Branch of Washington Co. Railway Quebec Central Quebec and Lake St. John				• • • • • • • •	1.116	1.116	
67 68 69 70	Quebec Railway, Light and Power Co' Quebec, Montreal and Southern Red Mountain	3	2	5	272 583	28 819	1,402	
71 72 73 74	Salisbury and HarveySchomberg and Aurora				152	13,176	13,328	
75 76 77	St. Lawrence and Adirondack Sydney & Louisburg (Dom. Coal Co.) Spokane and British Columbia Ry	2	617	619	99	643	643	
79 80 81	Quebec Central Quebec and Lake St. John Quebec Railway, Light and Power Co Quebec, Montreal and Southern Red Mountain Rutland and Noyan Salisbury and Harvey Schomberg and Aurora Stanstead, Shefford and Chambly St. Clair Tunnel St. Lawrence and Adirondack Sydney & Louisburg (Dom. Coal Co.) Spokane and British Columbia Ry. Temiscouata Temiscaning and Northern Ontario Thousand Islands. Toronto, Hamilton and Buffalo Vancouver, Victoria and Eastern. Victoria and Sidney, B.C. Victoria Terminal and Ferry Co.		70	70	998 5,187	283 8,766	1,281 13,953	
86	Wellington Colliery Co	103		103			1,407	
87	Yerk and Carleton	5,919				304,214	593,950	

88	89	90	91	92	93	94	95	96

			ontin	

lkon	AND STEEL I	Rails.	OTHER CAS	STINGS AND M	ACHINERY.	BAR AND SHEET METAL.			
Tonnage Originat- ing on Road.	Driginating on Section Freight		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.	
			47	386 60	386 107		72	22 51 72 52	
1,520	853	2,373			225 205 2,777	34 20		140 54 36 55 1,395 56	
24 29 20	213 2,874 370	237 2,903 390	13 36 589 7,443	$115 \\ 1,292$	144 151 1,881 43,783	1 166	$\frac{41}{716}$	2 55 42 50 882 61 3,145 62	
15	5,670 5,316 1 3,168	5,316 16 3,168	542 806 10	627 808 3,929 96 3,368 32 325	4,956 638 4,174 42 325	65 182 31	8 1,628 110		
920	64 • 480	1,400	89		3,482	7	2,021 112 1,012		
84 2,000	564 22,027 1,232 6,607	1,184 22,027 1,316 8,607	2,732 748	1,186 	20,917	1,171 278	4,424 23,353 1,175	1,281 78 79 4,424 80 24,524 81 1,453 82	
4,004		4,004	23,891		23,891	33,188			
183,136	263,542	446,678	452,267	445,582	897,849	127,019	210,847	337,866	

9-10 EDWARD VII., A. 1910
Table No. 11—Summary of Freight Traffic

_								
	97	98	99	100	101	102	103	
		·				М.	ANUFAC	
		CEMENT	, Brick an	D 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.	
2	Alberta Railway and Irrigation Co. Algoma Central and Hudson Bay.	653 39	327	980 39	• 475	471	946	
4 5 6 7	Atlantic and Lake Superior Atlantic, Quebec and Western Bay of Quinté Bedlington and Nelson Bessemer and Barry's Bay	10 42,303	197 270 19	207 42,573 19	78 1 69	183 29 6	261 30 75	
9	Brandon, Saskatchewan and Hudson Bay. British Yukon. Brockville, Westport and North-	23	482	505	52	692	744	
11 12 13	western. Canada Southern Canadian GovernmentIntercolonial Canadian GovernmentP. E. Island	2,140 7,248 82,844 1,358	320 67,506 12,264 259	95,108 1,617	40 4,645 1,371 651	41,014 5,378 47	1,550 45,659 6,749 698	
15 16 17	Canadian Northern. Canadian Northern Ontario Canadian Northern Quebec. Canadian Pacific Cape Breton	23,472 1,889 42,027 469,428 40	27,184 1,534 6,408 124,100	50,656 3,423 48,435 593,528 40	22,813 164 65,409	7,215 58 517 36,105	30,028 222 517 101,514	
$\frac{19}{20}$	Caraquet. Carillon and Grenville. Central Ontario.		87 8,277	87 8,486		160	160	
22 23	Crowsnest Southern	1,178 7,508	1,855 625	3,033 8,133	526	186	712	
25 26	Elgin and Havelock. Eastern British Columbia Grand Trunk	100 30 407,185	16 158,286	100 46 565,471	20		20 54,691	
28 29	Grand Trunk—Canada Atlantic Halifax and Southwestern Hampton and St. Martins	16,694 501	17,321 1,299	34,015 1,800	756 133	3,246 157	4,002 290	
31 32 33 34	Hereford Inverness Railway and Coal Co. Irondale, Bancroft and Ottawa Kaslo and Slocan	8,189 37	418 233 83		2 5	42 5 30	44 10 30	
36 37 38	Kent Northern. Kettle River Valley Kingston and Pembroke Klondike Mines.	312	1,831	2,173	51	55	106	
39 40 41	Liverpool and Milton London and Port Stanley. Lotbinière and Mégantic.	5,564 88	7,684 19	13,248 107	176 9	750 36	926 45	
43 44 45	Manitoulin and North Shore Maritime Coal Railway & Power Co. Massawippi Valley Midland Railway of Manitoba	249	192 641 141	194 890 141	99	70 44 231	70 143 291	
47	Moncton and Buctouche	3,979 302 45	5,841 962 2,973	9,820 1,264 3,018	454	1,014 2,774	1,468 2,77	

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104	105	106	107	108	109	110	111	112
ΓURES-	Continued.							
Wagons,	CARRIAGES, T	Cools, &c.	Wines,	Liquors and	BEERS.		HOLD GOOD	
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.	Tonnage Originat- ing on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
2,316	962	3,278	4		4	1,045		1,531 26
17 6 571	34	260 40 785		4,547 63	4,547 78 113	1,093 13 375	4,023 65 30	5,116 78
· · · · · · · · · · · · · · · · · · ·	25	25		32	32		333	
100		360	240	639 360	639		72 372 14,198	72 562 17,523
10,825 231 6,304 462 18,916	87 2,618 157 927	318 8,922 619 927 25,170	1,438 281 10,984 977 372 51,898	11,577 	13,015 429 15,494 1,312 14,197 74,478	2,323 347 28,763 689 380	3,361 114 17,634 174 808 19,344	5,684 461 46,397 863 1,188
1	40	40		200	200		4 110	4
1	253 68	254 68	32 5	1,045 69		1,327	1,047 419	2,374 419
10	)	10	86	9	95 2		217 326	1,670 336
11,817 1,387 76	950	24,868 2,337 164	30,904 467 1,333	21,480 5,981 271	52,384 6,448 1,604	989	1,953 305	877
18 14		18 13	16 29	111 79 54		53	181 53 34	806 109 87
19	2 34	46	128	470	598	413	63	476
1,20						897	794	1.621
	8	12		6	6	78	28	106
183	69 . 127	17 252 127	176	50 151 42	50 327 42		1,052 110	1,412
3.	$5_1 = 628$	663 42	455		6,556	1,221 162	2.657 3.099	3,878 $162$

9-10 EDWARD VII., A. 1910
Table No. 11—Summary of Freight Traffic

_	97	98	99	100	101	102	103	
			-					
						М	ANUFAC	
		CEMENT	, Brick an	D 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 Oarriers.	Total Freight Tonnage.	
50 51 52	Morrissey, Fernie and Michel Napierville Junction Railway Nelson and Fort Sheppard New Brunswick Coal and Ry. Co New Brunswick and P. E. Island	10	2,694 184			12 31	12 31	
54 55 56	New Brunswick Coal and Ry. Co. New Brunswick and P. E. Island New Brunswick Southern New Westminster Southern North Shore	222 122	150 1,270	150 223 1,392	21	175 2	175 23	
59 59	Nosbousing and Nipissing Nova Scotia Steel and Coal Co Orford Mountain	15	2 455	17 458	3	64	67	
62 63	Ottawa and New York. Père Maiquette (in Canada) Philipsburg Railway and Quarry Co. Princeton Branch of Washington Co.	6,753 29,057	2,068 40,126 310	8,821 69,183 310	18 919	3,919	46 4,838	
65 66 67	Railway Quebec Central Quebec and Lake St. John Quebec Railway Lightand Power Co	20,728 4,524 4 011	3,277 419	225 20,728 7,801 4,430	79	5,385 1,436 10	5,385 1,436 89	
70	Quebec, Montreal and Southern Red Mountain Rutland and Noyan Salisbury and Harvey		2,900			28	28	
72 73	Schomberg and Aurora. Stanstead, Shefford and Chambly St. Clair Tunnel	41	2,935	2,976		2,774	2,774	
76	St. Lawrence and Adirondack Sydneyand Louisburg, (Dom. Coal Co)	$\frac{32}{1,220}$	4,604 580			504	504	
78, 79, 80	Spokane and British Columbia Ry Temisconata Temiskaming and Northern Ontario Thousand Islands	999 5,773	3,925 6,534 682	4,924 12,307 682	36 1,437	109 2,313	145 3,750	
81 82 83	Toronto, Hamilton and Buffalo Vancouver, Victoria and Eastern Victoria and Sidney, B.C	2,255 417	6,934 3,323	9,189 3,740	22,933 7	3,980 241	26,913 248	
85	Victoria Terminal and Ferry Co Wabash Railway Co. (in Canada) Wellington Colliery Co York and Carleton.	50,854	32	50,854 32	5,376		5,376	
	Total			1,789,994	159,316	147,408	306,724	

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		ools, &c.	Wines,	Liquors and	BEERS.	Householi	n Coon										
		OOLS, &c.	Wines,	Liquors and	BEERS.	Householi	D. Cooper	73									
Tonnage Originat- ing on Road.	e received connecting and other rs.			Wagons, Carriages, Tools, &c. Wines, Liquors and Beers. Household Goods and Furniture.													
	Tonnage from Roads Carrie	Total Freight Tonnage.	Tonnage Originat- ing on Road.	Tomage 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.									
		11		154	154	20	14	20 5 44 5									
20	390 17 237	390 37 237	312 39	1 258	313 297	69 12	130 5 1,449	130 5 74 5 1,461 5									
1 2 103 6,290	66 39 6,289	1 68 142 12,579	$\begin{bmatrix} 25 \\ 281 \\ 4,572 \end{bmatrix}$	2 94 56 2,685	2 119 337 7,257	10 57 312 4,317	72 178	$\begin{array}{c} 11   5 \\ 129   6 \\ 490   6 \\ 8,465   6 \end{array}$									
40 73	1,539 1,011 9	1,539 1,011 49 106	2,884 2,970 1,533 176	1,154 597 1 184 171	4,038 3,567 1,534 360 171	2,404 256 258 193	32 4,616 153 50 56										
	1	1			141		11	11 7									
2	206	208		4,596 384 32	4,596 390 72	295 82	3,116 761 90	$ \begin{array}{c} 3,176 \\ 7,056 \\ 172 \\ 7 \end{array} $									
68	13 126	13 194	212	940	1,152	2 212 707	306 1,243	$ \begin{array}{r} 277 \\ 5187 \\ 1,9507 \end{array} $									
334	255 387	589 387	81 183	695 544	776 727	215 56	295 1,937	510 8 1,993 8									
2,501		2,501	12,262	8	12,262	7,587	8	7,587 8 8 8									
58,883	60,580	119,463	126,407	112,401	238,808	180,302	121,099										

9-10 EDWARD VII., A. 1910
TABLE No. 11—Summary of Freight Traffic

_	113	114	115	116	117	118	119	
		MANUI	FACTURF	ES-Con.	MEI	RCHANDI	SE.	
		Отнев	MANUFAC	TURES.	_			
Number.	Name of Railway.	Tonnage Origin- ating on Road.	Tonnage received from connecting Roadsand other Carriers.	Total Freight Tonnage.	Tonnage Origin- ating on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	
2	Alberta Railway and Irrigation Co Algoma Central and Hudson Bay				2,485 1,266	1,615	4,100 1.266	
3 4 5	Atlantic and Lake Superior Atlantic, Quebec and Western Bay of Quinte				110	541	651	
6 7	Bedlington and Nelson Bessemer and Barry's Bay				6	25 1,031	31 1,031	
	Bedlington and Nelson. Bessemer and Barry's Bay Brandon, Sask, and Hudson Bay British Yukon. Brockville, Westport and North-					407 6,451	1,575 7,216	
11 12	western. Canada Southern. Canadian Gov't,—Intercolonial	85,751	793,887	879,638	1,170	2,194	3,364	
					28,614	14.659	43,273	
15 16	Canadian Northern. Canadian Northern, Ontario Canadian Northern, Quebec Canadian Pacific	1,943 6,500	265 7,459	2,208 13,959			3,247	
17 18 19	Canadian Pacific. Cape Breton Caraquet. Carillon and Grenville.	19	100	19 100	93,599 98 420	358	335,989 456 2,474	
- 21	Central Ontario		1 342	1,342	9,994	9,098	19,092	
23 23	Crowsnest Southern Cumberland Railway and Coal Co. Dominion Atlantic Elgin and Havelock Eastern British Columbia	1,274	7,363				1,316 17,574	
25 26	Elgin and Havelock Eastern British Columbia	1,082	644	1,726			128	
27 28	Grand Trunk Grand Trunk—Canada Atlantic. Halifax and Southwestern Hampton and St. Martins	131,028 10,951	109,843 30,715	41,666	14,067	516,337 253,260	931,125 267,327	
30 31	Hampton and St. Martins	1,402	371 280 60	1,833 280 550	250	1,600 1,300	1,850 2,169	
32 33	Hereford				310 11		572 871	
34 35	Kaslo and Slocan						811	
$-36 \\ -37$	Kettle River Valley Kingston and Pembroke Klondike Mines	· · · · · · · · · · · · · · · · · · ·			49 5,849 1,677	5,579	11,428 $1,677$	
39	Liverpool and MiltonLondon and Port Stanley	161 5,859	2,757	161 8,616	28,890	12,381	41,271	
	Lotbinière and Megantic Manitoulin and North Shore	4	144	144 4	218 333	654	872 333	
44 45	Maritime Coal and Railway Co Massawippi Valley Midland Ry, of Manitoba	14,760	216	15,996 216	1,363 341	2,812 283	4,175 624	
47	Moncton and Buctouche			3,370	109 2,940	7,215 14,197	7,324 17,137	
49	Montreal and Vermont Junction Morrissey, Fernie and Michel				671	91,900 15,102	92,571 15,102	

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120	121	122	123	124	125	A	В	C	
MIS	CELLANEO	OUS.	RECAPITULATION.						
Отн	ER COMMODIT	TES.	G	RAND TOTAL	16				
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.	Tonnage Originat- ing on Road.	Tonnage received from connecting Roads and other Carriers.	Total Freight Tonnage.	Number.
1,203 7,457 24,709	1,701 3,646 3,913 105 371 384	2,904 11,103 28,622 105 578 384	96,901 361,950 16,238 3,975 92,403 2,053 18,864 58,995 1,754	54,084 983 21,781 9,295 49,372 447 2,505 13,663 22,199	150,985 362,933 38,019 13,270 141,775 2,500 21,369 72,658 23,953				2 3 4 5 6
26,398 283,183 29,777 298,760 7,954 24,430 1,546,785 1,003	237,581 74,897 4,157 59,484 259 8,143 614,006	263,979 358,080 33,934 358,244 8,213 32,573 2,160,791 1,143	7,579 621,135 3,157,187 103,143 2,284,300 175,051 196,405 11 617,107 2,327 19,775	14,334 5,334,116 395,552 8,297 674,502 26,245 289,414 4,084,169 1,108 5,018	21,913 5,955,251 3,552,739 111.440 2,958,802 201,296 485,819 15,701,276 3,435 24,793				11 12 13 14 15 16 17 18
10 9,127 997 17,020  701,749 69,456 4,616 340	25 4,809: 775 12,247 	35, 13,936 1,772 29,267 1,556,582 183,672 6,474 2,811	15 139,596 115,437 360,294 252,287 12,250 19,079 5,441,495 563,629 165,555	40 91,835 127,055 18,137 82,301 2,913 1 18 9,077,196 1,694,958 19,508	55 231,431 242,492 378,431 334,588 15,163 19,097 14,518,691 2,258,587 185,063				20 21 22 23 24 25 26 27 28 29
5,994	2,471 123 3,672 32 3,289 2,504	2,811 173 4,257 3,289 8,498	11,035 120,933 265,106 28,575 11,414 3,909 2,855 69,061 6,093 43,773	5.071 8,049 9,994 3,457 231 4,140 30,421	128,982 275,100				31 32 33 34 35 36 37 38
10,622 61  59 102 11,209 391 12,961 487	18,883 70 538 11,572 868 267,389	29,505 131 59 640 22,781 1,259 	166,333 46,176 225,445 125,097 125,238 31,776 28,540 119,024	296,843 5,851 1,207 4,335 279,732 63,426 880,810	463,176 52,027 226,652 129,432 404,970 95,202 28,540 999,834 63,098				40 41 42 42 43 45 46 47
1.169	3,567 103,532	4,054 104,701	11,950 7,055 377,788	51,148 $1,001,660$ $15,102$	1,008,715 392,890				49 50

9-10 EDWARD VII., A. 1910
TABLE No. 11.—Summary of Freight Traffic

113	114	115	116	117	118	119
	MANU	FACTURI	ES Con.	ME	RCHANDI	ISE.
	Отнек	Manufac	TURES.			
Name of Railway.	Tonnage Originat- ing on Road.	Tounage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.	Tomnage Originat- ing on Road.	Tounage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.
11 Napierville Junction Ry 12 Nelson and Fort Sheppard 13 New Brunswick Coal and Ry 16 Coal	1 598	27 232 17 754	$egin{array}{c} 27 \\ 232 \\ 22,342 \\ \end{array}$	158 1,426		746 2,188
23 Nelson and Fort Sheppard  23 New Brunswick Coal and Ry. Co  24 New Brunswick and P. E. Island  25 New Brunswick Southern  26 New Westminster Southern  27 North Shore  28 Neebosing and Ninissing	148	2,850	2,998	57 1,345	1,460 4,547	1,460 57 5,899
Worth Shore. Shorbonsing and Nipissing. Nova Scotia Steel and Coal Co	11	83	94 635			32
18 Nosoonsing and Alpissing 19 Nova Scotia Steel and Coal Co 10 Orford Mountain 11 Ottawa and New York 12 Père Marquette (in Canada) 13 Philipsburg Ry. and Quarry Co 14 Princeton Branch of Washington Co.	13,532 30,595	4,944 14,398	18,476 44,993	55 150,871	64,659	215,530
Ry	15.001	64,603	64,603 21,907	11,560	4,651 36,860	4,65 48,42
6 Quebec and Lake St. John	6,256 41	2,360 197 498 145	3,200 6,453 539 145	11,560 2,700  6,095 154	0.000	7,64 14,39 62
0 Rutland and Noyan 1 Salisbury and Harvey 2 Schomberg and Aurora	44	2,299 700	2,299 744		806	80
9 Red Mountain. 0 Rutland and Noyan 1 Salisbury and Harvey. 2 Schomberg and Aurora. 3 Stanstead, Shefford and Chambly. 4 St. Clair Tunnel. 5 St. Lawrence and Adirondack. 6 Sydney and Louisburg (Dominion	515	43,729	44,244	6,443	95,749	102,19
					2,559 14,258	
7 Spokane and British Columbia Ry 8 Temiscouata. 9 Temiskaming and Northern Ontario. 0 Thousand Islands 1 Toronto, Hamilton and Buffalo. 2 Vancouver, Victoria and Eastern 3 Victoria and Sydney, B.C.	7,400 17,357	14,884 40,676 5 220	22,284 58,033 5 937	8,242 		19 19
3 Victoria and Sydney, B.C. 4 Victoria Terminal and Ferry Co. 5 Wabash Ry. Co. in Canada. 6 Wellington Colliery Co.	64,726		64,726	5,149 404 89,900		8,29 8,22 89,90
6 Wellington Colliery Co				25		
Final total	478,968	1,202,110	1,681,078	912,489	1,480,796	2,393,2

SESSIONAL PAPER No. 20b

120	121	122	123	124	125	A	В	C		
MIS	CELLANEC	ous.	RECAPITULATION.							
Отн	ER COMMODIT	TIES.	G	RAND TOTAL	•					
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.	Tonnage Originat- ing on Road.	Tonnage Received from Connecting Roads and Other Carriers.	Total Freight Tonnage.		
2,410 969 2,106 346 832 55,472	6,526 437 249 6,181 5 746 881 98,617	6,542 500 2,410 1,218 8,287 5 1,092 1,713 154,089	2,125 28,898 46,695 26,210 11,618 34,510 6,762 16,310 5,816 30,111 34,754 965,579 8,329	160,757 12,814 19,193 8,603 512 51,352 35 1,137 5,882 90,846 1,453,392 5,124	162,882 41,712 65,888 34,813 12,130 85,862 6,797 16,310 6,953 35,993 125,600 2,418,971 13,453					
2,865 22,960 2,093 980 28	497 11,539 11,110 311 4,051 123 236 1,000	497 14,404 34,070 2,404 5,031 151 236 1,076	466,098 210,615 101,465 45,332 49,055 36 38,419	150,545 128,529 109,854 5,680 190,414 33,887 139,362 5,242	150,545 594,627 320,469 107,145 235,746 82,942 139,398 43,661					
4,695	148,286	152,981	18,726	1,063,753	1					
313 15,280 2,292 13,703	6,307 75,183 2,464 6,080	6,620 90,463 4,756 19,783	5,933 3,341,308 4,163 116,866 337,305	574,656 115,155 111 19,509 197,937	3,456,463 4,274 136,375 535,242					
7,911 9,921 3,067 1,634 424 52,162	5,433 114,097 4,429 4,956 6,166	13,344 124,018 7,496 6,590 6,590 52,162	14,612 96,422 699,053 20,542 1,240 1,225,487 324,738	15,900 1,137,881 228,883 9,461 28,702 4,083	927,936 30,003 29,942 1,225,487					
40	75	115	6,514	2,407	8,921					
3,301,529	2,932,843	6,234,372	36,075,101	30,754,918	66,830,019					

TABLE 12.—SUMMARY of Equipment for the Year ending June 30, 1909.

9-10 EDWARD VII., A. 1910

			9-10 EDWARD VII., A. 1910
1		Zumber.	110
16		Total.	: 
15		Other cars in passeng e r service.	. ΣΩ
I	<u>ج</u>	Baggage, ex- press_and postal.	
13	Service.	Sleeping.	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
13	PASSENGER	Parlour,	e
11		.BuiniaG.	δ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ σ
10	CARS IN	Emigrant.	83 C D 16
. 6		Combi- nation.	000- C 20-700 5 0 00- 5-00-0
		Second-class	55 E 1 1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1
t-		First-class.	+ + : : x - : 23.07 2 23.25 11.00 2 2 24.21 2 25.27 11.00 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
9		reased.	8.1
ī	LOCOMOTIVES.	Total.	
4		Switching.	2 6 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
က	Ľ	Freight.	8 78 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
23		Passenger.	2 c c c c c c c c c c c c c c c c c c c
1	Name of Railway.		Alberta Railway and Irrigation Co. Algoma Central and Hudson Bay. Allantic, Quebec and Western. Bay of Quinté. Bedlington and Nesson Bedlington and Nesson Bedlington and Barry's Bay. Berndon, Saskatchewan and Hudson Bay Brandon, Saskatchewan and Hudson Bay Brandon, Saskatchewan and Hudson Bay Brandon, Saskatchewan and Northwestern Canadian Government Railways— Intercolonial. P. F. Island. Canadian Northern, Quebec Canadian Southern Carallon and Grenville Cernilon and Grenville Central Ontario Crowsnest Southern Crowsnest Southern Grand Trunk Grand Trunk Grand Trunk Grand Trunk Grand Trunk Grand Trunk Hampton and St. Martin s Harpton
		Number.	128 28 28 28 28 28 28 28 28 28 28 28 28 2

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2000- 4 11 0	23 23 20 - 23			S :-
way and Coal Co. 2 4 1 1 and Ottawa 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P. S.	ba 999 1 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2	sland.  Co. 5  Solution Coal C	Outario 6 20 2 2 3 3 3 3 3 4 5 4 5 5 5 5 5 5 5 5 5 5 5 5
Inverness Railway and Irondale, Bancroft and Kaslo and Slocan Kett Niver Valley Ketle River Valley	Klondike Mines.  Liverpool and Milton.  Loubon and Port Stanley.  Lotbinière and Megantic.  Maritoulin and North Shore.  Maritoulin and North Shore.	Massawipp   Valley   Massawipp   Massawipp   Valley   Midland Railway of Manitoba   2   Moneton and Buctouche   2   Montreal and Abantic   12   Montreal and Province Line   1   1   Montreal and Vernont Junction   1   1   Montreal and Vernont Junction   1   1   Montreal and Michel   3   Montreal and Michel   3   Montreal and Michel   1   3   Montreal and Michel   3   3   3   3   3   3   3   3   3	Napierville Junction Railway         2           Nedson and Fort Sheppard.         2           New Brunswick Coal and Railway Co.         3           New Brunswick Southern.         2           New Weshninster Southern.         2           Norw Schainster Southern.         2           Nova Scorta Steel and Coal Co.         1           Nord Shore.         3           Nord Shore.         3           Nord Scorta Steel and Coal Co.         1           Orford Mountain.         3           Orford Mountain.         1           Ortawa and N-w York.         3           Philipsburg Railway and Quarry Co.         1           Philipsburg Railway and Quarry Co.         1           Quebec Central.         1           Quebec Railway, Light and Power Co.         5           Quebec Railway, Light and Southern.         7           Quebec, Montreal and Southern.         4           Saleshury and Harvey.         5           Schomberg and Aurora.         1           Schomberg and Aurora.         4           Schomberg and Aurora.         4           Schomberg and Aurora.         4           Schonberg and Aurora.         4           Schonberg and Aurora	Tennsconata Temiskaming and Northern Ontario Thousand Islands Toronto, Hamilton and Buffalo

Table 12.—Summary of Equipment for the Year ended June 30, 1909—Continued.

		Zumber,	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8			
16		Total.	£ 50 ± 50 ± 50 ± 50 ± 50 ± 50 ± 50 ± 50	4,192		
15		Other cars in passeng er service.		7		
4	.:	Baggage, ex- press and postal.	- m	926		
13	ERVICE	KRVICE	Sleeping.		192	
12	CARS IN PASSENGER SERVICE.	Parlour.	13	0.9		
=	Passe	Sminid		127		
10	ARS IN	Emigrant.		317		
5.	0	Combi- nation.	1 16	673		
oc.		Second-class		171		
t-		.sssfo-tsriff	£ 6	1,560		
9		Leased.		13		
ı.a	res.	Total	67. 23. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	3,969		
7	Locomotives	SOMOTIV	COMOLI	Switching.		374
m	loor	- trigier4	61 63 E3	2,539		
21		Разменияет.	- : := :-	1,056		
		Name of Railway,	Vancouver, Victoria and Eastern Victoria and Sidney, B. C. Victoria Terminal Railway and Ferry Co. Wabash Railway Co. (in Canada) Wellington Colliery Co.			
		Zumber.	88832			

9-10 EDWARD VII., A. 1910

Table 12.—Summary of Equipment for the Year ending June 30, 1909—Continued.

SESSI	ONAL	PAPER	No. 20b	
			Number.	66488911 11 11 11 11 11 11 11 11 11 11 11 11
	33		Cars leased	
	35	Total	cars in Service.	81 18 18 18 18 18 18 18 18 18 18 18 18 1
	31	ಬೆ	Total.	222 222 222 222 223 10 10 10 10 10 10 10 10 10 10 10 10 10
a,	30	SERVICE	Other Road.	110 111 112 113 113 113 114 114 114 114 114 114 114
-Continued	56	COMPANY'S SERVICE	Caboose.	111.3 106.106.106.106.106.106.106.106.106.106.
-Con	28		Derrick.	2
30, 1909	27	CARS IN	Gravel,	2 20 20 20 20 1,546 4 4 4 4 691 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
ie 30,	56	Ö	Officers' and pay.	330 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Year ending June	25		Total.	668 141 141 141 142 143 143 143 144 144 144 144 144
r end	24		Other cars in freight service.	235 255 10 1 6 177 20 50 4 4 964 964
	23	RVICE.	Refriger- ator.	1,025 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
or th	55	HT SE	Tank.	25. 4 4 11. 11. 11. 11. 11. 11. 11. 11. 11
ent f	21	Freig	Coal.	2020 2020 2020 2020 2020 2020 2020 202
Equipment for the	50	CARS IN FREIGHT SERVICE	Stock.	33.3 3.8 3.8 3.8 3.8 3.8 3.8 3.8
	19	Ö	Flat.	3877 3877 106 126 137 14 167 181 181 181 181 181 181 181 18
SUMMARY of	18		Box.	32 32 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
TABLE 12.—S	in ret		Namber.	Alberta Railway and Irrigation Co.  2 Algoma Central and Hudson Bay.  3 Atlantic and Iake Superior.  4 Atlantic Quebec and Western.  5 Bayof Quinte.  7 Bassener and Barry's Bay.  8 Brandon, Saskatchewan and Hudson Bay.  19 Britsh Vukon.  10 Brockville, Westport and Northwestern.  11 Canada Southern.  12 T. B. Ishand.  13 T. B. Ishand.  14 Canadian Government Railways—  15 Canadian Northern, Quidec.  16 Canadian Northern, Quebec.  17 Canadian Northern, Quebec.  18 Cape Breton.  19 Caraque.  20 Carallon and Grenville.  21 Canadian Alantic.  22 Crowsnest Southern.  23 Cumberland Railway and Coal Co.  24 Dominion Atlantic.  25 Elgin and Havelock.  26 Grand Trunk—Canada Atlantic.  27 Grand Trunk—Canada Atlantic.  28 Grand Trunk—Canada Atlantic.  29 Hailfax and South Western.  30 Hampton and South Western.
	206-	<b>—</b> 13		HE EEEEEEEWAXAXAAAAAA

9-10 EDWARD VII., A. 1910

Table 12.—Summary of Equipment for the Year ending June 30, 1909—Concluded.

Number,	
Cars	:T
Total cars in service.	200
Total.	<u>ωννο</u> να να δλείσι να να σο
SERVICE Other road.	2
Caboose.	8
Derrick.	
Gravel.	<u>g</u>
Officers' and pay.	
Total.	8 x 4 x 3 x x x x 8 2 x 2 0 2 x 4 2 x 4 2 x x x x x 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Other cars in freight service.	.41 .2 .6 .1 .15
Refriger-	<b>=</b>
IIT SEI	
FREIG Coal.	24 45 45 45 45 45 45 45 45 45 45 45 45 45
ARS IN	
C C	8221-2821-2821-2821-2821-2821-2821-2821
Box.	84744 2 2 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NAME OF RAILWAY.	22 Inverness Railway and Coal Co. 23 Irondale, Bancroft and Ottawa. 24 Kaslo, and Slocan. 25 Kent Northern. 26 Kent Siver Valley. 27 Kingston and Pembroke. 28 Klondides Mines. 28 Liverpool and Milton. 40 London and Perb Stanley. 41 Lotbinière and Megantic. 42 Maritime Coal Railway and Power Co. 43 Maritime Coal Railway of Manitoba. 44 Massawippi Valley. 45 Montreal and Atlantic. 46 Moncton and Buctouche. 47 Montreal and Atlantic. 48 Montreal and Atlantic. 49 Montreal and Atlantic. 40 Montreal and Atlantic. 41 Montreal and Atlantic. 42 Montreal and Stormont Junction. 43 Montreal and Stormont Junction. 44 Montreal and Stormont Junction. 45 Montreal and Stormont Junction. 46 Montreal and Stormont Junction. 47 Montreal and Stormont Junction. 48 Montreal and Nermont Southern. 49 Nont Storm Stormont. 40 North Shore. 41 Island. 42 New Brunswick Southern. 43 New Brunswick Southern. 44 North Shore. 45 North Shore. 46 North Shore. 47 North Shore. 48 North Shore. 49 North Shore. 40 North Shore. 40 North Shore. 41 North Shore. 42 North Shore. 43 North Shore. 44 North Shore. 45 North Shore. 46 North Shore. 47 North Shore. 48 North Shore. 49 North Shore. 40 North Shore. 40 North Shore. 41 North Shore. 42 North Shore. 43 North Shore. 44 North Shore. 45 North Shore. 46 North Shore. 47 North Shore. 48 North Shore. 49 North Shore. 40 North Shore. 41 North Shore. 42 North Shore. 43 North Shore. 44 North Shore. 45 North Shore. 46 North Shore. 47 North Shore. 48 North Shore. 49 North Shore. 40 North Shore. 40 North Shore. 40 North Shore. 40 North Shore. 41 North Shore. 42 North Shore. 43 North Shore. 44 North Shore. 45 North Shore. 46 North Shore. 47 North Shore. 48 North Shore. 49 North Shore. 40 North Shore. 41 North Shore. 42 North Shore. 43 North Shore. 44 North Shore. 45 North Shore. 46 North Shore. 47 North Shore. 48 North Shore. 49 North Shore. 40 North Shore. 40 North Shore. 40 North Shore. 40 Nort
	Cars in Freight Service.  Cars in Company's Service.  Total  Cars in Company's Service.  Total  Cars in Company's Service.  Cars in Company's Service.  Cars in Company's Service.  Cars in Cars in Company's Service.  Cars in Cars in Company's Service.  Cars in Cars in Company's Service.  Cars in Cars in Cars in Cars in Company's Service.  Cars in Cars i

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ceton Brancloe Central. bec and Lak bec Railway, bec, Montre Monntain. and and K	stead, She Mair Tunn Lawrence n	cane and lisconata	onto, Una couver, \ onia and oria Term	ash Raih fington C	I
rinceton Branci gueloc Central, gueloc Railway, gueloc, Kailway, leebec, Montrain, ed Mountain, infland and Nellisbury and A	tanstead, She t. Clair Tunn t. Lawrence n	pokane and 1 emisconata emiskaming	oronto, Uni fanconver, V fetoria and fetoria Tern	Vabash Raily Vellington C ork and Car	I
H. Princeton Branol B. Quebec Central. B. Quebec and Lake F. Quebec, Montray. S. Quebec, Montray. O. Kutland. and N. S. Schombeny. and H. Salisbury and J. S. Schomberg, and J.	3 Stanstead, She 4 St. Clair Tunn 5-St. Lawrence a	7 Spokane and 1 8 Temisconata. 9 Temiskaming	1 Toronto, Har 2 Vancouver, V 3 Victoria and 1 Victoria Tern	5 Wabash Raile 6 Wellington C 7 York and Car	
64 Princeton Branch of Washington 65 Quebec Central. 66 Quebec Cal Lake St. John. 67 Quebec Railway, Light and Powe 68 Quebec, Montral and Southern. 90 69 Red Mountain. 70 Rutland and Noyan. 71 Salishing and Harvey. 67 72 Schomberg and Anrea.	73 Stanstead, Shefford and Chambly 74 St. Clair Tunnel. 75-St. Lawrence and Adriendack. 76 St. Lawrence and Adriendack.	77 Spokane and British Columbia Le 78 Tomisconata. 79 Tennisconnig and Northern Ontal 80 Thomsond Islands.	81 Toronto, Hamilton and Buffalo. 82 Vatconia and Sydney, S. C. S. Victoria and Sydney, B. C. S. Victoria and French and Forey Co.	85 Wabash Railway Co. (in 86 Wellington Colliery Co. 87 York and Carleton	

9-10 EDWARD VII., A. 1910 Table 13.—Summary of Cars in Freight Service for the Year

=							
		Box	Cars.	FLAT	Cars.	Ѕтосі	CARS.
Number.	NAME OF RAILWAY.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.
_			Tons.		Tons.		Tons.
3 4 5	Alberta Railway and Irrigation Co. Algoma Central and Hudson Bay. Atlantic and Lake Superior. Atlantic, Quebec and Western Bay of Quinte. Bedlington and Nelson. Bessemer and Barry's Bay	32 4 1 18	80 1,090 60 30 370	11 387 10 126	220 13,725 300 2,820		
9 10 11 12 13 14 15 16	Brandon, Saskatchewan and Hudson Bay. British Yukon Brockville, Westport and Northwestern Canada Southern Canadian Govt. Ry.—Intercolonial Prince Edward Island Canadian Northern Canadian Northern, Ontario Canadian Northern, Quebec.	97 8 1,437 6,990 313 6,317 149 509	1,868 200 49,130 200,665 3,130 189,510 4,470 15,140	76 6 181 3,044 147 1,162 327 151	1,448 120 4,200 76,560 1,470 34,050 9,810 4,205	15 31	3,385 210 8,470 450 615
	Canadian Pacific. Cape Breton Caraquet.	33,542	974,560	$   \begin{array}{r}     6,949 \\     10 \\     25   \end{array} $	$ \begin{array}{c c} 214,400 \\ 1,500 \\ 375 \end{array} $	2,758	77,725
$\frac{20}{21}$	Carillon and Grenville	53	1,270	181	4,620	11	320
$\frac{22}{23}$	Crowsnest Southern Cumberland Railway and Coal Co Dominion Atlantic	2 212	40	33 219	430 5,200	12	240
25 26 27 28 29	Elgin and Havelock Eastern British Columbia Grand Trunk Grand Trunk (Canada Atlantic) Halifax and Southwestern Hampton and St. Martins	10 17,063 1,800 74	4,655 400 463,785 49,280 2,030 20	$\begin{array}{r} 219 \\ \cdot & 6 \\ 10 \\ 4,861 \\ 344 \\ 227 \\ 6 \end{array}$	5,200 60 400 121,875 9,010 5,850 120	1,768	45,750 1,500
31 32 33 34 35	Hereford Inverness Railway and Coal Co Irondale, Bancroft and Ottawa Kaslo and Slocan Kent Northern Kettle River Valley	60 8 2 26 1	1,800 160 40 520 12	10 29 30 2	200 870 600 40		
37 38 39 40 41 42	Kingston and Pembroke Klondike Mines Liverpool and Milton London and Port Stanley Lotbinière and Megantic. Manitoulin and North Shore Maritime Coal, Railway and Power Co	7 7 1 30 2 1	140 105 15 810 45 40	43 16 12 3 24 88 2	200 75 720 3,520	3	90
44	Massawippi Valley Midland Railway of Manitoba	350	6,950	150	2,750	• • • • •	
46 47 48	Moneton and Bouctouche.  Montreal and Atlantic.  Montreal and Province Line.  Montreal and Vermont Junction.	5 274 46 273	100 5,750 820 8,190	38 212 23 136	630 6,045 395 4,080	38	975 120
50 51 52	Morrissey, Fernie and Michel Napierville Junction Railway Nelson and Fort Sheppard	3	100				
53 54 55	New Brunswick Coal and Railway Co. New Brunswick and P. E. Island New Brunswick Southern New Westninster Southern	6 4 6	$ \begin{array}{c} 160 \\ 70 \\ 120 \end{array} $	53 41 34	1,330 615 680	4	80
57 58	North Shore	1	30	1 58	30 580		
60	Nova Scotia Steel and Coal Co. Orford Mountain	2 1	$\frac{20}{20}$	15 11	$\frac{150}{220}$		

SESSIONAL PAPER No. 20b ending June 30, 1909, showing Number and Aggregate Capacity.

COAL	. Cars.	TAN	k Cars.		IGERATOR ARS.	Отне	r Cars.	To	OTAL,
Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity. Number.
	Tons.		Tons.		Tons.		Tons.		Tons.
50	1,000		 				11,020	65	1,300 1
27						235 10	11,020 150	681 14	26,665 2 210 3
						11	415	22 144	745 4
						1 6	20	1	20 6
								177	55 7 3,540 8
12	240			4	80			222	4,296 9
40	80 930	35	710					20 1,731	440 10 55,730 11
1,683	26,061	40	1,000	143	3,950	50	1,500	12,095	313,121 12
$\frac{22}{522}$	$\frac{330}{21,280}$			68	2,040		1,500 40 2,000 2,800 28,525	510 8,358	$5,210 \begin{vmatrix} 13 \\ 255,350 \end{vmatrix} 14$
60 42	3,000			3	90	50	2,000	604 807	19,820 15 23,915 16
2,519	110,820	4	80	1,055	29.420	921	28,525	47,748	1,435,530 17
								10 30	1,500 18 450 19
									20
10	400					312	6,240	255 312	6,610 21 6,240 22
485	5.805						190	520 476	$\begin{array}{c} 6,275   23 \\ 10,745   24 \end{array}$
26							120	20	70 25
3,411	137 800	116	9 169	010	28,370 750 0			28,168 28,168	800 26 802.742 27
84	3,010			25	750			2,310	63,550 28
7	70	1	30	2				313 7 70	8,080 29 $140 30$
								70 185	2,000 31 5,470 32
148					 			32	640 33
						14	280	42	840 34 24 35
							40		
						$\frac{2}{2}$	40	52 23	1,040 37 445 38
								13	215 39
45	1,290					1	15	81 27	2,265 40 780[41
							120	89	3,560   42 $160   43$
								500	9,700 44
						92	1,840	92 43	1,840 45 730 46
		1	30					525	12,800 47
24	60 720			4	120	·····i	30	73 442	1,275 48 13,260 49
50	1,510							53	1,610;50
						21	420	21	420 52
10	250							69 45	1,740 53 685 54
								44	880 55
3	75		· · · · · · · · · · · · · · · · · · ·			37	740	37 5	740 50 135 57
						1	10	59	590'58 430 59
26	260							43 12	240,60

9-10 EDWARD VII., A. 1910
TABLE 13—Summary of Cars in Freight Service for the

=							
		Box	Cars.	FLAT	CARS.	STOCK CARS.	
Number.	NAME OF RAILWAY.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.
			Tons.		Tons.		Tons.
62	Ottawa and New York	3 1,333	43,630	14 134 1	280 3,680	35	1,030
64 65 66 67 68	Philipsburg Railway and Quarry Co Princeton Branch of Washington Co. Railway Quebec Central Quebec and Lake St. John Quebec Railway Light and Power Co Quebec, Montreal and Southern	25 308 461 17 1,396	750 7,915 13,930 340 41,880	10 325 190 79 48	300 7,260 4,415 1,580 1,180	74 20 90	1,965 480 2,700
70 71	Red Mountain	50	1,500 30	5 29	150 435	2 1	40 10
73	Schomberg and Aurora. Stanstead, Shefford and Chambly	105	2,000	53	860	1	15
75 76 77 78	St. Clair Tunnel St. Lawrence and Adirondack. Sydney and Louisburg (Dominion Coal Co.) Spokane and British Columbia Railway Temiscouata Temiskaming and Northern Ontario	75 16 5 73	150	30 66 13 57 489	450 1,020 390 1,240 16,670	10	
80	Thousand Islands Toronto, Hamilton and Buffalo	186	5,580	1 89	$\frac{20}{2,470}$		
82 83	Vancouver, Victoria and Eastern	2	40	15	300		
85 86	Victoria Terminal and Ferry Co Wabash Railway Co. (in Canada). Wellington Colliery Co. York and Carleton.	559 5	17,640 70	$\begin{array}{c} 22 \\ 14 \\ 4 \end{array}$	750 190 40	86	2,520
	Total	74,479	2,130,145	21,220	584,455	5,561	150,800

SESSIONAL PAPER No. 20b

Year ending June 30, 1909, showing Number and Aggregate Capacity—Concluded.

COAL CARS.		TANK CARS.		REFRIGERATOR CARS.		OTHER CARS.		Total.	
Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.	Number.	Aggregate Capacity.
ı	Tons.		Tons.		Tons.		Tons.		Tons.
615	21,495							2,128 1	340 70,160 10
87 14	2,300 280			6 5	180 110			35 713 763 110	$egin{array}{c} 1,050 \ 17,320 \ 21,235 \ 2,200 \ \end{array}$
2				10	300	21	420	1,544 21 59 33	46,060 ( 420 ( 1,770 ) 475 (
9	135			i	20			169	3,030
1,414	25,735					8	300	105 1,496 26 130	1,575 27,075 840 3,050
						206	4,120	599 1 285 206 17	20,470 20 8 8,350 6 4,120 8 340 8
94 172	3,720 4,370			172	5,160	9	90	933 200 4	29,790 8 4,720 8 40 8
11,721	379,981	197	4,012	2,465	71,085	2,273	64,835	117,916	3,385,313

9-10 EDWARD VII., A. 1910

Table 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 30, 1909.

13			Maximum Length.	Ft. Im. 300 0 300 0 125 0 125 0 125 0 25 239 0 450 0 450 0 450 0 25 25 0 556 0 56 0 0
12		Wоорки.	Aggregate Minimum Maximum Length, Length, Length.	Ft. Im. 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
11	=		Aggregate Length.	Ft. In. 615 0 615 0 60 0 75 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10			No.	3478773
6		Іком.	Maximum Length.	Ft. Im. 423 0 500 0 500 0 69 0 1,735 0 1,735 0 1,857 0 1,816 0 3,654 0 0 3,654 0 0 1,207 0 0 1,207 0
œ			Minimum Length.	Et. In. 230 0 230 0 11 0 0 11 0 0 12 0 0 22 0 0 22 0 0 22 0 0 22 0 0 22 0 0 22 0 0 22 0 0 22 0 0 22 0 0 22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
t-	BRI		Aggregate Minimum Length, Length.	Ft. In. 1,277 0 1,247 0 1,247 0 1,010 0 1,010 0 0 1,010 0 0 1,000 0 1,100 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 2,314 0 0 4,075 0 0 4,075 0
9			No.	20
10		STONE	Maximum Length.	Ft. In. 93 0
4			Aggregate Minimum Length. Length.	Ft. In. 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
m			Aggregate Length.	Et. In. 645 9 41,681 0 3,629 0
23			No.	32 32 62 62 62 63 63 63 63 63 63 63 63 63 63 63 63 63
1	Zamber. Name of Railway.			Alberta Railway and Irrigation Co. 2 Algona Central and Hudson Bay. 3 Achantic, Quebec and Western. 5 Bay of Quinté. 6 Bellington and Netson 7 Bessenaer and Barry's Bay 8 Brandon Transfer. 10 British Yukon 11 Brockville, Westport and Northwestern. 12 Bruce Mines and Algona. 13 Canada Southern. 14 Transe Mines and Algona. 15 Canada Southern. 16 Canadian Government Railways— 17 Canadian Northern Ontario. 18 Canadian Northern Ontario. 19 Canadian Northern Quebec. 19 Canadian Pecific. 20 Capt Breton 21 Caraquet. 22 Carillon and Grenville. 23 Central Ontario. 24 Carowsnest Southern 25 Cannberland Railway and Coal Co. 25 Carnberland Railway and Coal Co. 25 Carnberland Railway and Coal Co. 25 Cannberland Railway and Coal Co. 25 Charduand Railway and Coal Co. 25 Chanberland Railway and Lavelock. 27 Elljonninon Achanic.

SESSI	JANC	PAI	PERN	lo. 20b												
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19,733 2,958 1,288	637	2,330	1,450	200	304 382 419	899 745	888		80 793 1.035	1,100	289					561
412 46 77	409	14	77	F 61		ದ ಬ	- 4-		192	20						9
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6,594 2,180 403	120		105	34 596		314	289 94	55	320	208		1,215	468 646	300 300 965		112
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94,185 10,519 5,516	292 525		448	34 1,751		2,057	, 989 94	255	320	998		1,556	3,420	3,727 1,230 4,745		112
842 74 61		1				- 53	P	· x	- 21	12	. 1	ວາວ	27	28 14 17		
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Jana ada rwes	an i	<b>i</b> : •	bro or	gan Stan	orth.	ouc	non	i i	og Po	Sol	and		jo :	St.	n.	nor d ar
Sun Can	vay	an.	alle Zem	orte	E SE	Suct A tha	Ver	ncti		E X	i selz		ch,	y, I	oya Har	Att
3 × × ×	tail.	Sloc	r V nd J	and	amo Va Ma	יל בי ה	D 25	n r	For Wiel Wiel	wiel	r St inter	lett.	Srat	La lwa mtr	a Z D	and She
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nd 7	efor	No a	gsto dilk	don don itin	rane nitor saw lanc	neto	tre	ierv	on S	Z N	th Son	N S	Loc	bec bec	lane sbun	ourl aste Clai
28 Grand Trunk (in Canada)	32] Hearford and 55c, againgt 5	35 Kaslo and Sloan.	Kettle River Valley Kingston and Pembroke Klondike Mines	40 Liverpool and Milton. 41 Locbinière and Megantic. 42 London and Port Stanley. 43 Maritime Railway. Coal and Power Co	Maganetawan River Manitoulin and North Shore. Massawippi Valley. Midland of Manitoba	Moneton and Buctouche	Montreal and Vermont Junction Montreal and Province Line Morrison Roman and Michael	Na	Nelson and Fort Sheppard New Brunswick Coal and Railway Co Naw Brunswick and P. E. Island	New Brunswick Southern New Westminster Southern	59 North Shore. 60 Nosbonsing and Nipissing. 61 Nova Scotia Steel and Coal Co. 62 Orford Mountain.	os Ottawa and New York	56 Princeton Branch, of Washington Co., 57 Que'sec Central	68 Quebec and Lake St. John	71 Ked Mountain. 72 Rutland and Noyan. 73 Salisbury and Harvey.	74 Schomborg and Aurora. 75 Stanstead, Shefford and Chambly 76 St. Clair Tunnel.
2000	2 22 22 2	28.8	3833	0 1 2 2 3 3 4	4682	24 4 25 5	25.5	53.5	282	522	8858	3 2 3	925	886	323	75

\*Under construction. †Steel.

Table 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—Continued.

				9-10 EDWARD VII., A. 1910
133			Maximum length.	Ft. In.
12		Wooden.	Minimum length.	Ft. In.
11		Wo	Aggregate Minimum Maximum length.	Ft. Im. 13 0 1,892 0 144 0
10			No.	1,875
6			Maximum length.	Ft. 1n. 2598 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
×	BRIDGES.	IRON.	Minimum length.	Ft. In. 128 0 121 0 201 0 103 0 103 0 113 0 0 103 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 103 0 0 0 103 0 0 0 103 0 0 0 0
2	BR		Aggregate Minimum Maximum length.	Ft. In. 1,322 0 567 0 567 0 745 0 1,587 6 1,587 6
9			No.	*110 *12 *15 *15 *15 *15 *15 *15 *15 *15 *15 *15
10			Maximum length.	Pt In
4	-	Srone.	Aggregate Minimum Maximum length.	Ft. In.
8		S.	Aggregate length.	Ft. In
2			No.	2000
1		NAME OF RAILWAY.		77 St. Lawrence and Adirondack 78 Sydney and Louisburg (Dom. Coal Co.) 78 Sydney and Louisburg (Dom. Coal Co.) 79 Temiscouata. 80 Temiskaning and Northern Ontario 81 Thousand Islands. 82 Toronto, Hamilton and Buffalo 83 Vancouver, Victoria and Eastern 84 Vancouver Copper Co. 85 Victoria and Sidney. 85 Victoria Terminal Railway and Ferry Co. 86 Victoria Terminal Railway and Ferry Co. 87 Wabash Railway (in Canada. 88 Wellington Colliery Co. 88 Wellington Colliery Co. 89 York and Carleton.  Total.
. [,		۲.	əquin <sub>N</sub> j	[:12 C 3 2 3 3 3 3 3 3 3 3 3 5 5 8 8 8 8 8 8 8 8 8

Table 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—Continued.

	PAPER	110. 201											
36			Maximum length.	Ft. In.	<del>-</del>	767 0 418 0	702 0	2,964 0	:			1,702 0	350 0
25	TRESTLES.		Aggregate Minimum Maximum length. length. length.	Ft. ln.	90 00 286 0	65 0	16 0 575 0	9 0	•	27.0		14 0	28 0
24	TRE		Aggregate length.	Ft. In.	3,420 0 12,191 0 1,346 0 721 0	3,407 0	2,922 0 1,275 0	9,669 0	156,397 0 9,883 0	4,137 215,926			8,418 0
23			No.		4 12 0 31	: 22 : 23		: 25 27	1,489	1,83		33	20.50
55			Maximum length.	Ft. In.	300 0	. :		1,785 6	1,867 0	3,458 3,654 0 370 0	400 6	450 0	1,207 0
21		Potae.	Aggregate Minimum Maximum length.	Pt. In.	255 255 255 255 255	: :		: :	30.0	35 ° 58 0 0 0	:	0 #	29 0
20		ľ	Aggregate length.	Ft. In.	615 0 1,464 0 2,227 0 795 0		150 0 554 0	6,940	5,111 15,285 2,363 0	13,711 161,242 309	1,775	2,254	6,337
19	GES.		No.		4 4 C 4 0		-TE	82	\$ <del>4</del> \$	1,911	916	300	7 7 7
18	BRIDGES		Maximum length.	Ft. In.	0 019		12 0		27 0	3,485 0 1,158 0 370 0			
17		Cembination.	Minimum length.	Ft. In.	481 0	* * * * * * * * * * * * * * * * * * *	9		: .	16 33 50 00 33 00			
16		Семв	Aggregate Minimum Maximum length.	Ft. In.	991 0		150 0 179 0		: :	8,460 9,761 309 0			
15			No.		্গক		1. 19			11 124 4			
14		Маяв ог Ванмау.			Alberta Railway and Irrigation Co. 2 Algona Central and Hudson Bay. 3 Atlantic and Lake Superior. 4 Atlantic, Quebec and Western.	6 Bedhington and Nelson. 7 Bessenner and Barry's Bay. 8 Brundon, Saskatchewan and Hudson Bay.	9 Fixindon Transfer 10 British Yukon 11 Brockville, Westport and Northwestern 9 Brock Minne and Alexand	13 Ganada Southern 14 Canadian Government Railways— Intercolonial.	16 Trince Edward Island. 17 Canadian Northern. 18 Canadian Northern, Ontario.	19 Canadian Northern, Quebec 20 Canadian Pacific. 21 Cape Breton.	22 Caraquet	25 Crowsnest Southern.	27 Dominion Atlantic.
			Numbe		1 Alberta Rail 2 Algonia Cen 3 Atlantic and 4 Atlantic, Qu 5 Ray of Onio	6 Bedlington a 7 Bessemer an 8 Brandon, Sa	9 "Israndon T 10 British Yuk 11 Brockville, V	13 Canada Sout 14 Canadian Go 15 Intercolon	16 I'rmee Ed 17 Canadian No 18 Camadian No	19 Canadian No 20 Canadian Pa 21 Cape Breton	22 Caraquet 23 Carillon and 24 Central Onts	25 Crowsnest Sc	Mill annual manual and

Table 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 30, 1909.—Continued.

				9-10 EDWARD VII., A. 1910
98			Maximum Length.	He, In. 400 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6	TRESTLES.		Aggregate Minimum Length.	Hr. 1n. 20 30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
52	EE		Aggregate Length.	Ft. In. 1,060 0 6,245 0 6,246 0 6,248 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
65			No.	0888 04 : :700 L 120 688 c4 €
62			Maximum Length.	Ft. In. Ft. In. 6,594 0 9,180 0 0 950 0 0 950 0 0 950 0 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 950 0 95
21		Total.	Aggregate Minimum Length.	Hr. III. 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
50			Aggregate Length.	Ft. In. 129,785 0 159,785 0 159,785 0 159,785 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0 159,77 0
110	GES.		No.	. 888 :041741080400 :0411-0800400
18	BRIDGES		Maximum Length.	Ft. In. 533 0
17		Combination.	Minimum Length.	Pt. In. 100 0 26 00
16		Сомі	Aggregate Minimum Length.	Ft. In. 7,616 0 2,342 0 3,223 00
15			No.	99.:
14		NAME OF RAILWAY.	•	29 Elgin and Havelock. 30 Grand Trunk in Canada. 31 (Canada Atlantic). 32 Halifax and Southwestern. 33 Hareford. 33 Huveness Railway and Coal Co. 35 Inveness Railway and Ottawa. 36 Kent Northern. 38 Kent Northern. 39 Kettle River Valley. 41 Klondike Mines. 42 Liverpool and Mirlon. 43 Loobinides and Megantic. 44 Klondike Mines. 45 Maganetawan River. 46 Maritime Railway and Power Co. 47 Manitoulin and North Shore. 48 Massawippi Valley. 49 Midland of Manitola. 50 Montreal and Atlantic 51 Montreal and Vermont Junction. 53 Morrissey, Fernic and Michel. 54 Napherville Junction.

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56 New Brunswick Coal and Railway Co 57 New Brunswick Southern 58 New Westminster Southern 59 New Westminster Southern 60 North Shore. 61 Nosbonsing and Nipissing. 62 Nova Scotia Steel and Coal Co 63 Orford Mountain 64 Ottawa and New York 65 Piere Marquette, in Gandar Yo. 66 Philipsburg Railway and Quarry Co. 67 Princeton Branch, Washington Co. R. 68 Quebec Central. 70 Quebec Central. 71 Quebec, Montreal and Southern. 72 Red Mountain 73 Rutland and Noyan 74 Salisbury and Harvey 75 Steed Mountain 75 Schomberg and Adrora. 76 Stanstead, Shefford and Chambly 77 St. Clair Tunnel. 77 St. Clair Tunnel. 78 Tenniskaming and Adrondack. 79 Sydney and Louisburg. 79 Sydney and Louisburg. 79 Thousand I slands 80 Tenniskaming and Northern Ontario. 81 Tenniskaming and Sidney. 82 Thousand I slands 83 Toronto, Hamilton and Buffalo. 84 Vancouver, Victoria and Eastern 85 Vancouver, Copper Co. 86 Victoria and Sidney. 87 Victoria and Sidney 88 Wabbash (in Canada) 89 Vork and Carleton. 70 Total.
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Table 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 30, 1909.—Continued.

					9-10 EDWAR	
	38		Total.	Height of lowest above rail.	Feet In. 21 0 21 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	37		T	No.	333 17	20.2
	36	ROSSINGS.	Trestles.	Height of lowest above rail.	Feet In. 21 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0
	35	VAY CI	${ m Tre}$	No.		
	34	Overhead Highway Crossings.	Conduits.	Height of lowest above rail.	Feet In.	
	88	Оуевь	Ç	No.		
manufacture mention and property of the control of	32		Bridges.	Height of lowest above rail.	Feet In. 21 0 22 0 22 0 118 9 16 6	16 0
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			NAME OF RAILWAY.	Yumber.	Alberta Railway and frugation Co. 2 Algona Central and Hudson Bay. 3 Atlantic and Lake Superior. 4 Atlantic, Quebec and Western. 5 Bay of Quinte. 6 Bedlington and Nelson. 1 Berandon, Saskatchewan and Hudson Bay. 8 Brandon, Transfer. 10 British Yukon. 11 Brookville, Westport and Northwestern. 12 Brue Mines and Algona. 13 Canada Southern. 14 Intercolonial Island. 15 Prince Edward Island. 16 Canadan Northern. 17 Canadan Northern. 18 Canadan Northern. 19 Canadan Northern. 10 Canadan Northern.	18 Canadian Northern Ontario 19 Canadian Pacific 29 Cape Breton 21 Caraquet 22 Carillon and Grenville 23 Central Ontario 24 Crowsnest Southen

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Dominion Atlantic  Grand Trunk (in Ganada)  Grand Trunk (in Ganada)  Halifax and Southwestern  Hampton and St. Martins  Hereford  Inverses Railway and Coul Co.  Irondale, Bancroft and Ottawa  Kaslo and Slocan  Kettle River Valley  Kingston and Penthroke  Kingston and Pert Stanley  Liverpool and Milton  Kettle River Valley  Kingston and Port Stanley  Liverpool and Milton  London and Port Stanley  Liverpool and Milton  Maritime Coal and Rich  Maritime Coal and Rich  Maritime Coal and Rich  Montreal and North Shore  Montreal and Atlantic  Montreal and Atlantic  Montreal and Atlantic  Montreal and Pervince Line  Montreal and Vermont, Junction  Montreal and Atlantic  Montreal and Pervince  Montreal and Pervince  Montreal and Coal Co.  New Brunswick Coal and Railway Co  New Brunswick Coal and Railway  New Brunswick Southern  North Shore  North
26 [Dominion Atlantic 27 [Eigin and Havelook. 28 Grand Trunk (in Canada). 29 [Halifax and Southwestern. 30 Halifax and Southwestern. 31 Hampton and St. Martins. 32 [Hereford. 33 [Hereford. 34] Erondale, Bancroft and Ottawa. 35 [Kasha and Slocan. 36 [Kasha and Slocan. 37 [Ketle River Valley. 38 [Kington and Panhrooke. 39 [London and Port Stanley. 31 [London and Port Stanley. 32 [London and Port Stanley. 33 [London and Port Stanley. 34 [Liverpool and Milton. 35 [Martine Coal and Reliway Co. 36 [Martine Goal and Reliway Co. 37 [Martine Goal and Reliway Co. 38 [Martine Goal and Reliway Co. 39 [Montreal and Perovince Lutie. 30 [Montreal and Perovince Lutie. 31 [Montreal and Perovince Lutie. 32 [Montreal and Perovince Lutie. 33 [Montreal and Perovince Lutie. 34 [Montreal and Perovince Lutie. 35 [Montreal and Perovince Lutie. 36 [Montreal and Perovince Lutie. 37 [Montreal and Perovince Lutie. 38 [Montreal and Perovince Lutie. 39 [Montreal and Perovince Lutie. 30 [Montreal and Perovince Lutie. 31 [Montreal and Perovince Lutie. 32 [Montreal and Perovince Lutie. 33 [Montreal and Power Co. 34 [Montreal and Southern. 35 [Montreal and Southern. 36 [Mosbec Gentral. 37 [Mulband and Noyan. 37 [Mulband and Noyan. 37 [Mulband and Noyan. 37 [Mulband and Aurora. 37 [Mulband and Aurora. 37 [Mulband and Aurora. 37 [Mulband and Aurora. 37 [Mulbang and Aurora. 37 [Mulbang and Aurora. 37 [Mulbang and Aurora. 38 [Mulbang and

Table 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 30, 1909—Continued.

10 00 00 00 00 00 00 00 00 00 00 00 00 0	27	Overhead Highway Crossings.	NAME OF RAILWAY.  Bridges, Conduits, Trestles.  Total.	No. Guarded. Un- No. lowest No. lowest No. lowest No. lowest No. lowest lowest above rail.	No. No. Ft. In. Ft. In. Ft. In.	76 St. Clair Tunnel. 77 St. Lawrence and Adirondack 78 St. Clair Tunnel. 78 St. Lawrence and Adirondack 77 St. Lawrence and Adirondack 77 St. Lawrence and Adirondack 78 St. Lawrence and Adirondack 79 T. St. Lawrence and Adirondack 79 T. St. Lawrence and Adirondack 70 T. St. Lawrence and Adirondack 70 T. St. Lawrence and Adirondack 70 T. St. Co. O.	f. Westminster and Xukon.  F. Copper Co.  and Sidney  allways and Ferry Co.  allways (in Canada).  The Copper Co.  allways and Ferry Co.  allways (in Canada).  5 b  Carleton.	Final total
			NAM	Уштрег.		76 St. Clair Tunnel. 77 Sydney and Louisburg (Dom. Co. 79 Temisconata. 89 Temisconata. 80 Temiskaming and Northern Outs 11 Thousand Islands. 82 Toronto, Hamilton and Buffalo. 83 Vancouver, Victoria and Kaster	84 vancouver, Westminster and xui 85 Vancouver Copper Co- 86 Victoria and Sidney 87 Victoria Terminal Railway and F 88 Wabash Railway (in Canada) 89 Wellington Colliery Co- 90 York and Carleton.	Final total

Table 14.—Summary of Bridges, Trestles and Tunnels for the Year ending June 39, 1909—Continued.

	50	1. S.		Height of lowest above rail.	Ft. In.					22 0		17 6		20 E	
a pro same	67	=		No.								53		:	
	8#		Total.	Height of lowest above rail.	Ft. In.	16 2			325 0	22 4		22 10		20 20	:
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	94	OSSINGS.	Trestles.	Height of lowest above rail.	Ft. In.							9 55			
	4	'AY C	Tr	No.		: :					: :	· →			
	7	Overhead Rahway Crossings.	Conduits.	Height of lowest above rail.	Ft. In.										
	43	Оубя	ဝိ	No.							: :				
and the second second second second second second	6]		Bridges.	Height of lowest above rail.	Ft. ln.	16 2			395 0	: :23 :40		22 10		20 2	
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The state of the s	PF		NAME OF RAILWAY.	Zimiber:		Alberta Railway and Irrigation Company 2 Algona Central and Hudson Bay 4 Alowic and Lake Sunarior	4 *Atlantic, Quebec and Western 5 Bay of Quinté	6 Bedington and Netson 7 Bessenier and Barry's Bay 8 Renadon Saletchewan and Hudson Ray		12 Bruce Mines and Algonia 13 Canadian Government Railwavs—Intercolonial		17/Canadian Northern Ontario. 18/Canadian Northern Quebec. 19/Canadian Pacific.	zwi calpa Brecon. 21 Caraguet. 22 Carillon and Grenville.	23/Central Ontario. 24 Crowsnest Southern 25 Cumberland Railway and Coal Co.	Zollominion Atlantic
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TABLE 14.—SUMMARY of Bridges, Trestles and Tunnels for the Year ending June 30, 1909 - Concluded.

							9-10	EDWAR	D VII.,	A. 1910
20	Tunnels.		Height of lowest above rail.	Ft. In.						
67	Tu		No.							
48		Total.	Height of lowest above rail.	Ft. In.	16 4	20 0				
100		<u>-</u>	No.		105	: :- :			-	
46	ROSSINGS	Trestles.	Height of lowest above rail.	Ft. In.	22					
5	VAY CI	Ę	No.		21					
4	Overhead Raidway Crossings	Conduits.	Height of lowest above rail.	Ft. In.						
55	Оуеви	Ç	No.		- :					
45		Bridges.	Height of lowest above rail.	Ft. In.	16 4 22 0	96				
41		a <u>ā</u>	No.		102	-			: i- :	
40		NAME OF BAHWAY.	Number.		27 Elgin and Havelock 28 Grand Trunk (in Canada) 29 Grand Trunk (Canada Atlantic). 30 Halifax and Southwestern	31 Hampton and St. Martin s. 32 Hereford 33 Inverness Railway and Coal Co 34 Frondale, Bancroft and Ottawa.	ab) Rasio reta Sucan. 37 Kettle River Valley. 38 Kingston and Pembroke. 38 Kingston and Pembroke.	40 Liverpool and Milton. 41 Lotbiniere and Megantic. 42 London and Port Stanley. 43 Martine Railway and Coal Co.	11 Maganetawan Kaver 16 Massuwippi Valley 17 Midland of Manitoba.	48 Monteon and Juctouche 49 Montreal and Atlantic 50 Montreal and Promont Junction 52 Montreal and Vernont Junction

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53 Napierville Junction  54 Nekson and Fort Sheppard  55 New Brunswick Coal and Ry. Co.  56 New Brunswick Southern.  57 New Brunswick Southern.  58 New Westminster Southern.  59 North Since.  60 Nosbonsing and Nipissing  61 Nova Soctia Steel and Coal Co.  61 Nova Soctia Steel and Coal Co.  62 Orford Mountain.  63 Ottawa and Now York.  63 Ottawa and Now York.  64 Père Marquette, in Chanda.  65 Princeton Branch, of Washington Co.  66 Princeton Branch, of Washington Co.  67 Queboc Central.  68 Queboc Central.  72 Ruthand and Lake St. John  69 Queboc Ry., Light and Power Co.  70 Queboc Ry., Light and Power Co.  72 Ruthand and Noyan  72 Ruthand and Aurora.  73 Salisbury and Harvey.  74 Schomberg and Aurora.  75 Stanstead, Shefford and Chambly.  76 St. Clair Tunnel.  77 St. Lavvence and Adirondack.  78 Stanstead, Shefford and Buffalo.  80 Teniskaming and Northern Ontain St.  81 Thousand Islands.  82 Toronto, Hamilton and Buffalo.  83 Vancouver Copper Co.  84 Vancouver Copper Co.  85 Victoria and Sidney, B. C.  86 Victoria and Sidney, B. C.  87 Victoria and Sidney, B. C.  88 Walsush Ry., in Ganada.  89 Veltington Colliery Co.  80 Veltington Colliery Co.  80 Vet and Carleton.	
53 Napierville Junction 54 Nelson and Fort Sheppard 55 New Brunswick Coal and Ry. Co. 56 New Brunswick Southern. 57 New Brunswick Southern. 58 New Westminster Southern. 59 North Since. 59 North Since. 60 Nosbonsing and Nipissing 60 Orford Mountain. 61 Orford Mountain. 62 Ottowa and Now York. 63 Ottowa and Now York. 64 Père Marquette, in Chanada. 65 Ottowa and Now York. 65 Ottowa and Lake St. John 66 Princeton Branch, of Washington C 67 Queboc Central. 71 Red Mountain. 72 Ruthand and Lake St. John 69 Queboc Ry., Light and Power Co. 70 Queboc Ry., Light and Power Co. 70 Queboc Ry., Light and Power Co. 71 Red Mountain. 72 Ruthand and Noyan 73 Salisbury and Harvey. 74 Schomberg and Aurora. 75 Stanstead, Shefford and Chambly. 76 St. Clair Tunnel. 77 Salisbury and Louisburg. 78 Salisbury and Louisburg. 79 Temiscouata. 80 Temiscouata. 81 Thousand Islands 82 Toronto, Hamilton and Buffalo. 83 Vancouver Copper Co. 84 Vancouver Copper Co. 85 Victoria and Sidney, B. C. 86 Victoria and Sidney, B. C. 87 Victoria and Sidney, B. C. 88 Walbash Ry., in Canada. 89 Veitoria and Carleton.	
$10b-14\frac{1}{2}$	

TABLE 15A .- Summary of Accidents to Persons for the

A .- ACCIDENTS RESULTING FROM THE MOVEMENT

PASSEN

172	173	174	175	176	177	178	179	180	181	182
									KIN	D OF
NAME OF RAILWAY.	_	Col- IONS.		RAIL- NTS.	0	TING F INS.	OR (	OTIVES CARS AKING OWN.	FAL FROM T LOCG TIV OR C	'RAINS, OMO- 'ES
Number.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Canada Southern Canadian Government Railways— Intercolonial Prince Edward Island. Canadian Northern Canadian Northern, Quebec. Canadian Pacific Grand Trunk (in Canada). Grand Trunk (in Canada). Halifax and Southwestern Kingston and Pombroke Montreal and North Shore. Montreal and Province Line Nelson and Fort Sheppard. Nelson and Fort Sheppard. Nelson and Fort Sheppard. Vestminster Southern. Distance and New York. Pere Marquette Quebec and Lake St. John. Stanstead, Shefford and Chambly. Temiskaming and Northern Ontario Vancouver, Victoria and Eastern.	5 1	22 24	1	1 13 13 1 29					1 2 6	1 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total	6	83	1	99					11	11

Note.—Postal Clerks. Pullman Employees, etc.—Injured, 25.

Year ending June 30, 1909, showing kind of Accident.

OF TRAINS, LOCOMOTIVES OR CARS.

GERS.

183	184	185	186	187	188	189	190	191	15%	193	194	
ACCID	ENT.								,			
OR OFF	ING ON TRAINS,	STRI	ск ву Т	RAINS, LO	сомотіч	es or C	Cars.	Ozveza	CAUSES.		TAL	di debendi didi bilmanana
Loc-	omo- r Cars.	AT HI Cross	GHWAY SINGS.	AT ST	ATIONS.	OTHER S ALONG RACK.	OTHER	CAUSES.	TO PASS	ENGERS.		
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
1 8 3	2 9 2 26 15 1 1	i		1	2		i	2	1 15 4 1	1 1 1 3 23 4	3 42 9 76 70 1 7 2 1 1 1 13 1 1 2 2 9 8 15	1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20 21
14	57	1		1	5		1	2	25	36	281	

TABLE 15 B.—Summary of Accidents to Persons for the

A.-ACCIDENTS RESULTING FROM THE

EMPLOYEES-

										1101	
	1	2	3	4	5	6	7	8	9	10	11
	-									Kı	ND OF
	NAME OF RAILWAY.	Coup	r	Coupling.		Derail	ments.	(	ting of ins.	or ( Brea	notives Cars Iking wn.
Number		Killed	In- jured	Killed	In- jured	Killed	In- jured	Killed	In- jured	Killed	In- jured
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 166 17 18 19 20 21 22 23 24 25 26 27 98	Bessemer and Barry's Bay. Canada Southern. Canadian Gov't Railways— Intercolonial. Prince Edward Island. Canadian Northern. Canadian Northern, Quebec. Canadian Pacific. Crowsnest Southern. Dominion Atlantic. Grand Trunk (in Canada). Grand Trunk (Canada Atlantic). Halifax and Southwestern. Hereford. London and Port Stanley Manitoulin and North Shore. Maritime Railway and Coal Co. Massawippi Valley Moutreal and Atlantic. Montreal and Vermont Junction. Morrissey, Fernie and Michel Moncton and Buctouche. Nelson and Fort Sheppard. New Brunswick Southern	2 8 2 1	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	3 26 2 25 1	1 1 9	2		1		1
32 33 34 35 36 37 38 39	Père Marquette (in Canada) Quebec and Lake St. John. Quebec Ry., Light and Power Co. Quebec, Montreal and Southern. Red Mountain. Stanstead, Shefford and Chambly St. Lawrence and Adirondack. Temiscouata Temiskaming & Northern Ontario Toronto, Hamilton and Buffalo. Vancouver, Victoria and Eastern. Wabash (in Canada).	1 1 1	2 2 1	,		2			1		
	Final total	17	99	35	74	15	61		3	. •	6

Year ending June 30, 1909, showing kind of Accident.

MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

#### TRAINMEN.

12	13	14	15	16	17	18	19	20	21	22	23
Accides	т.										tal
Tra	otives	Jumpir off Tr Locom or C	rains, lotives	Tra	ek by ins, notives ears.		rhead uctions.	Other	Causes.	t	dents o ımen.
Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
	1									1	1 1
	5		5		1			·····i	115	······i	5 1 32
1	ช้		3	1	2				28 2	3	69 5
1 2 8	12 1 34	3	11 1 24 1	3	18		1 3	. 4	17 6 65 3	5 3 59	64 11 227
6	1 33 2	1	9	2 1	8		$\begin{array}{c} 1 \\ 2 \end{array}$	····i	40	19	8 1 140 15
			1			• • • • •			······i		3 1 1 1
					1						1 1 2
1	i				1		1		1	1	12 2 1 3
1		1							1	1	1
1	4		5 3						1 5 1	·	1 18 8
	1		1		1				1	2	3 3 1 3
	1		1 1		1 1				i	1 1	3 6 1
1	3 3	1	2		1			2	8 8	3 5 1	19 16
23	112	6	69	7	41		8	10	215	113	693

# TABLE 15 C .- SUMMARY of Accidents to Persons for

ACCIDENTS RESULTING FROM THE MOVEMENT

							TABL	E 15, C.	EM	PLOY	EES-
	22	26	27	28	29	30	31	32	33	34	35
										К	IND OF
	Name of Railway.	Conp		Collis	sions.	Derailı	ments	Part O Tra	f	20000	
Number		Killed	In- jured.	Killed	In- jured.	Killed	In- jured.	Killed	In- jured.	Killed	In- jured.
2 C 3 C 4 C 5 C 6 C 7 I 8 C 9 N 10 N 11 C 12 I 13 S 14 N	Canada Southern Can. Gov't. Ry.—Intercolonial'. Canadian Northern. Canadian Northern, Quebec Canadian Pacific. Crowsnest Southern Dominion Atlantic. Frand Trunk Montreal and Atlantic. Nelson and Fort Sheppard Orford Mountain Père Marquette Sydney & Louisburg (Dom. Coal Co) Vancouver, Victoria and Eastern. Wabash (in Canada).  Final total.	1		1			1 3		}	-	
2 0	Can. Gov't. Ry.—Intercolonial Canadian PacificVancouver, Victoria and Eastern.							ε 15, D	. EM	PLOY	EES-

Final total ....

the Year ending June 30, 1909, showing kind of Accident.

OF TRAINS, LOCOMOTIVES OR CARS.

#### TRACKMEN.

36	37	38	39	40	41	42	43	44	45	46	47			
Acciden	T.													
Tra Locom	Falling from Trains, Locomotives 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.	Ki led	Injured.	Killed.	Injured.			
1	1 3 3	1	7	1 1 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 10 1 1 1 1 2		2	2 2 1	15	1 2 1 1 26 1 1 1 1 2	38 38 3 5 1 2 1			
1	12	1	9	28	20			5	24	37	71			

# STATION MEN.

1 1		 6	2	1 1 8 2
	 	 		1 0
1 2			2	10

TABLE 15 E.—Summary of Accidents to Persons for

A-Accidents Resulting from the Movement

#### EMPLOYEES-SWITCH TENDERS,

25	26	27	28	29	30	31	32	33	34	35
									К	IND OF
Name of Railway.	0	r	Colli	sions.	Derail	ments.	(	of	or (	notives Cars king vn.
	Killed	In- jured.	Killed	In- jured.	Killed	In- jured.	Killed	In- jured.	Killed	ln- jured.
Canadian Pacifle		13 2								
Total		15								
						TAB	LE 15	, F—E	MPLO	YEES
Canadian Govt. Railway— Intercolonial Canadian Northern Canadian Pacific										
Total	••••	1			- T	TABLI	E 15, G	—ЕМ	PLOY	EES-
		\								
					Т	ABLE	15, H	.—ЕМ	PLOY	EES-
Canadian Govt. Railway— Intercolonial Canadian Northern Canadian Pacific. Crowsnest Southern. Dominion Atlantic Grand Trunk " (Canada Atlantic). Père Marquette. Quebec, Montreal and Southern. Vancouver, Victoria and Eastern.		8	3	11		1		1	1	
	Canada Southern Canadian Pacific. Grand Trunk  Total  Canadian Southern Canadian Govt. Railway— Intercolonial Canadian Northern Canadian Pacific. Montreal and Atlantic.  Total  Canadian Northern, Quebec Grand Trunk  (Canada Atlantic)  Total  Canadian Northern Canadian Recific Common Atlantic Crand Trunk Canadian Northern Canadian Northern Canadian Recific Canadian Northern Canadian Recific Crowsnest Southern Dominion Atlantic Grand Trunk  (Canada Atlantic)  Père Marquette Onebec. Montreal and Southern	Canada Southern Canadian Pacific. Grand Trunk  Total.  Canadian Northern Canadian Northern Canadian Pacific. Montreal and Atlantic.  Total.  Canada Souther n Canadian Northern Canadian Pacific. Montreal and Atlantic.  Total.  Canadian Northern Canadian Pacific.  Conscious Atlantic.  Total.  Canadian Northern Canadian Pacific.  Consenses Southern Canadian Pacific. Consenses Southern Canadian Pacific. Crowsnest Southern Comminion Atlantic Crand Trunk  Canada Atlantic).  Père Marquette. Quebec, Montreal and Southern Vancouver, Victoria and Eastern	Canada Southern. Canadian Pacific. Canadian Northern. Canadian Northern. Canadian Northern. Canadian Atlantic. Total.  Canada Southern. Canadian Northern. Canadian Northern. Canadian Northern. Canadian Northern. Canadian Atlantic.  Total.  Canada Souther n. Canadian Northern. Canadian Northern. Canadian Northern. Canadian Atlantic.  Total.  Canada Souther n. Canadian Northern. Canadian Atlantic.  Total.  Canada Souther n. Canadian Royt. Railway— Intercolonial Canadian Atlantic.  Canadian Royt. Canadian Southern. Canadian Pacific. Canadian Royt. Canadian Royt. Canadian Canadian Pacific. Canadian Royt. Canadian Royt	Name of Railway.  Canada Southern Canadian Pacific. Canadian Govt. Railway— Intercolonial. Canadian Pacific. Montreal and Atlantic. Total.  Canada Southern Canadian Northern Canadian Northern Canadian Northern Canadian Northern Canadian Pacific. Total.  Canadian Northern Canadian Pacific. Canada Atlantic Grand Trunk 8 3 Père Marquette Quebec, Montreal and Southern Vancouver, Victoria and Eastern	Coupling or Uncoupling.   Collisions.	Coupling of Uncoupling.   Collisions.   Derain Un	Coupling	Name of Rahway.   Coupling or Uncoupling.   Collisions.   Derailments.   Pat Of Uncoupling.   Collisions.   Derailments.   Tree of Uncoupling.   Collisions.   Derailments.   Pat Of Uncoupling.   Pat Of Uncoupling.   Pat Of Uncoupling.   Derailments.   Pat Of Uncoupling.   Pat Of U	Coupling	Coupling

the Year ending June 30, 1909, showing kind of Accident.

OF TRAINS, LOCOMOTIVES OR CARS.

CROSSING TENDERS AND WATCHMEN.

36	37	38	39	40	41	42	43	44	45	16	47
Accides	VT.							1		Total A	ceidents
Tra Locon	g from ins, notives Cars.	Jumpin off To Locom or C	ng on or rains, notives Cars.	Tra Locor	ck by ins, notives Cars.		erhead cuctions.	Other	causes.	to Swit ders, C Tende	ch Ten- rossing rs, and hmen.
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed	Injured.	Killed	Injured.	Killed.	Injured.
		1	4	2	1 3			} 	13	3	1 18 8
		1	4	2	4				4	3	27
-ѕнов	PMEN.										
				2						2	1
1	1 3	1	1	1	2 2			1 1	1 5	1 3 1	11 11
1	4	1	1	3	4			2	6	7	16
TELEG	RAPH I	EMPLO	YEES.								
					1 1				1		1 1 1
			••••		2				1		3
отнен	REMPL	OYEES.									
				1	1					1	1
1	2 7		·· ·· ·· · · · · · · · · · · · · · · ·	5	1 2				7	· · · · · · · · · · · · · · · · · · ·	1 5 25
1	3		4	5 1	1 8 1 2		1	1	4	10 2	1 1 31 5 2 2 2
			1 2						1		
2	12		12	12	16		1	1	13	20	77

Table 15 L.—Summary of Accidents to Persons for the Year ending June 30, 1909, showing kind of Accident.

A. -ACCIDENTS RESULTING FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

# OTHER PERSONS TRESPASSING.

199   295   296   297   298   299   211   212   213   214   215   216   217     RIND OF ACCIDENT.   Palling from Jumping on or Struck by Trains, Lacomotives, or Cars of Trains, Locomotives or Cars.   At Highway At Santions, At other Points or Cars.   At Highway At Santions, At other Points or Cars.   Trespassing.   At Milling d.				9-10 EDWARD VII., A. 1910
Falling from Jumping on or Struck Ly Trains, Locomotives, or Cars of Trains, Locomotives, or Cars or Cars.   Incomotives or Cars   Incomotives or Cars   Incomotives   I	217	tal nts to ner ons—	.b.auj	η
Falling from Jumping on or Acetibent.   Falling from Jumping on or Struck by Trains, Locomotives, or Cars.   Locomotives or Cars.   Liping from Jumping on or Struck by Trains, Locomotives or Cars.   Locomotives or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping fro	216			
Falling from Jumping on or Acetibent.   Falling from Jumping on or Struck by Trains, Locomotives, or Cars.   Locomotives or Cars.   Liping from Jumping on or Struck by Trains, Locomotives or Cars.   Locomotives or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping on or Struck by Trains, Locomotives, or Cars.   Liping from Jumping fro	215		g   beruli	T
Falling from Jumping on or Struck by Trains, Locomoodives or Cars.   At Highway At Stations,   Locomoodives or Cars.   Locomoodives or Cars.   Locomotives or Cars.   Limited.	314			M
Falling from Jumping on or Struck by Trains, Locomoodives or Cars.   At Highway At Stations,   Locomoodives or Cars.   Locomoodives or Cars.   Locomotives or Cars.   Limited.	213	r Cars	Truck.	
Falling from Falling from Ours. Caus. 1205	212	bives, o	along along illed.	M Historia
Falling from Falling from Ours. Caus. 1205	211	ocomo	ijured.	
Falling from Falling from Ours. Caus. 1205	310	er.		
Falling from Falling from   Trains,   Locomotives   Or Cars.   1	500	Acordens : by Th	amgs hagy	H
Falling from Falling from   Trains,   Locomotives   Or Cars.   1	808	D OF A	illed. Cross	
Falling from Falling from   Trains,   Locomotives   Or Cars.   1	202	KIN Ron or rains,	Jured.	
Ealling from Falling or Cars. Injured. Injured. Injured.	506	Jumpii Tio	illed.	A
	205	ig from ains,	Cars. Cars. beruit	
E	204	Fallin	illed.	A
	139		.bərujı	II si
20 and a second	198		illled.	H.
NAME OF RAILWAY.  Brandon, Saskatchewan and Hudson Bay. Canadian Novernment Ry.—Intercolonial Canadian Noverhern. Canadian Noverhern. Canadian Noverhern. Canadian Noverhern. Canadian Achtern. Canadian Alantic. Il Massawipi Valley. Il Massawipi Valley. Il Massawipi Valley. Il Montreal and Atlantic Southern. Il Woweel and Atlantic Southern. Il Wobere Central. Il Quebec Central.	195			Brandon, Saskatchewan and Hudson Canada Southern Canadian Northern Canadian Northern Canadian Northern Canadian Northern Canadian Northern Canadian Pacific Crowsnest Southern Dominion Alantic Grand Trunk (Ganada Atlantic) Massawippi Valley. Montreal and Atlantic Now Westminster Southern New Westminster Southern Père Marquette Quebec Central Quebec Central Quebec Ry, Light and Power Co. Stanstead, Shefford and Chambly Sydney and Lonisburg Temiskaming and Northern, Ontario.

SESSI	ONAI	_ PAPI	ER No. 20b	
-31	98		440 888222 - S	6
c) <del>4</del>	190		8 7 4 1 2 2 1 1 1 2 2 2 1 1 1 1 2 2 2 2 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5
: : :	22		22	i
- : :	9			>
23	43		c	•
- 2	105		H : H :   0	1
	10		20	•
	17	ING.		1
	15	TRESPASSIN	- 12 12 12 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	?
	22	- 1	23.5 - 1   23.5 + 6.5	3
- : :	13	NOT.		•
	16	PERSONS		•
	2	THER PE		
: 01	19	Ĭ.	-	•
: : :	2	Тавьк 15, Л		
	10	l'AB		
22 Toronto, Hamilton and Buffalo. 23 Vancouver, Victoria and Eastern. 24 Wabash (in Canada).	Final Total	1	1 Canada Southern 2 Canadian Government Ry.—Intercolonial. 3 Canadian Northern 4 Canadian Northern 5 Canadian Pacific 6 Grand Trunk (Canada Atlantic). 7 Grand Trunk (Canada Atlantic). 8 St. Lawrence and Adirondack 9 Sydney and Louisburg. 10 Wabash (in Canada	THE TAXABLE PROPERTY.

Table 15K.—Summary of Accidents to Persons for the

B. - Accidents arising from Causes other than those Resulting

EMPLOYEES-STATION

				3	STATIO?	v Men				
				Ki	ind of 2	Accide	nt.			
Name of Railway.	Hano Tra	lling ffic.	Hand Too Machi &c	ds, nery,	Hand Supp	olies,	Getti or Locom or Ca	off otives ers at	Otl Cau	
Number:	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Algoma Central and Hudson Bay. Bay of Quinté Canada Sonthern Canadian Govt. Ry.— Prince Edward Island. Canadian Northern Gundian Northern Gundian Northern Gundian Northern Gundian Northern Gundian Northern Gundian Northern					• • • •					1
Canadian Pacific		12	3	6					2	
Ottawa and New York		1								
Toronto, Hamilton and Buffalo										

SESSIONAL PAPER No. 20b

Year ending June 30, 1909, showing kind of Accident.

FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES, OR CARS.

MEN AND SHOPMEN.

Total Acciden to Station M		Hano Tra	lling	Mach	idling	SHOPM ad of A Hand Supp	Acciden	Getti		Otl Cau		Acci	otal dents to omen.	
Killed.	- Training	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number,
5	1		2	2	1 30 7 27 1 9 37 1 1 1 1 4 2 2 2 2 20 1 4		963		7	2	2 18 3 7 	1 2 2 2	2 1 59 10 50 1 1 9 73 2 2 2 1 16 	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
5	32	•••••	2	2	150		32		11	3	74	5	269	1

TABLE 15L.—SUMMARY of Accidents to Persons for the

B.-Accidents arising from Causes other than those Resulting

EMPLOYEES-TRACKMEN

					TRACE	CMEN.				
				Ki	nd of A	cciden	it.			
Name of Railway.	Hand Tra		Hand Too Machi	ols, nery,	Hand Supp	olies,	Gettin or Locom or Ca	off otives irs at	Otl Cau	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Algoma Central and Hudson Bay. 2 Bay of Quinté 3 Brockville, Westport and North-	· · · · · · · · · · · · · · · · · · ·			. ;						
western				1		9				1 3
5 Intercolonial				4 8		21	• • • •	1		4 3
O Canadian Pacific			3	1 31 1	1	20 8		<u>4</u>	4	74 1
2 Dominion Atlantic 3 Grand Trunk. 4 " (Canada Atlantic). 5 London and Port Stanley		1								 5 1
6 Massawippi Valley				1		$\frac{1}{2}$		1		
9 Nelson and Fort Sheppard						1 			• • • •	
3 Quebec and Lake St. John4 Red Mountain. 5 Temiscouata										
6 Temiskaming and Northern On-						18			<u>i</u>	···· š
Total		4	3	55	1	82		6	5	101

Year ending June 30th, 1909, showing Kind of Accident.

FROM THE MOVEMENT OF TRAINS, LOCOMOTIVES OR CARS.

# AND OTHER EMPLOYEES.

		1												_
					От	HER E	MPLOYE	ES.						
Acc	otal ridents to				Ki	nd of £	Acciden	ıt.			,	Acc	otal idents to	
Trac	ckmen.	Han Tra	dling	Mac	ndling lools, chinery, &c.	Sup	ndling plies,	Locor or C	ing on off notives ars at est.		ther		the <b>r</b> loyees.	
Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Number.
	2										1		1	$\frac{1}{2}$
	1 13		i		1		1		4		6	1	13	3
8	8 33 1 132 10 8 1 1 4 4 1 1 1 2 2 4 4		1 2 25 3 1 2 2 1	i	16 3 11 16 3 3 3 1 1 1 1	1	8 1 5 3 7 3		5	3	1 5 19 2 42 2 1 7 1 1	3	2 11 65 1 2 71 8 1 18 3 3 2	56 67 78 99 100 111 122 133 144 155 166 177 188 199 201 222 233 244 25
1	26		: i	• • • • • •	2						1 18		1 21	26 27
9	248		39	1	41	2	28		15	5	110	8	233	1

ELECTRIC

TABLE 1.—SUMMARY Statement of Description of Road, Mileage

	. 1	2	3	4	5
				Тваск.	
	Name of Railway.	Length	Length	Total	Length
1		of Road,	of	Length	of Sidings
TAGIIII) AT		First	Second Main Track.	of Main Track	and Turnouts.
1					
1	Raylin and Waterlee	3.12		3:12	.38
2	Berlin and Waterloo.  Leased Line- Berlin and Bridgeport.  Brantford and Hamilton Electric.	2.40		2.40	.10
3	Brantford and Hamilton Electric	23.00		23.00	
4	British Columbia	77:78	13.44	91:22	6:52
5 6	Cape Breton Chatham, Wallaceburg and Lake Erie	11.58 34.00		11.58 34.00	-20
7	Cornwall Street	4.00		4.00	2.50
8	Cornwall Street Egerton Tramway Co., N.S., now Picton County				
	Electric	7.30		7:90	:20
9 0	Galt, Preston and Hespeler Leased Line—Preston to Berlin	17.81	1 36	19.17	7 · 25
1	Grand Valley			38.29	-19
2	Guelph Radial	6.00		6.00	*33
3	Halifax Tramway	9.908		13 002	.38
4	Hamilton and Dundas	$\frac{7.00}{22.09}$			
5	Hamilton, Grimsby and Deamsville	25.00		25.00	
7	Hamilton and Dundas Hamilton, Grimsby and Beamsville. Hamilton Radial Hamilton Street	22:00		22 00	
8	HUII	11 11	11.51	23.02	2:31
9	International Transit Co			3:68	-21
20	Kingston, Portsmouth and Cataraqui	8:00		8·00 10·25	
22	Levis County	25.73	6:79	32.52	75
23	Montreal Park and Island	26.74	14.61	41.35	3 17
14	Montreal Street	74.68	57:18	131.86	16.1
5	Montreal Terminal	18.22	4.66	22.83	7.3
26 27	Nelson Tramway. Niagara Falls Park and River	10.02	9:31	19:33	1.4
8	Niagara, St. Catharines and Toronto			40.06	5.5
9	Oshawa.	4.00	1	4.00	4.8
30	Oshawa. Ottawa Peterborough Radial.	23:40	20.64	44.04	.5
32	Peterborough Radial.	5·10 9·321	(: AEC	5.10	$\frac{1}{7}$
3	Port Arthur Street	17 22		15·779 17 22	1
3.4	Quebec Ry., Light & Power Co. (Montmorency).	30.00	6.30	36.30	2.0
35	Quebec Ry., Light & Power Co. (Montmorency). Sandwich, Windsor and Amherstburg	35.81		35.81	
36	Sarnia	8.59			1.0
37 38	Sherbrooke Street South-western Traction Co			7:00 28:50	1.2
39	St. John	12.50	6.20	19:00	
49	St. Stephen, N.B	7.00		7.00	
11	St. Thomas Street	7:50		7.50	.5
12 13	Sydney and Glace Bay	20:98 49:65	53 203	$\frac{1}{102.859}$	· 3
13 11	Toronto Suburban	49 09	1	9.84	4.3
15	Toronto Suburban. Toronto and York Radial	72.42		72.43	8.4
16	Windsor, Essex and Lake Shore Rapid	.   36.167		36:167	3.8
47	Winnipeg Street	61.62		61.62	
48	Yarmouth Street	2.00		2.00	
	Total	988 · 970	215.057	1,204.027	83 6

RAILWAYS.

and Passengers carried for the Year ending June 30, 1909.

6	7	8	9	10	11	12	13	
			MILEAGE.		Pass	SENGERS CARR	IED.	
Total Computed as Single Track	Track Leased.	Passenger Car Mileage.	Freight, Mail and Express Car Mileage.	Total Car Mileage.	Fare Passengers Carried.	Transfer Passengers Carried.	Total Passengers Carried.	N.T.
3·50 2·50 23·00 97·74 11·87 34·00 6 50	21 00	89,987 34,400 246,915 4,647,797 321,570 104,623 192,284	39,141 114,934 21,932 12,882	\$9,987 34,400 286,056 4,762,731 321,570 126,555 205,166	590,705 128,010 247,195 25,183,739 1,524,437 257,276 381,536	21,876	612,581 128,010 247,195 25,183,739 1,883,656 257,276 381,536	-
8·1 26·42		$\begin{array}{c} 132,887 \\ 223,725 \end{array}$	5,023 29,251	137,910 252,976	916,142 730,880		916,142 730,880	
38·48 6·33 13·389 7·00 22·00 25·34 3 90 8·00 10·25 33·25 45·07 14·97 30·22	1.82	467,061 200,800 814,375 119,271 275,801 392,880 1,620,418 529,837 283,284 199,680 288,920 1,426,339 954,316 14,314,541 627,670	189 37,257 21,788 24,198 6,100 3,817 100,311 22,077	467,061 200,800 814,375 119,860 313,058 414,668 1,620,418 554,935 283,284 199,680 295,020 1,426,339 958,133 14,414,852 649,747	693,778 567,413 4,162,985 423,287 421,699 1,013,900 8,076,511 955,230 895,198 753,265 1,555,775 6,460,709 3,438,693 93,381,633 1,632,158	73,000 3,789 145,872 34,229 1,020,242 31,577,363 115,931	754,342 567,413 4,565,196 423,257 431,699 1,013,900 8,076,511 1,028,230 898,987 899,137 1,590,004 7,480,951 3,779,959 124,958,996 1,748,089	
20·75 45·62 8·83 44·54 5·242 16·520 17·22 38·30 35·81 9·25 7·00 29·75 19·00 7·70	2:22	356,652 666,969 40,284 3,675,888 257,450 389,420 1,394,744 327,156 838,673 143,990 288,020 304,928 983,648 183,960 333,032	81,429 17,203 15,000	356,652 748,398 57,487 3,690,888 257,450 389,420 1,394,744 327,156 838,673 143,990 288,020 340,539 983,648 183,960 333,032	1,180,882 2,360,107 126,999 14,216,621 622,145 6,859,679 1,271,622 2,911,358 645,463 734,319 497,195 3,601,809 590,717 455,480	3,266,000 343,324 108,951 22,259 1,318,894 23,389 151,820 22,220	1,180,882 2,378,712 126,999 14,216,621 622,145 10,125,679 1,271,622 3,254,682 645,463 843,270 519,454 5,010,703 614,106 607,300	
21.31 107.243 10.26 80.85 40.007 61.62 2.00	2.28	256,193 14,859,474 204,344 950,290 191,130 4,279,590	11,154 82,803 55,220	333,032 267,347 14,839,474 204,344 1,033,003 246,350 4,279,590	1,937,880 92,850,010 891,203 3,595,892 244,280 23,940,885	22,220 34,951,318 40,648 7,307,956	1,960,100 127,801,328 931,851 3,595,892 244,280 31,248,841	the often the often the often
1,287 651	38.90	59,415,126	737,720	60,152,846	314,026,671	81,670,945	395,697,616	

# ELECTRIC

TABLE 2—SUMMARY Statement of Capital

Name of Railway.   Amount Outstanding	1	1		[	
Name of Railway.   Amount Outstanding	1	2	3	4	5
Name of Railway.   Amount Outstanding			Stocks.		Funder
1 Berlin and Waterloo   1,000   7,083   87.50   2,208   2,208   3 Brantford and Hamilton Electric   300,000   13,013   31.25   660,000   4 British Columbia   6,326,666   82,164   51.12   6,651,21   5 Cape Breton   1,234,000   106,563   57.00   930,000   13,013   125   6,051,21   5 Cape Breton   1,234,000   106,563   57.00   930,000   7 Cornwall street   200,000   30,769   100.00   278,000   20,864   57.47   185,000   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626,55   626			per Mile of	to total Railway Capital.	Outstanding
3 Brainford and Hamilton Electric   300,000   13,043   31 25   6600,000     4 British Columbia   6,326,666   82,164   51 12   6,051,214     5 Cape Breton   1,234,000   16,563   57 00   930,000     7 Cornwall street   200,000   30,769   100 00     7 Cornwall street   200,000   30,769   100 00     8 Caperton Transway Co. (now Pictou County)   250,000   30,864   57 47   185,000     9 Galt, Preston and Hespeler   49,850   2,799   7 36   620,853     1 Carsad Valley   1,100,000   102   100 00     1 Carnad Valley   1,100,000   18,000   100 00     3 Halifax Transway   1,400,000   14,210   69 60     4 Hamilton and Dundas   100,000   14,286   28 56   250,000     5 Hamilton, Grimsby and Beamsville   235,000   10,682   61 100     6 Hamilton Radial   111,150   4,446   8 74     1 Hamilton Street   2205,000   23,031   29 08     8 Hull   2270   22,601   100 00     9 International Transit Co   150,000   40,761   22 70     10 Kingston, Portsmouth and Cataraqui   83,100   10,888   45 60   99,25     1 Levis County   382,600   37,327   71 69   573,000     3 Montreal Park and Island   1,035,900   22,984   45 02 7     4 Montreal Terminal   1,000,000   142,857   78 55   4,220,00     3 Montreal Terminal   1,000,000   142,857   78 55   4,220,00     4 Montreal Terminal   1,000,000   142,857   78 55   4,220,00     5 Montreal Terminal   1,000,000   142,857   78 55   4,220,00     6 Nelson Transway   1,000,000   142,857   78 55   4,220,00     7 Niagara Falls Park and River   925,000   25,001   37 74   10,000,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,000   10,0		\$	\$	Per cent.	\$
14 Winnipeg Street. 7,337,367 119,113 54 98 5,000,00	3 Brantford and Hamilton Electric. 4 British Columbia 5 Cape Breton. 6 Chatham, Wallaceburg and Lake Erie. 7 Cornwall street. 8 Egerton Tramway Co. (now Pictou County). 9 Galt, Preston and Hespeler. 1 Leased Line—Preston to Berlin. 1 Grand Valley. 2 Guelph Radial. 3 Halifax Tramway. 4 Hamilton and Dundas. 5 Hamilton Radial. 6 Hamilton Radial. 7 Hamilton Radial. 9 International Transit Co. 0 Kingston, Portsmouth and Cataraqui. 1 Levis County. 2 London Street. 8 Hull. 9 International Tramsit Co. 0 Kingston, Portsmouth and Cataraqui. 1 Levis County. 2 London Street. 5 Montreal Park and Island. 4 Montreal Park and Island. 5 Nelson Tramway. 7 Niagara Falls Park and River. 8 Niagara, St. Catharines and Toronto. 9 Oshawa 1 Peterborough Radial. 2 Port Arthur and Fort William. 3 Quebee Ry. Light and Power Co. (Citadel). 1 Quebee Ry. Light and Power Co. (Montmorency). 4 Sandwich, Windsor and Amherstburg. 5 Sarnia Street. 6 Sherbrooke Street. 7 Southwestern Traction Co. 8 St. John. 9 St. Stephen, N.B. 0 St. Thomas Street. 1 Sydney and Glace Bay. 2 Toronto Street. 3 Toronto Suburban. 4 Toronto Suburban. 6 *Windsor, Essex and Lake Shore Rapid. 6 *Windsor and Tecumseh. 7 Winnipeg Street.	300,000 6,326,666 1,234,000 639,000 200,000 250,000 49,850 1,000 1,000,000 1,000,000 235,000 1111,150 205,000 232,000 150,000 232,000 1,000,000 1,000,000 1,000,000 1,247,700 100,000 297,000 297,000 297,000 290,000 290,000 200,000 359,100 800,000 100,000 8,000,000 8,000,000 2,000,000 750,000 100,000	13,043 82,164 106,563 18,794 30,769 30,864 2,799 102 26,004 18,000 140,210 14,286 10,682 4,446 9,318 22,601 40,761 10,388 37,327 16,566 22,984 142,857 33,091 4,530 28,013 19,608 75,581 8,294 9,730 28,571 12,600 64,000 14,285 26,738 69,771 8,130 24,737 20,833 119,113	31 25 51 12 57 00 52 49 100 00 57 47 7 36 6 100 00 61 50 100 00 68 74 29 08 100 00 22 56 61 00 61 50 71 69 48 90 50 27 78 55 62 00 51 65 31 14 71 40 55 67 56 19 37 74 33 86 57 14 33 51 44 41 50 00 54 17 66 67 35 85 56 18	101,316 2,200 660,000 6,051,214 930,000 578,500 185,000 625,852 688,800 250,000 1,160,000 575,000 1,250 161,100 607,250 613,000 613,000 77,601 165,000 17,63,000 17,63,000 17,63,000 17,63,000 17,63,000 17,63,000 17,63,000 17,63,000 17,100 150,000 17,100 150,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 18,000 18,000 18,000

<sup>\*</sup>Under construction.

# RAILWAYS.

for the Year ending June 30, 1909.

6	7	8	9	10	11	12	13	_
Debt.			FUNDED	Dest.		Sum	IARY.	
Amount	Proportion to Total Railway		Designa	tion.		Total Railway	Amount per Mile of	
per Mile of Line.	Capital.  100 x Col.5  Col. 12.	Bonds.	Miscellane- ous Obligations.	Income Bonds.	Equipment Trust Obligations.	Capital.  Cols. 2+5.	Line. Cols. 3+6.	Numbe
8	Per cent.	8	8	8	\$	8	8	1
28,947 917 28,696 78,587 80,311 17,014	100·00 12·50 68·75 48·88 43·00 47·51	$\begin{array}{c} 101,316 \\ 2,200 \\ 660,000 \\ 6,051,214 \\ 930,006 \\ 578,500 \end{array}$				101,316 19,200 960,000 12,377,880 2,164,000 1,217,590 200,000	28,947 8,000 41,739 160,751 186,874 35,808 30,769	1 2 3 4 5 6 7
22,839 35,196	42·53 92·64	185,000 100,000	526,852			435,000 676,702	53,703 37,995	8 9
16,288	38.50	688,800				1,000 1,788,800 108,000	102 42,292 18,000	10 11 12
61,260 35,714 6,818 46,400 22,727	30·40 71·44 39·00 91·26 70·92	600,000 250,000 150,000 1,160,000 500,000	7,000			2,007,000 350,000 385,000 1,271,150 705,000	201,470 50,000 17,500 50,846 32,045	13 14 15 16 17
139,130 12,406 14,741 17,268 22,742 63,143 20,284	77:30 54:40 28:31 51:10 49:73 21:45 38:00	512,000 99,250 151,109 575,000 1,025,000 4,420,000 613,000				292,000 662,000 182,350 533,700 1,125,000 2,060,900 14,420,000 1,613,000	22,601 179,891 22,794 52,068 33,834 45,726 206,000 53,375	18 19 20 21 22 23 24 25 26
59,880 21,617 10,017 11,225 15,614 28,843	100°00 48°35 68°86 28°60 44°33 100°00	600,000 866,000 88,452 506,000 50,000 461,488	29,631			600,000 1,791,000 128,452 1,747,700 179,631 461,488	59,880 44,707 14,547 39,238 35,222 28,843	27 28 29 30 31 32
58,927	43.81	2,500,000	10,000		23,899	5,783,899	134,508	33
13,683 8,335 21,429 25,000 80,000 14,285 8,303	42.86 66.49 55.59 50.00 100.00	490,000 77,100 	62,272		150,000	787,000 167,100 350,000 1,059,100 1,800,000 200,000 62,272	21,977 18,065 50,000 37,600 144,000 28,570 8,303	134 35 36 37 38 39 40
22,620 34,870 14,548 19,295 20,833	45 · 83 45 · 83 33 · 33 64 · 15 43 · 82 50 · 00	423,000 3,998,327 140,000 1,560,000 750,000 189,000	3,155			923,000 11,998,327 223,155 3,560,000 1,500,000 289,000	49,358 104,641 22,678 44,032 41,666	41 42 43 44 45 . 46
81,168	45.02	5,000,000				12,337,367	200,281	147
		38,845,747	368,910		173,899	91,604,989		

#### ELECTRIC

# TABLE 3.—SUMMARY of Income Account

	1	2	3	4	5
	-	-		*	
			EARNINGS AN	D INCOME.	
Main Del.	NAME OF RAILWAY,	Gross Earnings from Operation.	Operating Expenses.	Net Earnings from Operation.	Mis- cellaneous Income.
		\$ ets.	\$ cts.	\$ cts.	S et:
1 2 3 4 5 6 7 8 9 0	Berlin and Waterloo Leased Line—Berlin and Bridgeport. Brantford and Hamilton Electric British Columbia Cape Breton Chatham, Wallaceburg and Lake Erie. Cornwall Street. Egerton Tramway Co., now Pictou County. Galt, Preston and Hespeler Leased Line—Preston to Berlin.	29,564 53; 5,324 99; 84,039 37; 1,410,007 54; 84,919 28; 55,853 26; 26,432 05; 43,770 50; 117,613 29	22,797 71 4,880 70 63,666 22 895,565 45 53,944 55 28,383 52 23,915 45, 28,526 39 68,190 22	444 29 20,373 15 514,442 09 30,974 73 27,469 74 2,516 60 15,244 11	60,921 6 6,347 4
1 2 3 4 5 6 7 8 9 0 1 2 3 4 5	Grand Valley Guelph Radial Halifax Tramway Hamilton and Dundas. Hamilton, Grimsby and Beamsville. Hamilton Radial Hamilton Street Hull. International Transit Co Kingston, Portsmouth and Cataraqui Levis County London Street. Montreal Park and Island. Montreal Street. Montreal Terminal	27,847 28 184,927 51 41,192 58 92,305 72 119,224 52 327,702 70 75,731 89 38,071 21 30,625 15 5,691 42 238,685 41 272,201 57 3,765,137 47	76,534 59 32,436 78 31,145 35 59,196 02 162,493 47 187,249 98 2,187,190 30	5,064 93 76,141 57 9,775 09 17,732 29 23,274 41 104,045 49 —802 70 5,634 43 —520 20 495 40 76,191 94 84,951 59 1,577,947 17	31,404 (12,720 (1,116 (1)))
67890123	Nelson Tramway. Niagara Falls Park and River., Niagara, St. Catharines and Toronto. Oshawa Ottawa Peterborough Radial Port Arthur and Fort William. Quebec Ry., Light and Power Co. (Citadel). Quebec Ry., Light and Power Co. (Montmore	133,514 02 231,704 76 55 370 01	155,934 48 41,727 25 417,481 46 25,001 01	37,423 99	696
5 6 6 7 8 9 9 1 1 2 1 3 1 4 5 6 6	Quebec Ry., Light and Power Co. (Montmorency) Sandwich, Windsor and Amherstburg. Sarnia Street. Sherbrooke Street. Southwestern Traction Co. St. John, N.B. St. Stephen, N.B. St. Thomas Street. Sydney and Glace Bay Toronto Street. Toronto Suburban. Toronto and York Radial. Windsor, Essex and Lake Shore Rapid. *Windsor and Tecumseh.	151,386 05 171,749 85 40,264 36 31,176 38 92,865 83 163,749 78 29,649 30 18,690 58 97,566 65 3,750,283 72 40,966 01 328,918 76 85,273 06	102,203 61 29,047 23 32,593 72 60,517 81 145,713 14 26,480 11 22,235 57 60,525 21 1,870,434 43 30,147 56 196,182 73	11,217 13 -1,417 3 32,348 02 18,036 64 3,169 19 -3,544 99 37,041 44 1,879,849 29 10,818 45 132,736 03	98,753 368
7 8 9	Windsor and Technisen Winnipeg Street Woodstock, Thames Valley and Ingersoll. Yarmouth Street.	1,008,614 36	517,151 22		
	Total	14 811 795 97	8,885,235 70		

<sup>\*</sup>Under construction.

### RAILWAYS.

for the Year ending June-30, 1909.

6	7	8	9	10	11	12	13	
		Deduct	IONS FROM IN	соме.				
Gross Income less Operating Expenses.	· Taxes.	Interest on Funded Debt.	Interest on Floating Debt.	Other Deduc- tions from Income.	Total Deductions from Income.	Net Income.	Net Loss.	Numbun
ŝ ets.	s ets.	\$ cts.	\$ cts.	8 cts.	\$ cts.	\$ cts.	8 cts.	
6,766 82 444 29 20,373 15	137 87 1,473 05	5,338 30 110 00 39,600 00	776 37 16.436 51		5,338 30 1,024 24 57,509 56		579 95 37,136 41	
514,442 09 91,896 32 33,817 21	3,315 23	43,570 83		28,925 00	47,175 37 28,925 00	4,892 21		
2,516 60 21,889 56 49,423 07	749 07 1,753 57	9,000 00 5,000 00	1,273 31	6,984 27	16,733 34 8,026 88	5,156 22 41,356 19		1
7,070 60 5,064 93 76,250 56	1,990 57 9,240 61				1,990 57 9,240 61	5,080 03 5,064 93 67 009 95		1 1 1
11,870 77 19,534 62	1,139 68 2,440 00	14,000 00 7,500 00 68,000 00	1,680 00 674 10		15,139 68 9,940 60 72,907 26	9,594 02	3,268 91	1 1 1
23,274 41 104,045 49 39,601 60 18,354 43	3,227 26 36,355 94 891 40 603 16		674 10 2,159 52		00,100 00	44,515 45		1 1 1
596 78 495 40 76,382 16 84,951 59	544 79 766 45 4,653 52 26,075 49	1,120 00	3,991 62 2,491 92	427 30	1,664 79 12,337 92 34,034 32	42,347 84	1.068 - 01	61 61 61 61
1,577,947 17 9,766. 96	4,289 88	34,682 91	20,440 00		143,846 63 38,972 79	1,577,917 17	29,205 83	2
69,824 41 75,770 28 14,339 37 226,619 26	2,332 09 3,509 73 261 77 17,891 18	30,000 00 53,428 64 4,250 00 20,000 00	1,312 82		32,332 09 56,938 37 5,824 59	37,492 32 18,831 91 8,514 78 181,146 79		44144
3,745 09 37,423 99 90,985 18	85 20	2,500 00	1,467 07		5,824 59 45,472 47 4,052 27	37,423 99	307 18	0000000
47,139 18 103,756 76 11,217 13	9 600 00	22,900 01			26,214 91	47,139 18 77,541 85		00000
-1,417 34 32,348 02 116,789 73	1.620 17	3,430 56 5,000 00 35,000 00 50,000 00	1,637 42		51,620 17	77,541 85 7,369 04 65,169 56	8,054 76 3,515 29	1
3,169 19 - 3,544 99 37,410 28	2,608 68	21,250 00				13,551 60		4
1,879,849 29 11,026 68 137,405 70 23,454 44	602,642 35 821 20 4,065 97 613 31		8,443 05 20.201 45	295 42	791,567 05 9,559 67 101,714 53 48,112 39	1,088,282 24 1,467 01 35,691 17		4 4 4
1,209,527 00	103,454 47				353,454 47	856,072 53		4
6,914,615 23	843,959 12	1,213,142 24	104,573 13	36,631 99	2,198,306 48	4,962,501 52	246,192 77	

# ELECTRIC

# TABLE 3.—SUMMARY of Income Account

	14	15	16	17
		DEDUCTI	ONS FROM NE	T INCOME.
Number.	Name of Railway.	Reserves and Special Charges.	Dividends.	Total Deductions from Net Income.
		\$ ets.		S ets.
1 2 3	Berlin and Waterloo Leased Line—Berlin and Bridgeport. Brantford Street.			
- 4				
6 7	British Columbia Cape Breton. Chatham, Wallaceburg and Lake Erie.	9,141 67	14,040 00	23,181 67
9	Cornwall Street  Cornwall Street  Egerton Tramway Co., N.S.  Galt, Preston and Hespeler.  Lessed Line—Preston to Berlin.  Grand Valley	• • • • • • • • • • • • • • • • • • • •	5,000 00	5,000 00
13 14 15	Guelph Radial. Halifax Tramway Hamilton and Dundas.			
16 17	Hamilton, Grimsby and Beamsville			
19	Hamilton Street Hull International Transit Co.			
21 22	Levis County London Street. Montreal Park and Island		**********	
الانت	Montreal Street .			
	Nelson Tranway Niagara Falls Park and River Niagara, St. Catharines and Toronto. Oshawa			
31	Ottawa Peterboro Radial		149,697 34	149,697 34
	Port Arthur and Fort William. Quebec Railway, Light and Power Co. (Citadel). Quebec Railway, Light and Power Co. (Montmorency).			
00	Sandwich, Windsor and Amherstburg.  Sarnia Street Sherbrooke Street.		4,041 10	4,841 18
39 40	South Western Traction Co St. John, N.B.		48,000 00	48,000 00
41 42 43	St. Stephen, A.B. St. Thomas Street. Sydney and Glace Bay	5,299 97	10,000 00	15.299 97
44 45 46	Sherbrooke Street. South Western Traction Co. St. John, N.B. St. Stephen, N.B. St. Thomas Street. Sydney and Glace Bay. Toronto Street. Toronto Suburban. Toronto Suburban.	150,000 00	499,803 65	649,803 65
47 48	Windsor, Essex and Lake Shore Rapid. Windsor and Tecumseh	***********		
50 51	Winnipeg Street Woodstock, Thames Valley and Ingersoll. Yarmouth Street		614,496 10	614,496 10
	Total		1,397,496 03	
			1	

#### RAILWAYS.

for the Year ending June 30, 1909—Continued.

Surplus   For   Vear.   Surplus at   Deficit   D	18	, 19	20	21	22	23	24	25
S ets.         8 ets.         9 ets.<	Surplus for	for	Surplus at Beginning		JUSTMEN	TS DURING	at Close of	at Close of
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Year.	Year.	of Year.	of Year.	Credit.	Debits.	Year.	Year.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ ets.	\$ ets.	\$ ets.	S ets.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,428 52	579 95						579 95
10,539 40		27 126 11		3 157 65				10.201.06
10,583 18	514,442 09						514,442 09	10,201 00
10,583 18	21,539 28		88,392 25				109,931 53	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,516 60						2,516 60	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	156 22		10,383 18				10,539 40	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	41,396 19	•••						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							5.080_03	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							5,064 93	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		3,268 91	3,304 72			1,138 38		1,102 57
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9,594 02	10 029 05	39,710 27			4,066 71	45,237 58	110 72 ( 61
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	44,515 45	49,052 89	53,660 49	05,121 70		28,348 18	69,827 76	112,754 61
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	29,710 20	10 100 05	24,454 62	10.007 01	100 00	10,474 51	43,790 31	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		12,128 25		12,987 24	3.150 36	889 94	2.082 35	26,001 06
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		11,842 52		9,863 98			************	21,706 50
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9,636 08	77.795.04	28,609 12	899 020 08	19 88	4,845 00	33,420 0S	976.815.19
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1,577,947 17						1,577,947 17	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		29,205 83	• • • • • • • • • • • • • • • • • • • •	35,087 66		101 02		65,394 51
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	37,492 32							
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18,831 91		163,285 09			049 #2	182,117 00	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	31,449,45		44,980 08' 55.299 19			13.582.87		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		307 18			2,496 07		2,188 89	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	47,139 18						47,139 18	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	77,541 85		18,096 56				00 400 84	
433,478 59     1,467 01       35,691 17     2,371,584 40       24,657 95     36,456 41       241,576 43     464,489 34       25,810,662 99       1,467 01       95,080 02       61,114 36       706,065 77	2,021 80		20,004 09				25,150 55	8,054 76
433,478 59     1,467 01       35,691 17     2,371,584 40       24,657 95     36,456 41       241,576 43     464,489 34       25,810,662 99       1,467 01       95,080 02       61,114 36       706,065 77	15 100 50	3,515 29	***************************************	27,721 47	3,388 58		110 700 47	27,848 18
433,478 59     1,467 01       1,467 01     2,810,662 99       35,691 17     59,388 85       241,576 43     464,489 34       433,478 59     2,810,662 99       1,467 01     95,080 02       61,114 36       241,576 43     464,489 34	17,169 96	2 354 83	101,399 89	19.672.99	• • • • • • • • • • • • • • • • • • • •		118,569 45	22 027 82
433,478 59     1,467 01       1,467 01     2,810,662 99       35,691 17     59,388 85       241,576 43     464,489 34       433,478 59     2,810,662 99       1,467 01     95,080 02       61,114 36       241,576 43     464,489 34		3,544 99						3,541 99
	433 478 50		82,061 12				2 810 062 99	
	1,467 01		2,011,004 40				1,467 01	
	35,691 17	21.657.05	59,388 85	26 156 11			95,080 02	61 114 96
		24,007 90		90,400 41				
	241,576 43		464,489 34				706,065 77	
29 (01 010 00 000 011 14 0 000 000 01 1 100 000 0								
	3,421,212 22	000 017 71	9.000 700 00	1 100 000 01	9,154 89	09.00= 02	0.000 570 00	1 907 990 40

#### ELECTRIC

# TABLE 4—SUMMARY of Gross Earnings from

	1	2	3	4	5
			· CAR EAR	RNINGS.	
•	Name of Railway.				
		Passengers.	Freight.	Mail Express.	Other Car Earnings.
_		\$ cts.	\$ ets.	\$ cts.	\$ cts
1	Berlin and Waterloo	25,145 78		1,043 09	$\frac{287}{100} \frac{5}{0}$
	Leased Line—Berlin and Bridgeport	5,040 41 71,983 99	4,720 04	1,029 99	622 (
ŀ	British Columbia	1,296,356 92	34,704 10	57,659 81	12,192 8
	Cape Breton	82,691 39 37,031 29	$34180 \\ 18,09457$	140 85 727 40	46 (
1	Cornwall Street	16,844 71	7,091 79	121 40	
	County Electric.  Galt Preston and Hespeler  Leased Line—Preston to Berlin.	42,573 05 56,848 77	1,197 45 53,074 11	5,883 42	109
	Grand Valley	73,146 68	2,037 69		
	Guelph Radial	25,710 07 184,046 89	1,085 53		6
	Hamilton and Dundas	39,400 34	1,019 47	187 90	99
	Hamilton, Grimsby and Beamsville	63, 107 58	19,435 57	5,932 70	205
	Hamilton Radial. Hamilton Street.	104,143 55 324 228 88	7,719 00	966 36	286 227
		324,228 88 59,204 15 36,954 48	12,380 83	2,532 68	
	Hull* *International Transit Co	36,954 48			
	Kingston, Portsmouth and CataraquiLevis County.	30,625 15 54,668 27	2,567 15	690 00	
	London Street	234,732 59	175 15	1,240 00	512
	Montreal Park and Island	264,398 29 3,698,572 46	851 29 29,590 47		
	Montreal Terminal	90,471 99		500 00	
	Nelson Tramway Niagara Falls, Park and River.				
	Niagara Falls, Park and River	129,605 90 165,579 39	57,200 52	826 71 1,031 47	1,483 $6,876$
	Oshawa	8,796 38		3,186 76	
	Ottawa	616,427 66		8,091 00	18
	Peterborough Radial	28,270 66 99,112 46		1,164 79	109
	Port Arthur Street	284,124 50			3,369
	Sandwich, Windsor and Amherstburg	133,541 51 153,520 51	5,509 90	3,203 89 800 00	3,450 394
	Sarnia.	29,908 85	3,669 26	4,096 60	0.71
	Sherbrooke Street	30,811 38	0.100.70	294( 0)	30
	South Western Traction CoSt. John.	81,531 57 $163,079$ 78	8,182 52	2,344 28	
	St. Stephen, N.B	29,493 30			
	St. Thomas Street	16,725 23		1,503 98	18 775
	Syluey and Glace Bay Toronto Street	90,430 47 $3,705,229 01$	4,102 44		
	Toronto Suburban Toronto and York Radial	39,076 06			
	Toronto and York Radial	282,763 02 $73,993 81$	44,155 74 6,045 80	2,000 00 $3,390 31$	516
	Windsor, Essex and Lake Shore Rapid Winnipeg Street	1,000,806 30		277 71	2,448
	Winnipeg Street. Yarmouth Street.				
	Total	14,080,755 63	386,091 67	110,451 70	34,185

# RAILWAYS.

Operation for the Year ending June 30, 1909.

6	7	8	9	10	11	12	. 13	14	1
			MISCEL	LANEOUS E.	ARNINGS,				
Total Car Farnings.	Advertising.	Rent of Land or Buildings.	Rent of Tracks.	Rent of Fquip- ment.	Sale of Power.		Total Miscel- laneous Earnings.	Total Gross Earnings from Operation.	Number
8 ets.	\$ cts.	8 cts.	S cts.	\$ ets.	8 cts.	\$ cts.	\$ ets.	ŝ ets.	ı
26,476 40 5,140 41 78,356 02 1,400,913 66 83,220 04 55,853 26 23,936 50		184 58 3,240 00		2,443 35			3,088 13 184 58 5,683 35 9,093 88 1,699 24 6,347 47 2,495 55	5,324 99 84.039 37 1,410,007 54 84.919 28	
43,770 50 115,916 03		76 00			1,608 19	13 07	1,697 26	43,770 50 117,613 29	}
40,706 9 88,680 85 113,115 66 324,456 53 74,117 66 36,954 48 30,625 15 57,925 42 236,660 39 265,249 58 3,728,162 93 108,716 72 131,916 17 230,687 39 53,884 90 624 537 36	300 00 604 00 312 50 581 22 300 00 425 00 1,266 50 500 00	291 96 793 36	800 00 1,200 00 5,658 63	5,808 86 674 17	2,474 87	1 65 535 51 1,341 00 466 56 36,974 54	3,624 87 6,108 86 3,246 17 1,614 23 1,116 73 1,116 93 1,766 00 2,025 02 6,951 99 36,974 54	77,221 25 27,847 28 184,927 51 41,192 58 92,305 72 119,224 52 327,702 70 75,731 89 38,071 21 31,742 13 59,691 42 238,685 41 272,201 57 3,765,137 47 109,216 72 231,704 70 55,370 01	
28,270 66 101,787 14 287,494 27 140,195 40 160,224 86 37,674 71	200 00 467 44  574 99	476 21			728 59	275 44 427 48 10,714 44	475 44 1,623 51 11,190 65 11,524 99	28,746 10 103,410 65 287,494 27 151,386 65 171,749 85	3 3 3 3 3
37,674 71 30,841 38 92,053 37 163,079 78 29,493 30 16,743 23 96,811 99 3,705,229 01 39,076 06 328,918 76 83,946 03	554 30	2,869 17 734 25 400 00			216 66	36 56	807 46	31,176 38 92,865 83 163,749 78 29,649 30 18,690 58 97,566 53 3,750,283 72 40,966 01 333,588 43	

14,611,484 09 39,507 66 19,874 41 9,728 75 10,040 29 28,823 32 105,478 03 213,452 46 14,824,936 55

# ELECTRIC

Table 5.—Summary of Operating Expenses

2.02.0 % Sommer of operating imponses					
-	1	2	3	4	5
		Maintenance—Way and Structures.			
Number.	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.	\$ ets.	\$ ets.
1 2 3 4 5 6 7	Berlin and Waterloo.  Leased Line—Berlin and Bridgeport.  Brantford and Hamilton Electric  British Columbia.  Cape Breton  Chatham. Wallaceburg and Lake Erie.  Cornwall Street.	143 44 3,901 68 53,290 64 2,124 56 954 07 1,637 00	3 98 1,620 35 11,322 37 1,204 28 411 15 166 85		1,355 54 187 89 5,568 29 79,625 33 3,783 00 1,574 70 1,803 85
9	Egerton Tramway Co., N.S., now Pictou County Electric. Galt, Preston and Hespeler	2,169 59 9,276 60	297 83 877 88	71 59 411 62	2,539 <b>61</b> 10,566 10
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	Leased Line—Preston to Berlin. Grand Valley Guelph Radial Halinax Tramway Hamilton an i Dundas Hamilton, Grimsby and Beamsville Hamilton Radial Hamilton Street Hull International Transit Co. Kingston, Portsmouth and Cataraqui Levis County London Street. Montreal Park and Island Montreal Street Montreal Terminal Nelson Tramway.	4,467 23 1,236 12 6,265 62 2,926 98 10,524 05 9,436 30 8,025 72 8,191 27 1,133 41 1,844 74 2,555 29 13,016 07 21,843 69	908 54 272 98 1,824 84 605 47 1,523 02 1,145 33 2,543 56 2,312 75 271 81 358 28 560 99 2,220 54 2,579 39	2,229 54 9 17 200 20 217 84 867 98 386 88 191 27 240 83 633 05 2,565 19	5,375 77 1,509 10 10,320 00 3,541 62 12,247 27 10,799 47 11,437 26 10,890 90 1,596 49 2,203 02 3,357 11 15,869 66 26,988 27 110,642 77 14,503 46
27 28 29 30 31	Niagara Falls Park and River Niagara, St. Catharines and Toronto. Oshawa Ottawa Peterborough Radial	3,249 30 15,584 69 4,015 75 13,749 95 1,749 25	2,706 48 2,398 46 240 18 7,304 32 118 39	741 29 1,783 30 547 20 2,400 34	6,697 07 19,766 45 4,803 13 23,454 61 1,867 64
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	Port Arthur Street Quebec Ry., Light & Power Co. (Citadel). Quebec Ry., Light & Power Co. (Montmorency). Sandwich, Windsor and Amherstburg Sarnia Sherbrooke Street South-western Traction Co. St. John St. Stephen, N.B. St. Thomas Street. Sydney and Glace Bay Toronto Street Toronto Suburban Toronto Suburban Toronto and York Radial Windsor, Essex and Lake Shore Rapid Winnipeg Street Yarmouth Street.	7,085 94 11,095 85 9,480 81 1,384 47 3,443 27 7,638 04 14,250 33 2,816 96 1,408 17 3,464 59 54,921 29 2,907 04 22,458 68 5,363 16 24,120 01	3,751 72 2,430 15 3,704 00 23 00 560 00 586 99 1,582 95 380 02 399 29 2,002 74 21,506 69 1,324 75 2,175 83 1,893 26 4,056 79	137 98 875 91 798 94 900 00 407 61 152 81 102 67 14,029 68 58 11 529 53 271 95 1,776 84	10,975 64 14,401 91 13,985 65 1,407 47 4,903 27 8,225 03 16,240 89 3,349 79 1,807 46 5,570 00 90,457 66 4,289 90 25,164 04 7,528 37 29,953 64
	Total	386,646 54	94,249 33	50,241 32	643,135 50

39,603 67 1,184,287 17

# SESSIONAL PAPER No. 20b

# RAILWAYS.

18,008 61

36,682 74

405,497 36

321,050 88

48,317 04

for the Year ending June 30, 1909.

Steam Plant.   Electric Plant.   Cars.   Equipment of Cars.   Equipment.   Equipm		12	11	10	9	8	7	6				
$ \begin{array}{c} \text{Maintenance} \\ \text{Steam Plant.} \end{array} \begin{array}{c} \text{Maintenance} \\ \text{Steam Plant.} \end{array} \begin{array}{c} \text{Maintenance} \\ \text{Steam Plant.} \end{array} \begin{array}{c} \text{Maintenance} \\ \text{Cars.} \end{array} \begin{array}{c} \text{of} \\ \text{Electric} \\ \text{Equipment.} \end{array} \begin{array}{c} \text{Maintenance} \\ \text{Steam Plant.} \end{array} \begin{array}{c} \text{Miscellaneous} \\ \text{Maintenance} \\ \text{Of} \\ \text{Cars.} \end{array} \begin{array}{c} \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Steam Plant.} \end{array} \begin{array}{c} \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Steam Plant.} \end{array} \begin{array}{c} \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Miscellaneous} \\ \text{Steam Plant.} \end{array} \begin{array}{c} \text{Miscellaneous} \\ Misc$	Maintenance—Equipment.											
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					Maintenance							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	l ent.	Total Equipmen	cellaneous Shop	of Miscellaneous	of Electric Equipment of	Maintonango	of	of				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			S ets.	\$ cts.	\$ ets.	\$ cts.	\$ cts.	\$ ets.				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	22 03	2,722										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	35 16 81 67 53 34	4,677 106,235 6,581 3,363 3,577	1,790 92 289 61 301 95	572 38 172 95 466 99	2,314 35 44,256 35 1,519 68 470 65 845 71	2,362 71 50,099 63 2,868 44 1,309 77 2,380 75	1,709 06	21 93 618 48				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	02 94 71 26	1,802 3,771		92 62	416 22	945 56 2.876 47	44 47	348 54 850 32				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	00 23 50 89 98 84 69 80 75 46	11,106 2,200 16,850 1,398 8,569 11,775	2,121 16 323 88	917 67	7,218 65 790 33 4,051 41 6,120 76	6,343 08 608 51 4,289 08 5,654 70	79 07 461 87 229 31	1,585 74				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12 30 25 96	14,612 4,125	364 33	104 07	1,678 41	1,979 15		107.26				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	44 24 92 57 74 10	7,741 27,692 18,974	462 16 2,377 15	1,208 36 546 72 445 93	2,911 39 8,463 67 8,496 96	2,828 72 11,007 33 10,031 21	333 61 1,267 68	4,030 02				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	07 99	14, 107		54 07	6,473 61	7.465 02		415 29				
12,916 87 6,927 99 158 49 20,0	13 84 37 68 84 39	9,513 17,837 5,184 59,003 2,523	146 70 641 51 193 93	129 06 734 22 2,794 35	3,312 09 10,401 39 1,810 37 24,696 18 938 72	5,754 43 5,427 62 2,288 72 25,280 27	31 60 537 42	139 96 632 94				
	03 35 01 57 12 36	20,003 7,301 9,512 3,043	456 24	158 49 31 28	6,927 99 2,203 08 2,482 36	12,916 87 4,387 29 4,340 76	254 96 1,328 98					
2,721 91 34 86 7,839 01 6,855 41 877 65 381 97 18,7 285 29 228 95 768 24 1,911 47 112 10 3,8	70 09 61 55 10 81 06 05	6,070 4,261 18,710 3,306 2,282	381 97 112 10	877 65	6,855 41 1,911 47	7,839 01 768 24	196 00 34 86 228 95	295 80 2,721 91				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	36 71 68 30 84 97 74 14	9,036 9,036 302,368 2,184 23,574 15,675	23,355 61 483 86 334 12 940 30	15 16 28,293 14 96 22 2,392 36 1.068 66	1,238 93 104,451 21 438 31 9,388 45 5,554 64	7,367 61 138,313 00 1,057 83	$egin{array}{cccccccccccccccccccccccccccccccccccc$	952 78 106 20				

# ELECTRIC

TABLE 5.—SUMMARY of Operating Expenses

	13	14	15	16	17		
		Transportation—Operation of					
Number.	NAME OF RAILWAY.	Power Plant Wages.	Fuel for Power.	Water for Power.	Lubricants and Waste for Power Plant.		
		\$ cts.	\$ cts.	\$ cts.	8 cts		
1 2 3 4	Berlin and Waterloo Leased Line—Berlin and Bridgeport Brantford and Hamilton Electric British Columbia.	3,253 79		11,7, 0 91	798-8		
5 6 7	Cape Breton. Chatham, Wallaceburg and Lake Erie. Cornwall Street Egerton Tramway Co., N.S., now Picton County Electric Calls Preston and Hespeler	$\begin{array}{c} 1,605 & 75 \\ 1,072 & 18 \end{array}$	7,269 38 655 55	374 01 120, 00	527 49 11 69		
9 10	Leased Line—Preston to Berlin	4,401.40	13,010 27	80 00	214 98 618 8		
1 12 13	Grand Valley Guelph Radial Halifax Tramway. Hanilton and Dundas.	4,189 S0 1,539 93 3,047 23	$\begin{bmatrix} 3,320 & 78 \\ 12,798 & 95 \end{bmatrix}$	580 47	312 5 270 3 355 1		
l4 l5 l6 l7	Hamilton, Grimsby and Beamsville	2,808 74					
.8 .9 20	Hull International Transit Co Kingston, Portsmouth and Cataraqui Levis Gounty London Street Montreal Park and Island	600 96			15 8		
1	Montreal Street			74 00	674 8		
~	Montreal Terminal. Nelson Tramway.' Niagara Falls, Park and River. Niagara, St. Catharines and Toronto.	4.732 90	4,900 57		224 1		
9	Niagara, St. Čatharines and Toronto. Oshawa. Ottawa. Peterborough Radial.	2,850 00	303 18 6,758 40 4,939 72	348 01 3,759 28 1,500 00	31 4 76 3		
1 2 3	Peterborough Radial. Port Arthur Street. Quebec Ry., Light and Power Co. (Citadel). Quebec Ry., Light and Power Co. (Montmorency) Sandwich, Windsor and Amherstburg	1,006 35					
156	Sandwich, Windsor and Amherstburg	6,369 57	16,239 00	1,140 00	319 3		
9.0	Sandwich, Windsor and Amherstburg. Sarnia. Sherbrooke Street. Southwestern Traction Co. St. John. St. Stephen, N. B. St. Thomas Street	6,193 25 3,927 40 942 05	12,313 15 13,652 54 5,669 58	150 00	358 ( 184 (		
231	Sydney and Glace Bay	2,873 41 19,116 90	7,243 34 11,084 84 234 94	578 35 371 07 41 90	278 4 94 2		
5	Toronto and York Radial. Windsor, Essex and Lake Shore Rapid. Winnipeg Street. Yarmouth Street.	10,910 09	23,232 77		1,698 1,009		
8	Yarmouth Street	127,015 19	184,719 72	20,818 00	8,262		

# GESSIONAL PAPER No. 20b RAILWAYS.

for the Year ending June 30, 1909—Continued.

18	19		20	21	22	23	24		
POWER PLANT.				Transportation—Operation of Cars.					
Miscellane- ous Supplies and Expenses of Power Plant.	Hired Power.	Total Operation of Power Plant.	Superintendence of Transportation.	Wages of Conductors.	Wages of Motormen.	Wages of Miscellane- ous Car Service Employees.	Wages of Car Hous	-0	
S cts.	\$ cts.	cts.	dets.	\$ cts.	\$ cts.	\$ ets.	s e	ts	
		6,984 49		818 43	818 44				
1,601 94	17,757 12 122,238 42 10,962 27	149,352 34 10,962 27 10,303 79	1,779 74 7,260 00 1,315 00	2,788 38 165,656 49 7,742 72 2,924 16 4,679 97	2,788 38 166,542 64 7,809 57 2,942 93 4,679 97	13,499 25 29 48 96 21	1,048 19,670 1,455 416 769	$\frac{24}{40}$ $\frac{45}{45}$	
		7,268 69 18,080 56	2,400 00 1,500 00	3,301 98 5,880 60	3,224 34 5,745 36	226 59 1,874 47		18	
9,449 04 1,013 21 791 26	48,863 22	17,794 96 4,173 27 14,246 81 14,895 09 42,890 24 7,988 30 7,000 00 4,680 73 9,674 81 28,366 43 48,863 22 385,174 12	1,200 (0 694 16 1,515 38 2,555 99 5,441 95 300 00 2,440 00 3,665 00	2,943 92 4,431 64 8,633 41 36,480 65 11,076 92 5,654 33 3,741 83 7,424 94 28,677 10 16,935 96	3,775 1s 20,231 62 2,943 93 4,431 61 8,653 42 36,480 65 11,076 93 5,656 79 7,487 13 28,701 87 16,347 79	1,494 60 1,211 52 5,885 48	1,968 2,658 272 821 1,940 4,280 1,212 2,340 1,251 2,667 2,605	72 13 16 60 85 59 68 97 61 60 42	
24 60	1,500 00	11,382 22	1.871 41	14,225 57	13,979 71	3,289 27 860 53	3,396		
675 10 494 93 270 00 2,571 52	255 00 11,364 20 2,148 09 18,240 22 13,059 80	6,244 47 16,420 59 12,102 85 37,468 20 1,500 00 13,059 80	2,494 92 1,461 30 4,812 40 780 00	8,819 31 28,590 10 2,413 44 81,507 51 5,600 29	8,830 68 28,590 09 2,645 06 81,507 51 5,600 29	6,644 35 29,934 81 537 63	2,114 10,041 626	90 00	
640 49	14,085 62 4,001 26 4,366 03 5,591 45	14,085 62 5,007 61 29,074 48 5,591 45 1,409 00	6,000 00 1,664 78 886 46	40,679 25 9,441 39 17,144 43 4,067 37 3,800 00	40,679 25 7,452 80 17,144 46 4,067 37 3,800 00	2,374 20 18,359 18 396 48 200 00	3,883 796 2,178	84 93 23	
550 77 1,413 20	3,944 40	19,425 18 18,993 14 6,946 23 3,944 40	500 00 897 30 2,835 00 355 00	5,005 12 25,074 40 2,743 80 4,974 26	5,161 69 25,074 40 2,715 80 4,974 26	3,154 00	2,113 2,058 680	91	
1,383 37	4,878 48 243,655 60 4,962 10 11,303 56	16,045 02 277,796 19 5,238 94 48,528 77 14,454 57	320 00 46,836 54 600 00 4,175 00 1,540 00	5,373 83 395,277 41 4,471 68 15,857 53 3,639 92	5,407 89 368,767 83 4,471 69 15,857 54 3,639 92		2.137	31	
	40,907 34	40,907 34	20,378 25	150,357 60	147,252 35	4,518 90			
26 121 40	686 198 69	1 445 997 07		1 181 944 60		121,009 71			

# ELECTRIC

TABLE 5.—SUMMARY of Operating Expenses

	25	26	27	28
		Transportati		
Number.	Name of Railway.	Car Service Supplies.	Mis- cellaneous Car Service Supplies.	Hired Equipment
		\$ ets.	\$ cts.	\$ ets.
2 1 3 1 5 6	Berlin and Waterlooo Leased Line—Berlin and Bridgeport Brantford and Hamilton Electric British Columbia Cape Breton Chatham Wallaceburg and Lake Erie	966 07 18,225 16 225 39 357 81	2,352 60 11,766 87 1,000 99 384 65	1,033 13
7 (8 I	Cornwall Street. Egerton Tramway Co., N.S., now Pictou County Electric Galt, Preston and Hespeler. Leased Line—Preston to Berlin	384 99	54 83 865 66	
11 (12 (13 14 14 14 15 16 14 17 18 1	Grand Valley Grand Valley Guelph Radial. Halifax Tramway Hamilton and Dundas. Hamilton, Grimsby and Beamsville. Hamilton Radial. Hamilton Street. Hull. International Transit Co. Kingstan, Portsmouth and Cataraqui.	1,905 04 555 05 1,013 02 1,329 17 2,338 67 804 61 161 06	158 00 406 10 1,258 48 2,252 70 3,162 14 10,727 36 647 42 238 67	2,296 61 1,427 18 3,709 38 1,018 29
21 1 22 1 23 1 24 1 25 1	Levis County. London Street. Montreal Park and Island. Montreal Street. Montreal Terminal		911 53 2,065 47	3,291 99 3,796 19
9	Nelson Tramway. Niagara Falls, Park and River. Niagara, St. Catharines and Toronto. Oshawa. Ottawa.	209 82 1,077 77 341 06	3,099 54 2,781 29 1,388 35	189 53 8,008 2 787 43
31 1		781 96	265 85 7,724 93 3,251 79	
56 2	Sarma Shorbrooke Street.	2,128 82 715 93	3,167 27	
8 9 9 0 1	Southwestern Traction Co St. John St. Stephen, N.B.	1,619 58 15 10	1.242,81 8,644 58	
2537	Sydney and Glace Bay Foronto Street. Foronto Suburban. Foronto and York Radial.	256 06 221 30	255 28	
71	Foronto and York Radial. Windsor, Essex and Lake Shore Rapid. Winnipeg Street. Yarmouth Street	2,276 85 376 60 13,344 91	4,387 59 236 54	
	Total	53,713 15	75,940 59	25,988 4

# SESSIONAL PAPER No. 20b

# RAILWAYS.

for the Year ending June 30, 1909—Continued.

# ELECTRIC

# TABLE 5.—SUMMARY of Operating Expenses

37	38	39	40
			CENERAL-
NAME OF RAILWAY.	Stable Expenses.	Advertising and Attractions.	Mis- cellaneous General Expenses.
	\$ cts.	\$ cts.	\$ cts
1 Berlin and Waterloo. 2 Leased Line—Berlin and Bridgeport 3 Brantford and Hamilton Electric. 4 British Columbia 5 Cape Breton. 6 Chatham, Wallaceburg and Lake Erie. 7 Cornwall Street 8 Egerton Tramway Co., N.S., now Pictou County Electric.	281 83 436 15	89 33 579 35 8,492 59 24 19 134 03	409 20 1,937 8 12,415 88 2,042 5 1,098 19
7 Cornwall Street 8 Egerton Tramway Co., N.S., now Pictou County Electric 9 Galt, Preston and Hespeler	714 74	18 25 1,605 24	686 39
9 Galt, Preston and Hespeler 0 Leased Line—Preston to Berlin 1 Grand Valley 2 Guelph Radial 3 Halifax Tramway 4 Hamilton and Dundas 5 Hamilton, Grimsby and Beamsville 6 Hamilton Radial 7 Hamilton Street 8 Hull 9 International Transit Co 0 Kingston, Portsmouth and Cataraqui 1 Levis County.	221 48 174 78	277 78 442 64 4,567 77 382 53 20 13 4 718 93	2,984 36 101 33 886 46 877 25 1,857 86 2,206 66 2,877 75 2,421 16 1,086 47 4,376 22 723 26
I Levis County. 2 London Street. 3 Montreal Park and Island. 4 Montreal Street. 5 Montreal Terminal. 6 Nelson Tramway.	394 41	1,227 39	2,104 6
77 Nagara Falls, Fark and River. 28 Niagara, St. Catharines and Toronto. 29 Oshawa 30 Ottawa 31 Peterborough Radial.	80 52		777 7 979 5 56 6 2,935 2 168 1
22 Port Arthur Street 33 Quebec Ry., Light and Power Co. (Citadel). 44 Quebec Ry., Light and Power Co. (Montmorency) 55 Sandwich, Windsor and Amherstburg 65 Sarnia 77 Sherbrooke Street. 85 Southwestern Traction Co.	432 00	1,335 38 1,314 51 59 45	52,926 3 2,274 3 15,604 3 767 5 4,960 6 3,547 8 1,205 2
1 St. Thomas Street		1,186 65	160 0
2 Sydney and Glace Bay. 3 Toronto Street. 4 Toronto Suburban 5 Toronto and York Radial. 6 Windsor, Essex and Lake Shore Rapid. 7 Winnipeg Street.			$\begin{array}{c} 12,611 & 7 \\ 437 & 6 \\ 3,949 & 2 \\ 265 & 6 \\ 5,875 & 8 \end{array}$
8 Yarmouth Street			

# SESSIONAL PAPER No. 20b

# RAILWAY.

for the Year ending June 30, 1909 — Continued.

41	42	43	41	45	46	47	48				
Continued.											
Damages.	Legal Expenses in Connection with Damages.	Mis- cellaneous Legal Expenses.	Rent of Land and Buildings.	Rents of Track and Terminals.	Insurance.	Total General.	Total Operating Expenses.				
\$ ets.	\$ cts.	\$ cts.	\$ ets.	\$ ets.	\$ ets.	\$ cts.	\$ cts.				
1,871 39 26,856 98 1,230 70 983 40 1,623 28	132 58 500 00 101 00 201 11	3,355 95 698 12 250 00 116 29	100 00 101 00 221 04 25 00	1,540 97 4,821 75 12,666 70 79 55	208 29 506 03 13,886 88 873 34 1,207 83 1,761 12 3,500 60	5,836 67 3,038 44 16,483 82 156,302 89 12,411 42 5,532 33 5,963 93 4,571 78 16,303 45	22,797 71 4,880 70 63,666 22 895,565 45 53,944 55 28,383 52 23,915 45 28,526 39 68,190 22				
740 00 1,900 00 2,083 42 2,364 67 3,919 57 13,666 01 2,488 30 205 18 252 87 9,436 14 9,297 93 4,523 57	414 00 978 17 744 39 2,665 63	615 27 467 30 410 80 314 63 95 69 756 74 2,210 35 1,657 22	1,400 55 23 50 372 00 3,179 89 1 00 13 00 6 60	752 20 372 92 3,677 78 5,272 27 8,403 05 3,469 12 1,200 00	953 55 326 30 2,710 80 126 58 603 64 1,197 70 2,461 58 1,580 24 812 57 3,398 84 2,165 00 2,376 63	14,048 59 4,043 65 12,552 32 11,578 08 18,844 23 25,052 81 45,991 66 16,176 30 4,888 63 11,655 28 10,301 80 21,857 64 33,496 21 240,633 19 10,108 33	70,150 65 1 22,782 35 1 108,785 94 1 32,117 49 1 74,573 43 1 95,950 11 1 223,657 21 1 76,534 59 1 32,436 78 1 30,600 56 2 59,196 02 2 162,493 47 2 187,249 98 2 2,187,190 30 2 98,848 74 2				
28,991 49 37 50 340 95 24 76 28,991 49 37 50 340 95 24 76 27 75 5,898 12 73,505 93 5,631 73	216 19 17 55 255 70 3,646 06 402 10 128 82 80 00 8,152 48 500 00	25 00 115 33 25 15 50 216 39 25 00 115 33 551 50 857 98 8,765 76 516 17 1,550 00 750 00	239 47  480 00  180 00  5 00  1 00  969 26  1,707 72  310 38  5,352 43  840 00	10,000 00 995 12 129 81 1,200 00 17,755 94	2,159 48 6,736 62 298 74 8,513 40 1,061 72 4,628 98 4,191 86 900 60 1,012 33 280 00 1,666 07 3,099 94 1,008 54 711 00 1,444 38 989 78 3,044 83 1,600 04	\$ cts.  5,836 67 3,038 44 16,483 82 156,302 89 12,411 42 5,582 33 5,963 93 4,571 78 16,303 45 12,552 32 11,078 08 18,844 23 25,052 81 45,991 66 16,176 30 4,888 63 11,655 28 10,301 80 21,857 64 33,496 21 240,633 19 10,108 33 20,121 50 30,948 75 3,955 89 74,167 79 5,566 30 52,926 86 25,648 40 30,079 35 7,997 86 10,870 49 8,031 36 10,113 10 20,090 42 4,362 79 2,194 13 15,723 67 184,229 40 5,555 04 37,445 17 5,573 01 17,830 10	70,315 30 5 155,934 48 2 41,727 25 2 417,481 46 3 25,001 01 3 65,986 66 3 196,509 09 3 102,203 61 3 29,047 23 3 32,503 7 2 60,517 81 3 145,713 14 2 22,235 37 4 60,525 21 4 1,870,434 43 4 30,147 56 4 196,182 73 4 61,818 62 4 517,151 22 4 8 884 690 71				

# ELECTRIC RAILWAYS.

Table 6.—Summary Statement of Description of Equipment for the Year ending June 30, 1909.

				9-10 EDWARD VII., A. 1910
13		Total Cars of all Classes.	No.	: : - 43188228
113		Miscellaneous Cars.	No.	::::::::::::::::::::::::::::::::::::::
=	Sweepers.	No.		
10	CARS.	Snow Ploughs.	No.	H +01 01 HH 01 01 01 HH + 4 00
G.	OTHER CARS	Work Cars.	No.	3 - 1 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -
∞ ′		Cars.	No.	5
<b>!</b> -		Mails, Express and Baggage	No.	
9		Freight Cars.	No.	
22	Passenger Cars.	Total Passenger	No.	2
4		Combination, Closed and Open Passen- ger Cars.	No.	1 22 2 1016
භ		Ореп Раззепgет	No.	200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
61		Closed Passenger   Cars.	No.	8 : 30 20 20 20 20 20 20 20 20 20 2
1		. Мамк ор Ванмау.		Berlin and Waterloo  Leased Line—Berlin and Bridgeport.  British Columbia  Cape Breton  (Chathum, Wallaceburg and Lake Erie  (Galt, Preston and Hespeler.  Leased Line—Preston to Berlin  I Grand Valley  I Grand Valley  I Hamilton and Dundas  I Hamilton and Dundas  I Hamilton Street  I Levis Comity  I Levis Comity  I Levis Charles  I Montreal Street  I Montreal Street  I Montreal Street  I Montreal Terminal

# SESSIONAL PAPER No. 20b

SESSIONAL PAPER No. 20b	3,544
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7396	337
851 852 853 853 853 853 853 853 853 853 853 853	1,017
	1,689
27 Nielson Tramway 27 Niagara Falls Park and River 28 Niagara Falls Park and River 28 Oshawa 39 Octawa 31 Octawa 31 Detaborough Radial 32 Port Arthur Street 32 Candwich, Windsor and Amherstburg 35 Sandwich, Windsor and Amherstburg 36 Sarnia 37 Sherbroode Street 38 Southwestern Traction Co 39 Southwestern Traction Co 30 Street C 41 Toronto Suburban 45 Toronto Suburban 46 Toronto Suburban 47 Winninger Street C	Total

# ELECTRIC RAILWAYS-Concluded.

TABLE 7.—SUMMARY Statement of Accidents for the Year ending June 30, 1909.

		a. 1		:: > > > > > > > > > > > > > > > > > >	ec [	::	VARD VII., A	. 1910 :
13		Total Acci-	No.	37 138 3		35,482	55 6 12 55 6 12 13 6 12 13 13 13 13 13 13 13 13 13 13 13 13 13	•
12	Totals.	Killed. Injured.	No.		<b>Φ1</b>	20 20 20 23 45 45 66 66	71.0 Mes.	9 7
11		Killed.	No.	HC-T			1111	
10		Total.	No.	162 25. cc		26 135 135 4	21. 2 6 6 6 6 6	or =
5	OTHERS.	Injured.	No.	984		133 27 d ∞	20 5 5 261 6	61
œ		Killed.	No.	- rc -			121	
t-	ż	Total.	No.	16	G1	62 - + 10 65 63 - + 10 65	17	C1 — +
9	<b>EMPLOYRES</b>	Killed. Injured.	No.	3 12 6	- c1 - :	01-4+01		c3 4
ಚ	8	Killed.	No.	4				
41	ź	Total.	No.	10 74		111 112 18 16 178 178	20 30 1	7
က	Passengers	Killed. Injured.	No.	10 74		111 111 118 16 178 3	293 302	63
63	J.	Killed.	No.	4				
	Name of Ramway.			1 Berlin and Waterloo 2 Leased line—Berlin and Bridgeport. 3 Brantford and Hamilton Electric. 4 British Columbia. 5 Cape Bretun. 6 Chatham, Wallaceburg and Lake Brie. 7 Cornwall Street.	8 Egerton Tramway Co., now Picton County Electric	11 Grand Valley. 12 Gelph Radial. 13 Halifax Franway. 14 Hamilton and Dundas. 15 Hamilton, Grinsby and Beansville. 16 Hamilton Street. 17 Hamilton Street. 18 Hull. 18 Hull.	20 Kingston, Portsmouth and Cataraqui. 21 Levis County 22 London Street. 23 Montreal Street. 24 Montreal Street. 25 Montreal Terminal.	27 Niagara Falls Park and River. 28 Niagara, St. Catharines and Toronto. 29 Oshawa.

# SESSIONAL PAPER No. 20b

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% − 21 to 4	1 61	637 23 33 45 45 45	2,139
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នា ឡាតនា	91		1,303
		9   7	
ency).			: :
Citadel)			
1 C C		. Rapid	
t and Por	Ç	First Short	
Radial Street wy, Ligh wy, Ligh indsor w	Traction	treet  Hace Bay  tr.  rrban  York Rac  ex and L  ect	Total.
30 Ottawa 31 Peterborough Radial 32 Port Arthur Screet 33 Quebee Railway, Light and Power 34 Quebee Railway, Light and Power 35 Sandwich, Windsor and Amhersbu 36 Sannia.	hrooke S hwestern ohn	41 St. Thomas Street. 42 Sydney and Glace Bay. 43 Toonto Street. 44 Toonto Suburban. 45 Foronto and York Radial. 46 Windsor, Essex and Lake Shore 47 Winning Street.	
30 Otta 31 Pete 33 Port 34 Cuel 36 Sand 36 Sand	37. Sher 38. Sout 40. St. J.	25 25 25 25 25 25 25 25 25 25 25 25 25 2	



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46	haul per ton	20
66	journey per passenger	
46	revenue from each passenger	
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44	" per passenger per mile	
60	" per passenger train mile	
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"	per passenger per mile	
44	per ton per mile	
и	per passenger train mile.	
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nom each ton or neight carried	-0
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# FOURTH REPORT

OF THE

# BOARD OF RAILWAY COMMISSIONERS FOR CANADA

FOR THE YEAR ENDING MARCH 31

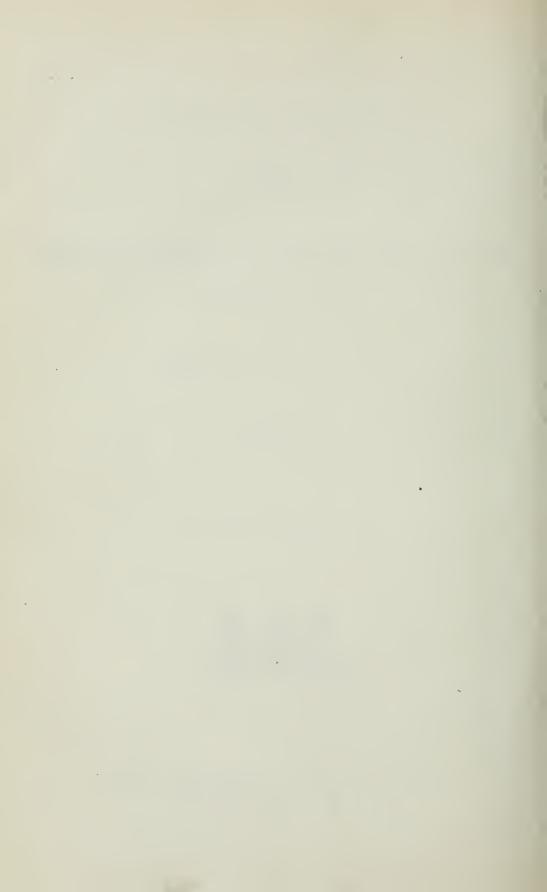
1909

PRINTED BY ORDER OF PARLIAMENT



OTTAWA
PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY
1909

[No. 20c-1910.]



# BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Hon. J. P. MABEE, Chief Commissioner.

D'ARCY Scott, Assistant Chief Commissioner.

Hon. M. E. BERNIER, Deputy Chief Commissioner.

JAS. MILLS, Commissioner.

S. J. McLean, Commissioner.

A. D. CARTWRIGHT, Secretary.



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# REPORT

OF THE

# BOARD OF RAILWAY COMMISSIONERS FOR CANADA

Ottawa, March 31, 1909.

To His Excellency the Governor in Council.

Pursuant to the provisions of section 62 of the Railway Act, the Board of Railway Commissioners for Canada has the honour to submit its fourth report for the year ending March 31, 1909.

Since the submission of the Board's last report, the Railway Act has been amended in certain important particulars under and by virtue of chapter 61-7-8, Edward VII., entitled 'An Act to amend the Railway Act with respect to telegraphs and telephones and the jurisdiction of the Board of Railway Commissioners'; and also by chapter 62-7-8, Edward VII. of the Dominion statutes, entitled 'An Act to amend the Railway Act with respect to the constitution of the Board of Railway Commissioners.'

The following are the amendments above referred to:-

# 7-8 EDWARD VII.

# Chap 61.

An Act to amend the Railway Act with respect to Telegraphs and Telephones and the jurisdiction of the Board of Railway Commissioners.

Assented to 20th July, 1908.

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

# PART I.

- 1. In this part, unless the context otherwise requires.—
- (a) 'Board' means the Board of Railway Commissioners of Canada;
- (b) 'company' means a railway company or person authorized to construct or operate a railway, having authority to construct or operate a telegraph or telephone system or line, and to charge telegraph or telephone tolls, and includes also telegraph and telephone companies and every company and person within the legislative

20c—1

authority of the Parliament of Canada having power to construct or operate a telegraph or telephone system or line, and to charge telegraph or telephone tolls;

(c) 'special Act' means any Act under which the company has authority to construct or operate a telegraph or telephone system or line, or which is enacted with special reference to any such system or line, and any letters patent constituting a company's authority to construct or operate a telegraph or telephone system or line, granted under any Act, and the Act under which such letters patent were granted, and includes The Telegraphs Act and any general Act relating to telegraphs or telephones;

(d) 'telegraph' includes wireless telegraph;

(e) 'telegraph toll' means and includes any toll, rate or charge to be charged by the company to the public or to any person for the transmission of messages by

telegraph.

- 2. The board shall have jurisdiction to inquire into, hear and determine any application by or on behalf of any party interested complaining that any company or person has failed to do any act, matter or thing required to be done by The Railway Act or this Part or the special Act, or by any regulation, order or direction made thereunder by the Governor in Council, the Minister, the Board or any other authority, or that any company or person has done or is doing any act, matter or thing contrary to or in violation of The Railway Act or this Part or the special Act, or any such regulation, order or direction, or requesting the Board to make any order, or give any direction, sanction or approval which by law it is authorized to make or give, or with respect to any matter, act or thing which by The Railway Act or this Part or the special Act or by any such regulation, order or direction is prohibited, sanctioned or required to be done.
- 2. The Board may order and require any company or person to do forthwith, or within or at any specified time, and in any manner prescribed by the Board, so far as is not inconsistent with The Railway Act or this Part or the special Act, any act, matter or thing which such company or person is or may be required or authorized to do under the said Acts or any of them or this Part, and may forbid the doing or continuing of any act, matter or thing which is contrary to the said Acts or any of them or this Part; and shall, for the purposes of this Part, have full jurisdiction to hear and determine all matters whether of law or of fact.
- 3. The Board may make orders and regulations with respect to any matter, act or thing which by The Railway Act or this Part or the special Act is sanctioned or required to be done or prohibited, and generally for carrying the said Acts and this Part into effect
- 2. The Board may, by regulations, prescribe penalties when not prescribed by the Railway Act or this Part or the special Act, to which every company or person which or who offends against any regulation made under this section shall be liable; provided that no such penalty shall exceed one hundred dollars.

3. The imposition of any such penalty shall not lessen or affect any other lia-

bility which any company or person may have incurred.

4. Notwithstanding anything in any Act heretofore passed by Parliament, all telegraph and telephone tolls to be charged by the company shall be subject to the

approval of the Board.

2. The company shall file with the Board tariffs of any telegraph or telephone tolls to be charged, and such tariffs shall be in such form, size and style and give such information, particulars and details as the Board, from time to time, by regulation, or in any particular case, prescribes, and the company shall not charge, and shall not be entitled to charge, any telegraph or telephone toll in respect of which there is default in such filing, or which is disallowed by the Board; provided that any company, previous to the first day of May, one thousand nine hundred and eight, charging telegraph or telephone tolls may, without such filing and approval, for a

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period of four months after this Part comes into force, or for such further period as the Board allows, charge such telegraph or telephone tolls as such company was immediately previous to the said date authorized by law to charge, unless in the meantime the Board in the case of any company disallows any of such tolls.

3. Such telegraph and telephone tariffs may be dealt with by the Board in the same manner as is provided by The Railway Act, with respect to standard freight tariffs; and all the provisions of The Railway Act, except as to publication under section 339 thereof, applicable to companies thereunder with respect to standard freight tariffs and tolls, shall, in so far as they are applicable and not inconsistent with this Act, apply to the company with respect to such telegraph and telephone tariffs and tolls.

4. The Board may, by regulation or otherwise, determine and prescribe the manner and form in which any tariff or tariffs of telegraph or telephone tolls shall

be published or kept open for public inspection.

- 5. When ever any company or any province, municipality or corporation, having authority to construct and operate, or to operate, a telephone system or line and to charge telephone tolls, whether such authority is derived from the Parliament of Canada or otherwise, is desirous of using any long-distance telephone system or line owned, controlled or operated by any company, in order to connect such long-distance telephone system or line with the telephone system or line operated or to be operated by such first mentioned company or by such province, municipality or corporation for the purpose of obtaining direct communication, whenever required, between any telephone or telephone exchange on the one telephone system or line and any telephone or telephone exchange on the other telephone system or line, and cannot agree with the company with respect to obtaining such use, connection or communication, such first mentioned company or province, municipality or corporation may apply to the Board for relief, and the Board may order the company to provide for such use, connection or communication, upon such terms as to compensation as the Board deems just and expedient, and may order and direct how, when, where, by whom, and upon what terms and conditions such use, connection or communication shall be had, constructed installed, operated and maintained.
- 6. Upon any such application the Board shall, in addition to any other consideration affecting the case, take into consideration the standards, as to efficiency and otherwise, of the apparatus and appliances of such telephone systems or lines, and shall only grant the leave applied for in case and in so far as, in view of such standards, the use, connection or communication applied for can, in the opinion of the Board, be made or exercised satisfactorily and without undue or unreasonable injury to or interference with the telephone business of the company.
- 7. Where the telephone system or line operated by the company is used or connected, for purposes of communication as aforesaid, with the telephone system or line operated by another company or by any such province, municipality or corporation, whether the authority of such province, municipality or corporation to construct and operate or to operate such telephone system or line is derived from the Parliament of Canada or otherwise, and whether such connection or communication has been previously or is hereafter established either by agreement of the parties or under an order of the Board, the provisions of The Railway Act with respect to joint tariffs, in so far as they are applicable and not inconsistent with this part or the special Act, shall apply to such company or companies and to such province, municipality or corporation; and the Board shall have, for the enforcement of its orders in this respect, in addition to all other powers possessed by it therefor, the power to order a discontinuance of such connection or communication between such different telephone systems or lines.
- 8. All contracts, agreements and arrangements between the company and any other company, or any province, municipality or corporation having authority to construct or operate a telephone system or line, whether such authority is derived from

the Parliament of Canada or otherwise, for the regulation and interchange of telephone messages or service passing to and from their respective telephone systems and lines, or for the division or apportionment of telephone tolls, or generally in relation to the management, working or operation of their respective telephone systems or lines, or any of them, or any part thereof, or of any other systems or lines operated in connection with them or either of them, shall be subject to the approval of the Board, and shall be submitted to and approved by the Board before such contract, agreement or arrangement shall have any force or effect.

5. The several provisions of The Railway Act with respect to the jurisdiction of the Board, practice and procedure upon applications to the Board, appeal to the Supreme Court or the Governor in Council, offences and penalties, and the other provisions of the said Act (except sections 9, 79 to 243, both inclusive, 250 to 289, both inclusive, 294 to 314, both inclusive, 348 to 354, both inclusive, 361 to 396, both inclusive, 405 to 431, both inclusive), in so far as reasonably applicable and not inconsistent with this part or the special Act, shall apply to the jurisdiction of the Board and the exercise thereof, created and authorized by this Act, and for the purpose of carrying into effect the provisions of this Part according to their true intent and meaning and shall apply generally to companies within the purview of this Part.

2. In and for the purposes of such application:-

- (a) 'company' shall mean a company as above defined;
- (b) 'railway' shall mean all property real and personal and works forming part of or connected with the telegraph or telephone system or line of the company;

(c) 'toll' or 'rate' shall mean telegraph or telephone toll;

(d) 'traffic' shall mean the transmission and other dealings with telegraphic and telephonic messages.

6. Sections 355 to 360 of The Railway Act, both inclusive, are repealed.

7. This Part shall come into force upon proclamation of the Governor in Council.

### PART II.

. 8. The Railway Act is amended by inserting the following section immediately after section 26:—

26a. Where it is complained by or on behalf of the Crown or any municipal or other corporation or any other person aggrieved, that any company has violated or committed a breach of an agreement between the complainant and the company—or by any company that any such municipal or other corporation or person has violated or committed a breach of an agreement between the company and such corporation or person,—for the provision, construction, reconstruction, alteration, installation, operation, use or maintenance by the company, or by such municipal or other corporation or person, of any structure, appliance, equipment, works, renewals or repairs upon or in connection with the railway of the company, the Board shall hear all matters relating to such alleged violation or breach, and shall make such order as to the Board may seem, having regard to all the circumstances of the case, reasonable and expedient, and in such order may in its discretion direct the company, or such municipal or other corporation or person, to do such things as are necessary for the proper fulfilment of such agreement, or to refrain from doing such acts as constitute a violation or a breach thereof.

'2. The Board may take such steps and employ such persons as are necessary for the proper enforcement of such order, and in pursuance thereof may forcibly or otherwise enter upon, seize and take possession of the whole or part of the railway, and the real and personal property of the company, together with its books and offices, and may, until such order has been enforced, assume and take over all or any of the powers, duties, rights and functions of the directors and officers of the company, and supervise and direct the management of the company and its railway in all respects, including

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the employment and dismissal of officers and servants of the company for such time as the Board continues to direct such management.

'3. Upon the Board so taking possession of the railway and property of the company, it shall be the duty of every officer and employee of the company to obey the orders of the Board or such person or persons as it places in authority in the management of any or all departments of the railway.

'4. The Board may, upon so taking possession of such railways and property, determine, receive and pay out all moneys due to or owing by the company, and give cheques, acquittances and receipts for moneys to the same extent and in as full and ample a manner as the proper officers of such company could do if no such order as aforesaid had been made.

'5. Cheques, acquittances or receipts so given by the Board shall be a defence to any action that may afterwards be brought by the company against the persons paying over the money for which such cheques, acquittances or receipts were given.

'6. The Board and the members thereof, and its officers and employees, shall not be liable to any action for any act done by them under the authority of this section.

'7. The cost and expenses of and incidental to proceedings to be taken by the Board under this section shall be in the discretion of the Board, and Board may direct by whom and to what extent they shall be paid.

'8. The certificate of the Board as to the amount of such costs and expenses shall be final.'

shall be illiai.

- 9. Paragraph (30) of section 2 of the said Act is repealed and the following is substituted therefor:—
- '(30) 'toll' or 'rate' means and includes any toll, rate, charge or allowance charged or made either by the company, or upon or in respect of a railway owned or operated by the company, or by any person on behalf or under authority or consent of the company, in connection with the carriage and transportation of passengers, or the carriage, shipment, transportation, care, handling or delivery of goods, or for any service incidental to the business of a carrier; and includes also any toll, rate, charge or allowance so charged or made in connection with rolling stock, or the use thereof, or any instrumentality or facility of carriage, shipment or transportation, irrespective of ownership or of any contract, expressed or implied, with respect to the use thereof; and includes also any toll, rate, charge or allowance so charged or made for furnishing passengers with beds or berths upon sleeping cars, or for the collection, receipt, loading, unloading, stopping-over, elevation, ventilation, refrigerating, icing, heating, switching, ferriage, cartage, storage, care, handling or delivery of, or in respect of, goods transported, or in transit, or to be transported; and includes also any toll, rate, charge or allowance so charged or made for the warehousing of goods, wharrage or demurrage or the like, or so charged or made in connection with any one or more of the above-mentioned objects, separately or conjointly.
- 10. Section 284 of the said Act is amended by adding at the end thereof the following subsection:—
- 'S. The Board may make regulations, applying generally or to any particular railway or any portion thereof, imposing charges for default or delay by any company in furnishing accommodation, appliances, or means as aforesaid, or in receiving, loading, carrying, unloading or delivering traffic, and may enforce payment of such charges by companies to any person injuriously affected by such default or delay; and any amount so received by any person shall be deducted from the damages recoverable or recovered by such person for such default or delay; and the Board may, by order or regulation, determine what circumstances shall exempt any company from payment of any such charges.'

- 11. Section 314 of the said Act is repealed and the following is substituted therefor:—
- '314. The company, or the directors of the company, by by-law, or any officer of the company thereunto authorized by by-law of the company or directors, may from time to time prepare and issue tariffs of the tolls to be charged in respect of the railway owned or operated by the company, and may specify the persons to whom, the place where and the manner in which such tolls shall be paid.

2. The tolls may be either for the whole or for any particular portion of the

railway.

'3. All such by-laws shall be submitted to and approved by the Board.

'4. The Board may approve such by-laws in whole or in part, or change, alter

or vary any of the provisions therein.

- '5. No tolls shall be charged by the company or by any person in respect of a railway or any traffic thereon until a by-law authorizing the preparation and issue of tariffs of such tolls has been approved by the Board, nor unless otherwise authorized by this Act, until a tariff of such tolls has been filed with, and, where such approval is required under this Act, approved by, the Board; nor shall any tolls be charged under any tariff or portion thereof disallowed by the Board; nor shall the company charge, levy or collect any toll or money for any service as a common carrier, except under the provisions of this Act.
- '6. The Board may, with respect to any tariff of tolls, other than the passenger and freight tariffs in this Act hereinafter mentioned, make regulations fixing and determining the time when, the places where, and the manner in which, such tariffs

shall be filed, published and kept open for public inspection.'

- 12. Section 237 of the said Act is amended by inserting the words 'the railway be carried over or under the highway or that,' immediately after the word 'that' in the fourth line of subsection 2 of the said section, and by inserting the words 'the railway to be carried over or under the highway or 'immediately after the word 'orders' in the first line of subsection 5 of the said section.
- 13. Section 241 of the said Act is amended by inserting the words 'by which any railway is carried over or under any highway or 'immediately after the word 'struc-

ture' in the first line of the said section.

# 7-S EDWARD VII.

# CHAPTER 62.

An Act to amend the Railway Act as respects the constitution of the Board of Railway Commissioners.

(Assented to July 29, 1908).

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. Subsection 1 of section 10 of The Railway Act, chapter 37 of the Revised Statutes, 1906, is repealed and the following subsection is substituted therefor:—

'10. There shall be a commission known as the Board of Railway Commissioners for Canada, consisting of six members appointed by the Governor in Council.'

2. Subsection 5 of the said section 10 is repealed and the following is substituted therefor:—

5. One of such commissioners shall be appointed by the Governor in Council, chief commissioner, and another of them assistant chief commissioner of the Board.

(a) Any person may be appointed chief commissioner or assistant chief commissioner who is or has been a judge of a superior court of Canada or of any province of

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Canada, or who is a barrister or advocate of at least ten years' standing at the bar of any such province.

- (b) The chief commissioner shall be entitled to hold the office of chief commissioner, and the assistant chief commissioner the office of assistant chief commissioner or that of chief commissioner, so long as they respectively continue to be members of the Board.
- (c) The assistant chief commissioner shall have all the powers of the chief commissioner; but such powers shall not be exercised by him except in the absence of the chief commissioner, and whenever he has acted it shall be conclusively presumed that he so acted in the absence or disability of the chief commissioner within the meaning of this section.'
- 3. Section 12 of the said Act is repealed and the following is substituted therefor:—
- 12. In case of the absence of the chief commissioner and the assistant chief commissioner, or of their inability to act, the deputy chief commissioner shall exercise the powers of the chief commissioner for him or in his stead, and in such case, all regulations, orders and other documents signed by the deputy chief commissioner shall have the like force and effect as if signed by the chief commissioner.
- '2. Whenever the deputy chief commissioner appears to have acted for or instead of the chief commissioner, it shall be conclusively presumed that he so acted in the absence or disability of the chief commissioner and of the assistant chief commissioner within the meaning of this section.'
- 4. Section 13 of the said Act is repealed and the following is substituted therefor:—
- 13. Two commissioners shall form a quorum, and not less than two commissioners shall attend at the hearing of every case: Provided that
- (a) in any case where there is no opposing party and no notice to be given to any interested party, any one commissioner may act alone for the Board; and
- '(b) the Board, or the Chief Commissioner, may authorize any one of the Commissioners to report to the Board upon any question or matter arising in connection with the business of the Board, and when so authorized such commissioner shall have all the powers of two commissioners sitting together for the purpose of taking evidence or acquiring the necessary information for the purpose of such report, and upon such report being made to the Board, it may be adopted as the order of the Board, or otherwise dealt with as to the Board seems proper.
- '2. The chief commissioner, when present, shall preside, and the assistant chief commissioner, when present, in the absence of the chief commissioner, shall preside, and in the opinion of either of them upon any question arising when he is presiding, which in the opinion of the commissioners is a question of law, shall prevail.
- '3. No vacancy in the Board shall impair the right of the remaining commissioners to act.'
- 5. Section 15 of the said Act is repealed, and the following is substituted therefor:—
  - '15. No commissioner or officer of the Board shall, directly or indirectly,—
- '(a) hold, purchase, take or become interested in, for his own behalf, any stock, share, bond, debenture or other security, of any railway company subject to this Act; or —
- '(b) have any interest in any device, appliance, machine, patented process or article, or any part thereof which may be required or used as a part of the equipment of railways or of any rolling stock to be used thereon.
- '2. If any such stock, share, bond or other security, device, appliance, machine, patented process or article or any part thereof or any interest therein, shall come to or vest in any commissioner or officer of the Board by will or succession for his own benefit, he shall, within three months thereafter, absolutely sell and dispose of the same or his interest therein.'

- 6. The said Act is amended by inserting the following section immediately after section 19:—
  - '19A. The Board may hold more than one sitting at the same time.'
- 7. Section 18 of the said Act is amended by adding thereto the following subsection:—
- '2. The Governor in Council, upon the recommendation of the Minister, may establish at any place or places in Canada such office or offices as are required for the Board, and may provide therefor the necessary accommodation, furnishings, stationery and equipment.'
- 8. Section 29 of the said Act is repealed, and the following is substituted therefor:—
- '29. The Board may re-hear any application before deciding it, or may review. rescind, change, alter, or vary any order of decision made by it.'
- 9. Subsection 1 of section 35 of the said Act is repealed, and the following is substituted therefor:—
- '35. The chief commissioner shall be paid an annual salary of ten thousand dollars, the assistant chief commissioner an annual salary of nine thousand dollars, and each of the other commissioners an annual salary of eight thousand dollars.'
- 10. The said Act is amended by inserting the following section immediately after section 41:—
- 41a. There shall be kept in the office of the secretary of the Board a book, to be called the agents' book, in which every railway company to which this Act in whole or in part applies, shall enter its name and the place of its head office, and the name of an agent at Ottawa and his place of business or some other proper place within Ottawa where he may be served for the company with any notice, summons, regulation, order, direction, decision, report or other document.
- '2. Service on the company may be effected, unless the Board otherwise directs, by delivering the documents or a copy thereof to the person entered by the company as its agent or at its place of residence, or to any member of his household. or at his place of business, or such other place as aforesaid, to any clerk or adult person in his employ.
- '3. Where at the time of attendance to serve any document the place of business or other place aforesaid is closed or no one is in attendance therein for receiving service, service of the document may be effectively made by mailing the same at any time during the same day, addressed to the agent at such place of business or other place, by registered letter, postage prepaid, and the service shall be deemed to have been effected at the time of attendance for service.
- '4. Where any such company has not caused the required entry to be made in the agents' book the posting up of the document to be served in the office of the secretary of the Board shall be effective service upon the company unless the Board otherwise directs.
- '5. The Board may in any case give directions that the fact of service upon an agent and the nature of the document served shall be communicated to the company by telegraph.'
- 11. Section 62 of the said Act is repealed and the following is substituted therefor:—
- 62. The Board shall within three months after the thirty-first day of March in each year, make to the Governor in Council through the Minister. an annual report, for the year next preceding the thirty-first day of March, showing briefly:—
- (a) applications to the Board and summaries of the findings thereon under this Act;
- (b) summaries of the findings of the Board in regard to any matter or thing respecting which the Board has acted of its own motion, or upon the request of the Minister;

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- (c) such other matters as appear to the Board to be of public interest, in connection with the persons, companies and railways, subject to this Act; and
  - (d) such matters as the Governor in Council directs.
- '2. The said report shall be laid before both Houses of Parliament during the first fifteen days of the then next session of Parliament.'

# PRACTICE AND PROCEDURE.

Several changes and alterations have been made in the Rules and Regulations of the Board and among the more important changes are the following:—

Rule 1 is rescinded and the following substituted therefor:-

- 1. Regular sittings of the Board will be held at the Court Room, Ottawa, at 10 a.m., on the first Tuesday of every month, for the hearing of matters, applications or complaints.
- (a) In addition to its regular sittings, the Board may appoint special sittings at Ottawa or elsewhere.
  - 7. Rule 7 is amended by adding thereto the following:
- '7. (a) Any party to any matter, application or complaint pending before the Board may set the same down for hearing at the next monthly sitting of the Board, upon giving at least ten days, or such shorter notice as the Board may order, to all parties interested.
- (b) When contested matters, applications or complaints are ready for hearing, and are not at once set down by any party interested, the Secretary shall set the same down for the first siftings commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down.
- (c) When a matter, application or complaint is set down for hearing by the Secretary, he shall give ten days' notice of hearing (or such shorter time as the Board may order) to all parties interested.'

# GENERAL REGULATIONS AFFECTING HIGHWAY CROSSINGS.

- 1. That, unless otherwise ordered by the Board, the width of approaches to rural railway crossings over highways be twenty feet road surface on concession and main roads and sixteen feet on side and bush roads.
- 2. That a strong, substantial fence or railing, four feet six inches high, with a good post-cap (four inches by four inches), a middle piece of timber (1½ inches by 6 inches), and a ten-inch board firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing where the height is six feet or more above the level of the adjacent ground—leaving always a clear road-surface twenty feet wide.
- 3. That the width of approaches to rural railway crossings made in cuttings be not less than twenty feet clear from bank to bank.
- 4. That, unless otherwise ordered by the Board, the planking or paving blocks or broken stone topped with crushed rock screenings, on rural railway crossings over highways (between the rails and for a width of at least eight inches on the outer sides thereof) be twenty feet long on concession and main roads and sixteen feet on side and bush roads.

The Rules and Regulations sanctioned by the Board will be found in Appendix 'H.'

# PUBLIC SITTINGS OF THE BOARD.

Public Sittings of the Board between April 1, 1908, and March 31, 1909.

Province of Ontario-

Chatham-October 20, 21.

Fort William-July 21.

Grimsby—February 12, 1909.

Hamilton-October 13.

London-February 25, 1909.

Ottawa—April 9, 22, 23, 24; May 5; June 2, 4, 18, 23, 24; July 14, 15; September 1, 2, 3; October 6, 7, 8; November 3, 4, 19; December 1; January 5, 11, 12, 13, 1909; February 2, 16, 1909; March 9, 18, 1909

Toronto—May 18, 19, 20, 21; November 10, 11, 12, 13; December 7, 8, 9, 10, 11, 14, 15, 16, 17, 18; January 14, 15, 27, 28, 1909.

Province of Quebec-

Montreal—May 12, 13; December 22, 23; January 5, 6, 7, 8, 1909. Sherbrooke—March 19, 1909.

Province of New Brunswick-

St. John—January 18, 19.

Province of Manitoba-

Winnipeg—September 14, 15, 16, 17; February 1, 2, 3, 4, 5, 6, 8, 9, 1909; March 10, 11, 1909.

Province of Saskatchewan-

Regina—February 11, 12, 1909. Saskatoon—September 23.

Province of Alberta—

Calgary, February 17, 18, 1909. Edmonton—February 19, 20, 1909. Lethbridge—March 8, 1909. Medicine Hat—February 15, 1909.

Province of British Columbia-

Nelson-March 5, 1909.

Vancouver—February 23, 24, 25, 1909.

Victoria-February 27, 1909.

Vancouver-February 27, 1909.

The total number of public sittings was 99, at which 736 applications were heard. A list of which will be found in Appendix 'C.'

Among the more important matters dealt with by the Board at the Sittings above mentioned, special attention might be directed to the following:—

#### UNIFORM BILL OF LADING.

This important matter has received the further consideration of the Board and the following circular letter was sent out to the various Boards of Trade and kindred organizations, suggesting that the shippers appoint a committee to meet the committee of the carriers that adopted the contract submitted to them. The following is the circular:—

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THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

OTTAWA, ONT., April 24, 1908.

# Re Bill of Lading.

'Dear Sir,—In March, 1905, complaint was made to this Board regarding the form of bills of lading in use by the railways and which had been temporarily approved in October, 1904. The complaint came from the Canadian Manufacturers' Association, and was afterwards supported by the Bankers' Association, by various Boards of Trade, merchants, and shippers throughout the country. After much delay, in February, 1907, a draft bill of lading was submitted by a select committee appointed by the railway companies, and this was printed and distributed among those interested in the matter, the result being that the Board received from various shippers and business parties throughout the Dominion a variety of suggestions as to changes and modifications that should be made. The Winnipeg Jobbers' and Shippers' Association submitted a form and afterwards requested that it be withdrawn. There does not appear from all the mass of correspondence and suggestions, any concerted idea of what would, from the shippers' point of view, be a fair contract; on the other hand, the proposition of the railways has been before the Board since February, 1907.

'There seems to be no reason why this matter should not be dealt with, three years having elapsed, and not much progress made. The letters and circulars from the shippers and those interested, from their standpoint, contain such divergent ideas that the matter is left in a most difficult and complicated position for the Board to deal

with.

'When the question of a uniform bill of lading was before the Interstate Commerce Commission, upon the complaint of the Illinois Manufacturing Association, much the same diversity of opinion existed among the shippers, and the Commission suggested that, the matter being one for negotiation between the various conflicting interests, a joint committee of the carriers and shippers should be formed with the view of adjusting the points in dispute. The result was that a contract was ultimately agreed upon.

'The Board is of the opinion that a similar course may produce good results in the present instance, and suggests that the shippers appoint a committee to meet the committee of the carriers that adopted the contract submitted by them. This should

produce-

'First, unanimous agreement among the shippers as to what is deemed from their standpoint to be a fair contract; and

'Second, adjustment of many, if not all, of the terms of the contract.

'This circular is being sent to all the persons and associations that have corresponded with the Board upon the subject, with the suggestion that arrangements be at once made between them for the appointment of a small committee to meet, with as little delay as possible, the committee representing the railways.

'This committee of the shippers should be clothed with authority to represent all their interests; there should be a secretary to this committee, with whom correspondence with this Board may be carried on, and the delay and labour of corresponding

direct with the various persons and associations saved.

'The Board will be pleased to learn that immediate steps are taken upon the above lines, to facilitate its dealing with this matter, and will grant a special sitting at any time to hear the parties interested, or deal with any counter suggestions, either from the shippers or the railways.

'Mr. W. E. Foster, of the Grand Trunk Railway Company, Montreal, is the secre-

tary of the sub-committee representing the railway interests.

· Yours truly,

'J. P. MABEE, 'Chief Commissioner, B.R.C.'

As a result of this communication, a special committee representing the business communities; that is to say, the Boards of Trade and similar bodies throughout the Dominion, was named and after several meetings a conference was had between the representatives of the shippers and the railways in the rooms of the Canadian Manufacturers Association, Toronto, on March 22 and 23, 1909, and the Board understands that considerable progress was made towards coming to an agreement. There were, however, certain points of difference which are to be taken up on a date to be fixed in April next when it is hoped that sufficient progress will be made to enable the matter to be dealt with by a special hearing as suggested in the above circular of April 24, 1908.

#### PASSENGER RATES.

As stated in the report of the Board for the year cuding March 31, 1909, a circular letter was sent to all the railway company's subject to the Board's jurisdiction, informing them of the order of the Board herein, and asking if they were willing to have their standard tariffs similarly reduced, and if not to file their objections with the Board. The following is the list of railways on which the maximum passenger basis is three cents per mile.

List of Railways on which Maximum Passenger Basis is Three Cents per Mile.

Bay of Quinte.
Boston & Maine.
Canadian Northern.
Canadian Northern Ontario.
Canadian, Northern, Quebec.
Canadian Pacific (East).
Canadian Pacific (West), east of Edmonton-Calgary line.
Central Ontario.
Central Vermont.
Chatham, Wallaceburg & Lake Erie.
Elgin & Havelock.
Grand Trunk (East).
Hampton & St. Martins.
Irondale, Bancroft & Ottawa.
Maine Central.
Michigan Central.
Michigan Central.
Midland Railway of Nova Scotia.
Moncton & Buctouche.

New Brunswick Çoal & Railway Company.
New York Central.
Niagara, St. Catharines & Toronto.
Pere Marquette.
Quebec Railway, Light & Power Company.
St. Maurice Valley.
Salisbury & Harvey.
Schomburg & Aurora.
Tilsonburg, Lake Erie & Pacific.
Toronto, Hamilton & Buffalo.
Wabash.
Windsor, Essex & Lake Shore Rapid Railway.
Kingston & Pembroke.
New Brunswick Southern.
Grand Valley.
Brantford & Hamilton.

No further action has been taken by the Board.

# COMPLAINT OF THE FREDERICTON, N.B., BOARD OF TRADE.

This was a complaint filed with the Board by the Board of Trade of the city of Fredericton, in the province of New Brunswick, complaining that the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada were unjustly discriminating against the city of Fredericton in the rates charged on traffic originating west of Montreal, in the province of Quebec, and in favour of the city of St. John, in the province of New Brunswick, and applying for an order directing that the said discrimination be removed. The complaint was heard at a sitting of the Board held in the city of Ottawa on the 23rd of April, 1908, before the chief commissioner, the deputy chief commissioner and Commissioner Mills, in the presence of counsel for the Board of Trade, the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada. The judgment of the Board was delivered by the chief commissioner under date of the 28th April, 1908 (for the full text of the judgment see Appendix 'D'). The judgment directed that an order should go absolving both the Infercolonial and the Grand Trunk Railway Company

of Canada from the agreement referred to as having been entered into between the Intercolonial Railway and the Grand Trunk Railway Company, and directing the Grand Trunk Railway Company to restore to Fredericton the St. John rate upon all traffic originating west of Montreal. The following is the full text of formal order of the Board, issued pursuant to the judgment of the Board:—

Order No. 4682.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Ottawa, Tuesday, the fifth day of May, A.D., 1908.

PRESENT:

Hon. J. P. Mabee, Chief Commissioner. Hon. M. E. Bernier, Deputy Chief Commissioner. James Mills, Commissioner.

In the matter of the complaint of the Board of Trade of the city of Fredericton, in the province of New Brunswick, hereinafter called the 'Applicant,' complaining that the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada, hereinafter called the 'Grand Trunk,' were unjustly discriminating against the city of Fredericton in the rates charged on traffic originating west of Montreal, in the province of Quebec, and in favour of the city of St. John, in the said province of New Brunswick; and applying for an order directing that the said discrimination be removed;

Upon the hearing of counsel for the applicant, the Canadian Pacific Railway Company and the Grand Trunk, the evidence adduced, and what was alleged,—

It is Ordered, That the Intercolonial Railway and the Grand Trunk be, and they are hereby, absolved from the agreement with the Canadian Pacific Railway Company, as the result of which the rates to Fredericton on traffic from points west of Montreal were raised from two and one half cents (2½ cents) to eight cents (8 cents) per one hundred pounds above the rates on traffic from the same points to St. John, New Brunswick; and that the Grand Trunk be, and it is hereby, directed to restore to Fredericton the St. John basis of rates on traffic originating west of Montreal as aforesaid.

(Sgd.) J. P. MABEE,

Chief Commissioner,

Board of Railway Commissioners for Canada.

## COMPLAINT OF THE CITY OF CHATHAM.

This was a complaint filed with the Board by the City of Chatham, in the province of Ontario, complaining that the Grand Trunk Railway Company of Canada and the Wabash Railroad Company refused to issue passenger tickets for traffic over the portions of the Grand Trunk Company's line of railway operated by both companies which were available on the trains of either company as was formerly the practice, and applying to the Board for an order directing the companies to restore this practice. The matter was the subject of considerable correspondence between the Board and the railway companies affected, and finally on May 27, 1908, the Board issued the following order:—

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA

Meeting at Ottawa, Wednesday, the twenty-seventh day of May, A.D., 1908.

PRESENT:

Hon. J. P. Mabee, Chief Commissioner. Hon. M. E. Bernier, Deputy Chief Commissioner.

JAMES MILLS, Commissioner.

In the matter of the complaint of the Council of the city of Chatham, in the province of Ontario, complaining that the Grand Trunk Railway Company of Canada and the Wabash Railroad Company refuse to issue passenger tickets for travel over the portions of the Grand Trunk Railway Company's line of railways, operated by both companies which are available on the trains of either company, as was formerly the case; and applying for an order directing the companies to restore the practice:

Upon reading the petition, and what has been alleged on behalf of the companies

respectively:-

1. The Board doth order that the said companies be, and they are hereby, required to interchange passenger tickets between all stations in the province of Ontario through which the railways of both companies run passenger trains.

2. And the Board doth further order that each of the said companies account to

the other for the revenue earned upon the tickets so interchanged.

(Sgd.) J. P. MABEE,

Chief Commissioner, Board of Railway Commissioners for Canada.

# INTERSWITCHING.

The matter of interswitching charges generally is one that has been under the consideration of the Board for nearly two years, during which period arguments have been presented to the Board at sittings held in Winnipeg, Lindsay and Toronto, in interswitching cases, with the object of suggesting standardization; and the Board has also had several reports from its chief traffic officer on the subject. It might here properly be remarked that by 'interswitching' is meant the local service performed in moving local cars at and above common points by one company or by another, without any reference to the transfer of through or interlining freight.

On the 15th January, 1908, by direction of the Board a circular letter was sent to a number of parties who had filed complaints with the Board and to certain of the railway companies inclosing report of the Board's chief traffic officer, dated the 18th December, 1907, together with a memorandum of judgment of the late chief commissioner, the Hon. A. C. Killam, adopted by the full Board, on the subject of interswitching, in order that the parties might have an opportunity of making any observations or suggestions on the subject they might desire to make, coupled with a statement that, on the receipt of answers, the Board would be prepared to deal with each particular case individually. In response to this circular letter a number of answers were received and the matter was set down for consideration at sittings of the Board, held in Toronto on the 18th of May, 1908. Subsequently, on the 8th of July, 1908, the Board made an order dealing with the general question of interswitching, as follows:—

Order No. 4988.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Ottawa, Wednesday, the Eighth day of July, A.D. 1908.

PRESENT:

Hon. J. P. Mabee, Chief Commissioner. Hon. M. E. Bernier, Deputy Chief Commissioner. James Mills, Commissioner.

In the matter of the following complaints to the Board: The Canadian Manufacturers' Association, the Huntsville Lumber Company et al., against the Grand Trunk Railway Company of Canada; the W. Booth Lumber Company against the Grand Trunk Railway Company of Canada; the Winnipeg Manufacturers' Association against the Canadian Pacific Railway Company and the Canadian Northern Railway Company: W. J. Lovering against the Grand Trunk Rilway Company of Canada; Messrs, Leak and Company against the Grand Trunk Railway Company of Canada; Messrs. T. Dexter & Son against the Grand Trunk Railway Company of Canada; the Boake Manufacturing Company against the Grand Trunk Railway Company of Canada; the Peterborough Sandstone and Brick Company against the Canadian Pacific Railway Company and the Grand Trunk Railway Company of Canada; the town of Lindsay, Ont., against the Grand Trunk Railway Company of Canada and the Lindsay, Bobcaygeon and Pontypool Railway Company, and the Canadian Pacific Railway Company; the Windsor, Essex and Lake Shore Rapid Railway Company against the Pere Marquette Railroad Company; Messrs. Melady & Company against the Canadian Northern Railway Company; the Board of Trade of Niagara Falls re interswitching at Niagara Falls, Ont.; and J. Davy against the Niagara, St. Catharines and Toronto Railway Company.

Whereas, the foregoing and many other complaints have been made to the Board against various railway companies regarding the charges made for interswitching;

Therefore, the Board, having heard the evidence adduced in support of some of the said charges—certain of the same having been allowed to stand over until the matter could be dealt with in a general manner as far as possible, with the view of establishing some fixed basis for payment for interswitching services, and having fully considered the views and submission of the various interests, and the report and recommendation of its chief traffic officer, under the authority conferred upon it by the Railway Act, doth Order, Direct and Declare as follows:—

For the interpretation, application and operation of this order, -

1. (a) 'Interswitching' shall not include the service incidental to the transfer and continuous carriage of through or interline traffic between points outside of and beyond the terminal limits hereinafter prescribed.

(b) 'Contracting Carrier' shall, where it is necessary, between the points of shipment and delivery, to use the line or lines of another carrier or other carriers than the carrier performing the interswitching service, include such other carrier or carriers.

2. It shall be lawful for the contracting carrier to absorb the toll charged for the

interswitching of competitive traffic.

3. Upon traffic destined to consignees located upon, or reasonably convenient to, the tracks of the contracting carrier, or to consignees who have customarily accepted the contracting carrier's delivery, or which may be so consigned as not to indicate clearly the delivery required, and which subsequent to shipment is ordered by the shipper, the consignee, or the agent of either, for interswitch delivery involving an additional service by another carrier, and which is so interswitched, the contracting

carrier may charge and collect, in addition to its freight charges (including back charges if any), the interswitching toll of the carrier which performs such service, which toll shall not be more than twenty (20) cents per ton for any distance not exceeding four (4) miles, nor more than three dollars (\$3) as the minimum and eight dollars (\$8) as the maximum per carload.

4. Upon traffic destined to consignees located upon or reasonably convenient to tracks other than those of the contracting carrier, or to consignees who have customarily required such other carrier's delivery, the contracting carrier may for the interswitching service rendered necessary for such delivery charge and collect an additional toll of not more than ten (10) cents per ton for any distance not exceeding four (4) miles, nor more than one dollar and a half (\$1.50) as the minimum, and four dollars (\$4) as the maximum, per carload; and the interswitching toll of the carrier which performs such service shall not be more than twenty (20) cents per ton, nor more than three dollars (\$3) as the minimum, and eight dollars (\$8) as the maximum, per carload—provided that the contracting carrier shall not thereby be required to reduce its revenue below eight dollars (\$8) per carload.

5. Distance shall be computed to or from the nearest point of interchange.

6. The foregoing tolls shall include the empty movement of the car to or from the point at which it was received by the interswitching carrier.

7. Traffic consigned 'to order' shall be subject to the provisions of paragraph three (3) and four (4) of this order as the same may apply.

8. Traffic interswitched at the point of shipment shall be subject to clause four

(4) of this order, in so far as the same may be applicable.

- 9. The class and commodity tariffs of all railway companies subject to the provisions of the Railway Act, shall show clearly and explicitly at what points and under what circumstances interswitching services will be performed, and at whose expense.
- 10. The tolls herein provided for interswitching service shall not interfere with or supersede any lawfully published freight rates for ordinary freight service from station to station.
- 11. All and every arrangement or device, such as free or assisted cartage, cartage allowances, or the like, intended to equalize the facilities of competing companies at common points, except such as are lawfully published in the freight tariffs of the companies, are hereby prohibited.

(Sgd.) J. P. MABEE,

Chief Commissioner,

Board of Railway Commissioners for Canada.

This order becomes effective September 1, 1908.

A. D. CARTWRIGHT,

Secretary.

## WINNIPEG RATE CASE.

This case was the outgrowth of a complaint filed with the Board by Portage la Prairie Board of Trade, Manitoba, against a series of special freight tariffs of the Canadian Pacific Railway Company expressed as 'to be used on re-shipments by Winnipeg wholesale houses only to traders doing business at or tributary to stations specified herein.' A judgment was delivered in this latter complaint by the late Chief Commissioner, the Hon. A. C. Killam, in which, 'inter alia,' he stated that he thought it advisable that the Board should not in that instance determine the rates to be substituted, as much delay would be involved in making the necessary inquiries but that it would be sufficient to disallow the tariffs referred to, allowing the company to substitute new ones which may be made the subject of complaint if found to be unjust

to any interests. Subsequently, the Canadian Pacific Railway Company substituted new tariffs and the Winnipeg Board of Trade and the Winnipeg Jobbers and Shippers' Association and the Deloraine Board of Trade applied to the Board for an order disallowing the tariffs of freight rates issued by the Canadian Pacific Railway Company and the Canadian Northern Railway Company in substitution for the traders' tariffs, so-called, declared illegal by the Board as preferential in favour of Winnipeg. This application was heard at Winnipeg on September 16, 17 and 18, 1908, before the Chief Commissioner and Commissioner Mills, and at the conclusion of the hearing the Chief Commissioner delivered judgment of the Board (for full text, see Appendix 'D') dismissing the application. The following was the order issued by the Board in the matter.

Order No. 5453.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Winnipeg, Wednesday, Thursday and Friday, the sixteenth, seventeenth and eighteenth days of September, A.D. 1908.

PRESENT:

Hon. J. P. Mabee, Chief Commissioner. James Mills, Commissioner.

In the matter of the application of the Winnipeg Board of Trade, the Winnipeg Jobbers' and Shippers, Association, and the Deloraine Board of Trade, hereinafter called the 'Applicants,' under section 323 of the Railway Act, for an order disallowing the tariffs of freight rates issued by the Canadian Pacific and the Canadian Northern Railway Companies, hereinafter called the 'Railway Companies,' in substitution for the 'Traders' tariffs, so-called, declared illegal by the board as preferential and discriminatory in favour of Winnipeg.

Upon the hearing of counsel for the Applicants and the railway companies, the evidence adduced, and what was alleged, the cities of Regina and Portage la Prairie

being represented at the hearing:-

It is ordered that the said application be, and it is hereby, dismissed.

And it is further ordered, that the question of special commodity rates from Winnipeg, also the adoption of a modification of the Ontario 'town' tariffs, prescribed in the order of the Board No. 325S, dated the 6th July, 1907 (Schedule A), as a basis for special 'town' tariffs applicable to the western provinces, as suggested at the hearing, be reserved for future consideration.

(Sgd.) J. B. MABEE,

Chief Commissioner,

Board of Railway Commissioners for Canada.

## BRAMPTON COMMUTATION TICKET CASE.

This was an application made by F. W. Wegenast, of the town of Brampton, Ont., under section 315 of the Railway Act, for an order directing the Grand Trunk Railway Company of Canada to issue to him the fifty-five trip ticket for use between Brampton and Toronto, similar to those in use between Oakville and Toronto, and at the same rate at which those between Oakville and Toronto are sold. The application was heard in Toronto at the sittings of the Board held in Toronto on the 18th November, 1908, before the Chief Commissioner and Commissioners Mills and 20c—2

McLean, counsel appearing for the town of Brampton, the Brampton Board of Trade, the city of Toronto, the town of Oakville and the Grand Trunk Railway Company of Canada, and the applicant appearing in person. The judgment of the Board (Commissioner Mills dissenting) was delivered by the Chief Commissioner under date of the 23rd November. 1908, refusing the application for the reasons therein stated (for the full text of the judgment and of the dissenting judgment of Commissioner Mills see Appendix 'D'). Subsequently the applicant applied for a rehearing, but the Board refused to entertain the application on the ground of no new evidence sufficient to warrant a rehearing having been adduced.

# PROPOSED UNIFORM CODE FOR CANADIAN RAILWAYS TRAIN RULES—PETITION OF TRAINMEN OF ONTARIO.

A special sitting was held in Ottawa on the 24th April, 1908, for the further consideration of the proposed uniform code of train rules for Canadian railways, and at the same sittings and in conjunction therewith the following matters submitted by the joint committee of the Legislative Board of the Brotherhood of Railroad Trainmen, were considered:—

1. That co-employees be allowed to attend investigations held by the Board's Inspector of Accidents, on request of witness.

2. That witness fees to be paid at such investigations be increased.

3. That the Board order an increase in the number of men on trains for flagging purposes.

4. That telegraph operators be not employed under the age of twenty-one and evidence be furnished of their having one year's experience in railroad work.

5. That the Board's inspectors be required to ride on and inspect the condition of locomotives.

6. That all engines be equipped with dump ash pans, such as will avoid the necessity of a man going under the engine to clean the same.

The Board also considered at the said sittings, in conjunction therewith, the following matters presented to it by memorial through the Ontario Brotherhood of Railroad Trainmen:—

1. That all brakes, dogs and ratchets be placed on the top of the car instead of on the step at the end of the car.

2. That all cars used as caboose be equipped with air brakes, gauge, conductor's valve, platform, steps and cupola.

3. That operating levers be placed on both sides of the draw-bar along the end of the car.

4. That no obstructions be piled on the tops of any box cars while being hauled by the train crew.

5. That any order requiring men to ride on the top of trains be abolished.

6. That safety handholds and steps be placed on engines.

7. That obstructions and structures be placed not less than six feet clear of rail.

8. That not less than five men be placed on any train and not less than three men on light engines.

9. That there be a car limit as to number.

10. That passenger brakemen have one year's experience in yard or freight service.

11. That steps be taken to prevent the handling of crippled cars on trains, except on wreck trains.

At this meeting there were present Mr. Harvey Hall, legislative representative of the different labour organizations; Mr. David Campbell, representing the Order of Railroad Telegraphers; Mr. Geo. A. Wark, representing the Locomotive Firemen; Mr. Lawrence, representing the Brotherhood of Locomotive Engineers; Mr. Courte-

nay, representing the Trainmen; and the following representatives of the different railways:—

M. K. Cowan, K.C., assistant solicitor, and W. G. Brownlee, general superintendent, representing the Grand Trunk Railway Company.

F. H. Chrysler, representing the Dominion Atlantic Railway.

E. W. Beatty, assistant solicitor; J. W. Leonard, assistant general manager, and H. H. Vaughan, assistant to vice-president, representing the Canadian Pacific Railway Company.

W. P. Torrance and R. H. L'Hommedieu, general manager, representing the

Michigan Central Railway Company.

Andrew Haydon, representing the Great Northern Railway, operating lines in Canada.

C. H. Hibbard, representing the Q., M. and S. Railway.

T. J. Kennedy, general manager, representing the Manitoulin and North Shore Railway.

H. W. Gays, general manager, representing the Ottawa and New York Railway. Geo. Collins, general manager, representing the Central Ontario Railway.

J. H. Black, general superintendent T. and N. O. Railway, representing the Temiskaming and Northern Ontario Railway.

Mr. Little, representing the Orford Mountain Railway.

F. M. Spaidal, general superintendent, representing the Canadian Northern Railway Company.

J. S. Pyatt and Mr. Trump, general superintendent, representing the Père Marquette and the London and Port Stanley Railway.

J. E. Duval, representing the Canadian Car Service Bureau.

F. C. Cleaver, representing the Rutland Railway.

Dealing with the question of the proposed uniform code of train rules for Canadian railways, it was agreed that the committee of Trainmen should file with the Board, as a confidential document, their criticism of the final revision of the rules submitted by the select committee of five representing the railway companies operating in Canada, and that upon such criticism being filed, the Board would then again take the matter up and for that purpose the further consideration of the uniform code of train rules stood adjourned. Subsequently a special committee of five to consider the objections raised by the trainmen was named by the board. This committee was composed of two officers of the Board, two representatives of the railway companies, and one representative of the men.

In connection with the memorial of the Trainmen's Association of Canada, for the adoption of certain regulations by the Board as heretofore mentioned the Board

issued the following order:-

Order No. 5888.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Ottawa, Wednesday, the sixteenth day of December, A.D. 1908.

## PRESENT:

Hon. J. P. Mabee, Chief Commissioner. Hon. M. E. Bernier, Deputy Chief Commissioner. James Mills, Commissioner.

In the matter of the memorial of the Trainmen's Association of Canada, for the adoption of certain regulations by the Board, having in view the protection of employees of the railway companies, subject to the jurisdiction of the Board:—

Upon the report of the operating officials of the Board; and upon hearing the representatives of the railway companies and of the employees; and in pursuance of

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the powers conferred upon it by sections 30 and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf,—

It is ordered that,

- 1. No freight train, except work or construction trains of fifteen cars or less, now in service, shall be made up or allowed to proceed upon its journey unless at least three-quarters of the cars composing such train have air brakes in good working order.
- 2. The number of cars that may be drawn in freight trains shall be left entirely to the judgment of the operating officials of such railway companies; in all cases, however, in which it may be found necessary to double-head, the leading engine shall control the train.
- 3. Every road locomotive engine shall be equipped with a step or steps and handholds on both sides of and at or near the rear ends of tenders; foot-rests shall be provided on the pilots of every such engine, sufficiently wide for a man to stand on; every switching or yard engine shall be equipped with foot-boards and headlights on the front and rear ends of the engine and tender, such foot-boards to be not less than ten inches wide; the back of such foot-boards shall be protected by a board not less than four inches high, and if cut in the centre, the inner ends shall be protected in like manner; and foot-boards and headlights shall be placed on the rear end of the tender of every road locomotive used for switching service, except in case of emergency; in no case, however, shall any engine be continuously used for switching purposes for more than twenty-four hours without such equipment.
- 4. The number that shall comprise the switching engine crews shall be left entirely to the judgment of the operating officials; on main lines light engines shall not be run at a distance greater than twenty-five miles in any one direction without a conductor, in addition to the engineer and the fireman; and on branch lines, the operating officials shall determine the necessity of requiring conductors on light engines.
- 5. Every locomotive engineer of such companies must have at least one year's continuous experience as a fireman, pass a satisfactory examination in regard to the proper care of locomotive engines, the handling of air brakes, and train rules and regulations, be at least twenty-one years of age, and undergo an eye and ear test by a competent examiner before being eligible for appointment as such engineer. Except in cases of emergency, every conductor of such companies must have at least one year's experience as a brakeman or conductor and be at least twenty-one years of age before being eligible for appointment as such.
- 6. The telegraph operators of such companies required to handle train orders shall be at least eighteen years of age, able to write a legible hand, to send and receive messages at the rate of not less than twenty words a minute, and be thoroughly familiar with and required to pass an examination upon train rules before a competent examiner.
- 7. Every employee of such railway companies engaged in operating trains shall, before undertaking such duties, be required to undergo a colour test by a competent examiner.
- 8. All railway companies shall strictly conform to the rules and regulations. from time to time approved by the Master Car Builders' Association, governing the loading of lumber, logs and stone on open cars, and the loading and carrying of structural material, plates, rails and girders. No material of any kind shall be carried upon the roofs of cars.
- 9. All open drains crossing tracks in the yards of such companies shall be covered for five feet on each side of the rails, except in times of flood, when temporary open drains may be provided; semaphore and signal wires, when they cross under tracks. shall be carried in pipes or boxes; new buildings and semaphores and poles erected shall be placed not less than six feet from the rail of the main track; water stand

supply pipes shall be fastened parallel with the main line; and engine-men shall be required to see that this is done after using such pipes.

10. Every person or company offending against any of the foregoing provisions

shall forfeit and pay the sum of \$50 for every such offence.

(Sgd.) J. P. MABEE,

Chief Commissioner,

Board of Railway Commissioners for Canada.

# CARTIER AND SARNIA TUNNEL—STOP-OVERS ON WESTERN GRAIN.

This matter came before the Board for consideration in connection with a complaint filed by the Montreal Board of Trade, Transportation Bureau. The complaint was heard and evidence taken at the sittings of the Board held in the city of Montreal on the 22nd of December, 1908, before the Chief Commissioner, the Assistant Chief Commissioner and the Deputy Chief Commissioner. Mr. W. S. Tilston represented the Montreal Board of Trade; Mr. C. B. Watts the Dominion Millers' Association; Mr. J. E. Walsh the Canadian Manufacturers' Association; Mr. E. W. Beatty the Canadian Pacific Railway Company; and Mr. M. K. Cowan, K.C., the Grand Trunk Railway Company.

The judgment of the majority of the Board (the Assistant Chief Commissioner dissenting) was delivered on the 28th of December, 1908. (For the full text of judg-

ment and dissenting judgment, see Appendix 'D.')

The following was the order of the Board issued in pursuance of the said judgment.

Order No. 6147.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Meeting at Montreal, Thursday, the twenty-first day of January, A.D. 1909.

PRESENT:

Hon. J. P. Mabee, Chief Commissioner. D'Arcy Scott, Assistant Chief Commissioner. Hon. M. E. Bernier, Deputy Chief Commissioner.

In the matter of the complaint of the Transportation Bureau of the Montreal Board of Trade against an additional charge of one cent per 100 pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products, in carloads, consigned to Cartier, 'for orders,' under Supplement No. 13, effective September 1, 1908, to the company's tariff, C.R.C., No. E 678, and still in force by Supplement No. 15 to the same tariff.

Upon the hearing of counsel for the Transportation Bureau of the Montreal Board of Trade, the Canadian Pacific Railway Company, the Dominion Millers' Association and the Canadian Manufacturers' Association, the evidence adduced and

what was alleged,-

It is ordered that the said charge of one cent per 100 pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products in carloads, consigned to Cartier 'for orders,' under Supplement No. 13, effective September 1, 1908, to the company's tariff, C.R.C., No. E 678, and still in force by Supplement No. 15 to the same tariff; and by the Grand Trunk Railway Company at Sarnia tunnel, on grain and grain products, in carloads, originating in western Canada, destined to points in eastern Canada, and routed via Chicago, Chicago

Junctions, or Milwaukee to Sarnia tunnel, Ontario, 'for orders,' under Supplement No. 3 to the company's tariff, C.R.C., No. E 1101,—be and the same is hereby disallowed, and a 'stop-over' charge of twenty-five (25) cents per car a day for the first forty-eight hours, and the car service toll thereafter, substituted therefor.

And it is further ordered, that this order become effective not later than the 15th

day of February, 1909.

# D'ARCY SCOTT,

Assistant Chief Commissioner, Board of Railway Commissioners for Canada.

# CAR SHORTAGE.

As stated in previous report, the equipment question would appear to have worked out its own solution. That is to say, that there is still a considerable excess of idle cars both in Canada and the United States, over and above the requirements for traffic purposes.

During the past year the number of complaints made to the Board in regard to car shortage has greatly decreased, and as will appear from statement of uniform complaints in Appendix 'E,' filed with the Board, there were less than a dozen complaints made to the Board during the year, and these were of local or minor importance.

No further action, therefore, has been taken by the Board in regard to the equipment question, other than to deal with the special complaints made.

# FORM OF RELEASE FOR FREIGHT SHIPPED TO FLAG STATIONS.

The matter of a form of release of responsibility for freight shipped to flag stations upon the lines of all railways in Canada subject to the jurisdiction of the Board having been brought before the Board in connection with the complaint of the Winnipeg Board of Trade respecting alleged demand of the Canadian Pacific Railway Company that shippers in Winnipeg sign a release form for freight shipped to regular or flag stations, the Board having considered the matter at its meeting held in Winnipeg on February 8, 1909, issued an order providing as follows:—

1. That hereafter the form of release of responsibility for freight shipped to flag stations, upon the lines of all railways in Canada, subject to the jurisdiction of the

Parliament of Canada, be in the following form:—

2. That no other form of release shall be required to be signed by any shipper of any property to any flag station upon any line of railway in Canada until further order (if any) regarding facilities and conveniences to be established by railway com-

panies at flag stations.

## INVESTIGATION OF EXPRESS COMPANIES.

As stated in previous report, owing to the illness and death of the then Chief Commissioner of the Board, Hon. A. C. Killam, further sittings in connection with the above investigation had to be postponed and, as a consequence, further enlarge-

ments were granted by the Board, extending the time advised by Section 27 of the Act 6 Edward VII, Cap. 37, until the first of June. 1909, within which the express companies were required to file their tariff of tolls. After the Chief Commissioner, Hon. J. P. Mabee, had an opportunity to read the large amount of evidence taken and familiarize himself with the question arising therefrom, sittings of the Board were held in Toronto on.......day of December, 1908, and adjourned sittings in Montreal commencing January 5, 1909. Previous, however, to these sittings the Board made an order under date of October 22, 1908, order No. 5493, temporarily approving the express classification for Canada, C.R.C. No. 1, Table of Graduation Charges, C.R.C. No. 2, and Monthly Classification C.R.C. No. 3, filed with the Board on July 2, 1908. At a subsequent meeting held in the city of Ottawa on January 11, 1909, the Board made an order, No. 6020, rescinding the said order of October 22, 1908, and directing all express companies to at once notify their agents to apply the tariff and rules in instances prior to January 1, 1909; and in all respects to carry on their business in compliance with the rates and rules prior to that date, until further order of the Board; and further providing that the cancelling of the said section and tariff filed, should not necessarily give rise to claims for reparation as to any shipments occurring within ten days from January 12, 1909, but, that such claims if made should be dealt with, regard being had to the steps taken by the companies to inform their agents as required by the order of the Board.

# JUDGMENT OF THE BOARD—NEW CLASSIFICATION DISALLOWED.

The Chief Commissioner.—It is not denied that this classification, which came into force on January 1, 1909, will materially increase the receipts of the express companies. It is not an inconsiderable volume of traffic that the rates have been increased through the charges on returned empties, and the adoption of the weight and measurement rule. It has been shown that the movement under these heads is large and considerable. The increase, it is said, will run up to nearly 100 per cent. When this inquiry began, before I became a member of the Board, an undertaking was given on behalf of the express companies that, pending the inquiry, no increase of tolls should be made by them. I think it is the duty of the Board to require that this undertaking be carried out. When this classification was approved I understood that such changes as were made were small, and that, upon the whole, there was a reduction and not an increase. There was, therefore, some surprise when it was found that these general increases had been attempted.

There was no notification of any kind given to the public of these changes, and no opportunity to shippers to adapt their business to such changes as might be reasonable. I can only repeat I would not have signed the order approving of this classification upon any ex parte application of the express companies had I been in possession of the facts now before us, but would have required public notice to be given in order that those who have to pay these tolls should have an opportunity to present their views. Many and important rules have been changed; those that I have carefully considered are mostly changes in favour of the companies. These have not yet had sufficient investigation, nor is the full purport of them yet understood by either the public or the Board.

I am free to confess that this matter was not given the consideration it was entitled to when the order of October was made, my understanding being that it was for the convenience and not for the profit of the express companies, and that tolls were not, upon the whole, being increased.

It is said the disallowance now of this new tariff and classification will be a hardship upon the express companies, requiring reprinting the old classification, and its distribution. I regret that this is so, but the present confusion is brought about

by reason of the companies' action in filing and asking approval of a classification that materially increases the tolls, when it was understood this should not be done, and if an order has inadvertently issued, that should not have been made, it is the plain duty of the Board to recall it, and its so doing in this case only reinstates the conditions that shippers are perfectly familiar with and upon which they have been doing business for many years.

Complaint is made that this course casts an imputation of bad faith upon the companies. I do not say, and have not said, that there was any bad faith, or deliberate intention to deceive or mislead the Board. The traffic officers of the companies discussed matters very fully with the chief traffic officer of the Board, who was of opinion that, upon the whole, the proposed changes would reduce instead of raise the receipts of the companies, but so far as the evidence given before us goes, the contrary is the case. It is, I think, unfortunate that this proposed change in the classification and rules had not been brought to the attention of counsel for the government, who have had charge of this whole inquiry from its inception. Had this course been taken, it is fair to assume that after inquiry as to the effect of the proposed changes, approval would have been for present withheld. This omission I regard as an oversight, and not by design.

It was represented to me that some shippers were defrauding the express companies by shipping full packages by freight, and returning the empties by express, taking advantage of the rule allowing empties to return free. To stop this, they proposed to charge 50 per cent of the merchandise rate, and in some instances specific charges on the returned empties. The facts now show that the effect of this upon the business of only some 18 or 20 shippers would be to cause an increase of \$25,000 and \$30,000 in express tolls upon their volume of business in 1908. I do not undertand, when approving this change, that the companies were protecting themselves in this way.

Many cases in the United States and England, and followed here, hold that a long-established rate is regarded as reasonable unless shown to be too low, it would not be proper to permit a general increase in rates through the medium of imposing a toll upon returned empties without requiring the companies to show affirmatively that the outward rate was not sufficient to cover the transport of the returned empty free of charge. Of course, we do not at this time deal with the suggestion that the practice involves discrimination.

The weight and measurement rule is creating a disturbance that could have all been avoided if public notice had been given so shippers could have adjusted themselves to it, if it were thought a proper rule to introduce, as to which we can say nothing at present.

We are of opinion that the order approving this classification, of January 1, 1909, must be rescinded, and this classification and variation of the old rules disallowed. Of course, this is not to be regarded as a final disposition of the matter, but merely leaves everything connected with the express business as it stood prior to January 1, and all evidence applicable to the subject given upon the inquiry will be treated as being given for the purpose of obtaining allowance of this classification and amended rules, some of which at present appear not to be unreasonable.

The companies must at once notify all their agencies to apply the tariff and rules in existence prior to January 1, and in all respects carry on their business in compliance with the rates and rules in force at and prior to that date until further disposition of this hearing.

Cancellation of the tariff filed and above referred to shall not necessarily give rise to claims for reparation as to any shipments occurring within the next ten days, but such claim, if made, shall be dealt with individually, regard being had to the steps taken by the companies to inform agents of the above cancellation.

Further hearing of the express investigation was continued before the Chief Commissioner to the Board at St. John, N.B., on the 18th of January, 1909; and by

the Chief Commissioner and Commissioner McLean, at Winnipeg, on the 1st of February, 1909; Regina, the 11th of February; Medicine Hat, the 15th of February; Calgary, the 17th of February; Edmonton, the 19th of February; Vancouver, the 23rd of February; Victoria, the 27th of February; Nelson, the 5th day of March; Lethbridge, the 8th day of March, and Winnipeg, the 10th of March.

Prior to the above sittings of the Board, on the dates stated forthwith, the following notice was sent under instructions of the Board, to the secretaries of the various boards of trade in the provinces of Manitoba, Saskatchewan, Alberta and British Columbia, and the express companies and others directly interested, notifying them

of the sittings as follows:-

January 18, 1909.

Re Complaint against Express Companies originating in the Provinces west of the Province of Ontario.

DEAR SIR,—I am directed to inform you that the Board of Railway Commissioners for Canada will hold a sittings in the following cities and towns commencing on the dates named, viz.:—

Winnipeg, February 1, 1909. Regina, February 11, 1909. Medicine Hat, February 15, 1909. Calgary, February 17, 1909. Edmonton, February 19, 1909. Vancouver, February 23, 1909. Victoria, February 27, 1909.

During its western sittings, the Board heard numerous complaints, almost all given, such sittings to be held in the court house, and the Board will be prepared, on the dates specified and at the places named, to hear complaints against express companies doing business in the western provinces.

If your board of trade have any complaints to lay before the Board, you are requested to notify the Secretary of the Board to that effect as soon as possible after the receipt of this notice.

Yours truly,

(Sgd.) A. D. CARTWRIGHT,

Secretary, Board of Railway Commissioners.

The Secretary, Board of Trade.

During its western sittings, the Board heard numerous complaints, almost all of which have been held over to be dealt with when the general question of express rates has been disposed of, and since the return of the Chief Commissioner and Commissioner McLean from the western sittings, arrangements have been made to continue the investigation the later part of April or early in May in Toronto, the delay being caused by counsel for the various interests not being able to arrange for an earlier continuation.

# TORONTO UNION STATION AND PROPOSED VIADUCT.

A special sittings of the Board was held in Toronto on the 20th May, 1908, and the two following days, in connection with the settling of the plans of the Union Station in Toronto, and matters connected therewith, and also in settling the question whether the railway tracks in Toronto should be raised or depressed in different parts of the city, and whether any or what further bridges should be built for carry-

ing streets over railways along the water front. Counsel appeared at the said sittings for the corporation of the city of Toronto, for the Toronto Board of Trade, the Grand Trunk Railway Company of Canada, the Canadian Pacific Railway Company, and for certain property owners affected by the proposed viaduct. After hearing counsel, the application was adjourned until the 4th June, the Board directing that in the interim the corporation of the city of Toronto should file and serve a formal application on the parties interested, setting forth the character of the works required.

At the hearing on the 4th June, objection was taken to the jurisdiction of the Board to order the elevation of the railway companies' tracks along the Toronto water front, and the judgment of the Chief Commissioner, concurred in by Commissioner Mills, was delivered on the 8th June, 1908. (For full text of the judgment)

ment, see Appendix 'D.')

The Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company made application to a judge of the Supreme Court on the 24th June, 1908, for leave to appeal to the Supreme Court on the question of the jurisdiction of the Board to entertain the application of the municipality. Mr. Justice Duff, who heard the application, reserved judgment, and having expressed the opinion upon the argument that there might be questions of law raised other than that of jurisdiction, and stating that as to these application would have to be made to the Board for leave to appeal, the railway companies thereupon made an application to the Board on the 14th July, 1908, for leave to appeal and for an opportunity to the parties to give any further evidence upon the questions involved in such appeal. Upon this last application, the Chief Commissioner, expressing the views of the Board, stated that the Board was of opinion that the next appointment it gave should be one to take all the evidence that any person might offer regarding the question as to whether an order for a viaduct or a grade crossing should be made, and that the case should not be split up any more than it had been.

Subsequently the city applied for an appointment to proceed with taking the evidence at an early date, which the Board granted, and the matter was taken up at a sittings of the Board held in Toronto on the Sth December, 1908, before the Chief Commissioner, the Assistant Chief Commissioner and Commissioner Mills. The judgment of the majority of the Board was delivered by the Assistant Chief Commissioner, under date of the 29th December, 1908. (For the full text of the judgment)

ment, see Appendix 'D.')

The Chief Commissioner wrote a separate judgment under date of the 30th December, 1908, in which he differed from his colleagues on certain points. (For

the full text of his judgment, see Appendix 'D.')

A further hearing for the purpose of settling the terms of the order to be issued pursuant to the judgment of the Board was had on the 12th of January, 1909, in Ottawa; and upon the undertaking of counsel for the railway companies given to counsel for the city of Toronto, to file complete and working plans within three months from that date, and to furnish copies thereof to the city, it was arranged that final settlement of the order should stand adjourned for three months.

The matter of the appeal of the railway companies to the Supreme Court of

Canada from the judgment of the Board is still pending.

## Re TELEPHONE RATES.

As stated in the previous report, a large amount of evidence had been taken in this connection and the late Chief Commissioner, the Hon. A. C. Killam, K.C., was engaged in preparing a judgment at the time of his death. Since then no further evidence has been taken, save dealing with the matter of the Bell Telephone Company and the Windsor Hotel Company, in which the following order was made:—

Upon the hearing of counsel for the applicant company and the Windsor Hotel Company, the evidence adduced, and what was alleged:—

It is ordered, that the said contract be, and it is hereby approved. subject to the

following conditions, namely:-

1. That the charge of ten cents for each connection had over any telephone thereby leased with the Montreal Exchange subscribers of the applicant company be subject to alteration at any time by the board.

2. That any extension of the term of the agreement after the expiration of ten

years, be subject to the approval of the Board.

The reasons for this order appear in Appendix 'D.'

(Sgd.) J. P. MABEE,

Chief Commissioner,

Board of Railway Commissioners for Canada.

## Re RAILWAY FENCING AND CATTLE GUARDS.

The Board has been in receipt, during the past year, of a number of complaints from farmers and settlers in the northwestern provinces, complaining of neglect or failure on the part of the railway companies to properly fence their right of way.

Also numerous complaints in respect to cattle killed on railway tracks.

In view of these complaints, after the return of the Chief Commissioner and Commissioner McLean from the western sittings, held by the Board during the months of February and March, the following circular, together with memorandum prepared by the Chief Commissioner and a draft order in connection therewith, was mailed to all railway companies subject to the jurisdiction of the Board, and to all secretaries of boards of trade of the principal towns of the provinces of Manitoba, Saskatchewan, Alberta and British Columbia. The Board will, at its sittings to be held the first Tuesday in May, hear the interested parties as intimated in the circular.

The Board feels that the subject is one which calls for its immediate attention, and hopes by the proposed action to get rid of the cause of these complaints, or at least greatly ameliorate the condition of affairs in this respect now existing.

The following are the documents referred to.

March 25, 1909.

Circular No. 34.

Cattle Guards, Highway Crossings and Fencing of Rights of Way.

DEAR SIR,—I am directed by the Board to inclose you a memo, and draft order prepared by the Chief Commissioner upon the question of fencing the rights of way of railway companies, cattle guards and highway crossings. The final settlement of the terms of this order will be spoken to at a meeting of the Board to be held in Ottawa on May 4 next. Any suggestions you may see fit to make either by letter or in person at this meeting, will receive consideration.

Yours truly.

(Sgd.) A. D. CARTWRIGHT,

Secretary, Board of Railway Commissioners.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

PRESENT:

Hon. J. P. Mabee, Chief Commissioner. S. J. McLean, Commissioner.

In the matter of complaints against railway companies for non-compliance with the provisions of the statute regarding fences and cattle guards and public highway crossings.

Upon hearing complaints from many individuals, public bodies and municipalities that railway companies are not complying with the provisions of section 254 of the Railway Act, and that much-hardship is caused by the exemption provided for in subsection 4 of the said section, and upon request being made that the Board intervene, as provided for by said subsection, and upon hearing what was said upon behalf of the railway companies,—

It is ordered, that all railway companies subject to the jurisdiction of this Board shall, as to all railway lines completed, owned or operated by them, whether or not

the lands on either side of the railway are inclosed, settled or improved-

1. Within one year from this date erect and maintain, on each side of the right of way (1) fences of a minimum height of 4 feet 6 inches, with swing gates, 18 feet in width, at farm crossings, with minimum height aforesaid, with proper hinges or fastenings; (2) cattle guards on each side of the highway at every highway crossing at rail level. Provided that siding or hurdle gates, constructed before the 1st day of February, 1904, and farm gates of a minimum width of 16 feet, constructed before the 1st day of April, 1909, may be maintained.

2. The railway fences at every highway crossing shall be turned into the respec-

tive cattle guards on each side of the highway.

3. All fences, gates and cattle guards shall be suitable and sufficient to prevent

cattle and other animals from getting on the railway.

4. As to lines not yet completed or opened for traffic, or in course of construction, all such companies shall—

(1) Erect fences, gates and cattle guards as aforesaid as the line of railway

is graded.

- (2) If not yet opened for traffic, then such fences, gates and cattle guards as aforesaid shall be erected and maintained before such railway shall be opened for traffic.
- (3) Where the railway is being constructed through inclosed lands, it shall be the duty of the railway company to at once construct such fences so that cattle and other animals cannot escape, or injury be caused by them to crops.
- 5. Where in mountainous or other sections of the country, it shall be made to appear to the Board that no necessity exists for the fencing or other works hereinbefore directed, the company or companies may apply to the Board for exemption from fencing and other works, and such exemptions may be made as the Board deems proper.

6. All railways now in operation shall, within one year, construct and maintain suitable and proper highway crossings at all such as may be opened for travel, and additional ones at once upon such highways being from time to time open for travel.

7. All railways not yet opened for traffic, or hereafter constructed shall, before the same are opened for traffic, construct and maintain suitable and proper highway crossings at all such as may be opened for travel, and additional ones at once upon such highways, being from time to time opened for travel.

8. All such crossings shall comply with the standard conditions of the Board.

which are as follows:-

(1) That, unless otherwise ordered by the Board, the width of approaches to rural railway crossings over highways be 20 feet road surface on concessions and main roads, and 16 feet on side and bush roads.

(2) That a strong, substantial fence or railing, 4 feet 6 inches high, with a good post-cap (4 inches by 4 inches), a middle piece of timber (1½ inches by 6 inches), and a 10-inch board, firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing, where the height is 6 feet or more above the level of the adjacent ground, leaving always a clear road surface of 20 feet wide.

(3) That the width of approaches to rural railway crossings made in cut-

tings be not less than 20 feet clear from bank to bank.

(4) That, unless otherwise ordered by the Board, the planking or paving blocks or broken stone, topped with crushed rock screenings, on rural railway crossings over highways (between the rails and for a width of at least 8 inches on the outer sides thereof) be 20 feet long on concession and main roads, and 16 feet on side and bush roads.

# Re RAILWAY FENCING AND CATTLE GUARDS.

The CHIEF COMMISSIONER.—At every sitting of the Board, from Winnipeg to Victoria, complaints were made against the railway companies in connection with the fencing, or rather the defective and non-fencing of their rights of way, and that the law regarding cattle guards was not complied with. Claims innumerable for stock killed, and refusal to make compensation were disclosed. Many cases appeared where stock had been killed upon the track, and farmers were afraid to ask for compensation for fear of being involved in endless litigation.

It would seem, perhaps, that upon the whole the absence of fences along the right of way is a more fruitful source of loss to the rancher and farmer than defec-

tive cattle guards or of their absence.

Cases were given where those in charge of the construction of railways entered upon improved and inclosed land, threw down the fences, made no attempt to inclose the right of way, allowing stock to get out upon the highways, thus injuring crops and in some instances these cattle were killed upon distant railway tracks. Whether these wrong-doers were independent contractors or servants or officers of the railways under construction, did not appear, but so far as this Board has power, it is determined that such high-handed and unreasonable conduct shall cease.

The Railway Act is clear upon the questions of fencing and cattle guards, and the time has arrived when something must be done to compel the observance of its pro-

visions.

Section 254 provides as follows:-

'1. The company shall erect and maintain upon the railway-

(a) Fences of a minimum height of 4 feet 6 inches on each side of the railway;

(b) Swing gates in such fences at farm crossings of the minimum height aforesaid, with proper hinges and fastenings, provided that sliding or hurdle gates constructed before February 1, 1904, may be maintained; and

(c) Cattle guards on each side of the highway at every highway crossing at

rail level with the highway.

'2. The railway fences at every such highway crossing shall be turned into the respective cattle guards on each side of the highway.

'3. Such fences, gates and cattle guards shall be suitable and sufficient to prevent cattle and other animals from getting on the railway.

'4. Wherever the railway passes through any locality in which the lands on either side of the railway are not inclosed and either settled or improved, the company shall not be required to erect and maintain such fences, gates and cattle guards, unless the Board otherwise orders or directs.'

There has been no order of the Board respecting fencing through uninclosed or unimproved lands, and the practice of the companies, so far as I can learn, has been to leave their rights of way entirely unfenced, until the adjacent owner or owners had erected side fences, when such owner or owners would be expected to call upon the company to erect its fences. Cases, however, were presented where the side fences had been long since erected, but yet the railway fences had not been erected.

We have been furnished with no information by the railway companies of the amounts paid by them for cattle killed upon their lines, or of the number of claims they have disputed, but from the large number of cases that were brought to the attention of the Board where compensation has not been made, the better opinion perhaps is that the disputed claims vastly exceed those in which settlements have been made, if not, the companies have been paying out very large sums that would have been much better spent in protecting their rights of way.

Now, the statute defines clearly the kind of fence and cattle guard that must be provided; the fence must be at least 4 feet 6 inches high, and it and the cattle guards must be 'suitable and sufficient to prevent the cattle and other animals from getting

on the railway.

It is just as incumbent upon the companies to fence against hogs as it is against horses, yet it is not pretended that any attempt has been made to do so, and instances were given where farmers had so many hogs killed that they were compelled to abandon any attempt to raise them.

It seems to be the practice in Manitoba, Saskatchewan, some parts of Alberta and British Columbia to remove the cattle guards entirely in the winter time. This is done, it was said, to facilitate the operation of the snow ploughs. It is not shown by any railway expert that this practice is necessary, but it was shown by many Saskatchewan farmers that it was more important to them to have the cattle-guards in place during winter than any other season, as during the other seasons their cattle were mostly pasturing in the hills in charge of herders. At any rate, these cattle guards have been removed during the winter months without authority, and unless a great deal more can be shown than has yet appeared, the practice must cease. Furthermore, the railway companies must establish and maintain cattle-guards that will prevent cattle and other animals from getting upon the railways. This is the requirement of the law, and I know of no reason why it should not be complied with.

The provisions of clause 4 have been abused, and this statutory exemption from fencing has been used by the companies to free themselves from making compensation in innumerable cases of meritorious claims. This condition of affairs cannot be permitted to continue; it works great hardship upon the public, and is of little or no benefit to the railway companies. The conditions in the west have greatly changed since this exemption was granted to the companies, and as they are compelled at some stage of the undertaking to erect fences, I am clearly of the opinion that no hardship will be imposed if that stage is made the initial one.

I am aware that in various parts of the country no necessity now exists and possibly never will, for the erection of fences. The formal order may contain a provision that railway companies, the lines of which have already been constructed, may apply to exempt certain sections of the road from the operation of the order, when, if conditions are shown that such course will entail no hardship upon the public, the Board may so declare. The like course may be taken where railways are in course of construction, and as to such latter, when application is made to open the road for traffic, the fences, cattle-guards, highway and farm crossings and gates shall all form part of the work necessary to be complete according to the statute and the Board's regulations

before permission is given to operate the road. I am convinced that this course will, in the end, be less expensive for the railway companies, as the erection of fences, gates, &c., can all be carried on at the time of construction at less cost than later on, to say nothing of saving liability for damage claims for stock killed and law costs in defending, even if successful.

Many complaints were made that in the construction of the railway lines the highway crossings were left in an impassable state, causing endless inconvenience and trouble to the public. I confess I am at a loss to understand such disregard of the rights of others, and such selfish and inconsiderate conduct upon the part of those constructing the railways, or responsible for their construction. If these works are let out to contractors, the railway companies may as well at once understand that they must make some provision in their contracts that will compel their contractors to treat the public with ordinary decency. This Board has no control over the contractors and can only deal with the railway companies. These highway crossings can be constructed at less expense when the grading is being done than later on, after the road is completed; and with respect to roads not yet completed, they will not be opened for traffic until every highway crossing opened for travel is put into the condition called for by the Board's regulations. As to these railways now in operation, all highway crossings, opened for travel, must be put into the condition called for by the regulations within one year from this date.

A draft order embodying the foregoing may be sent to all the companies, and its settlement spoken to by them at the May meeting of the Board at Ottawa.

March 23, 1909.

# ROBERTSON AND THE GRAND TRUNK RAILWAY COMPANY.

This was an application of W. N. Robertson, to the Board under Section 26 of the Railway Act, to compel the Grand Trunk Railway Company of Canada to issue third class tickets at the rate of one penny per mile for each mile travelled and to run third class passenger carriages attached to one train per day each way, throughout the length of its line. The application was heard by the Hon. A. C. Killam, late Chief Commissioner, Deputy Chief Commissioner and Commissioner Mills and pursuant to the judgment of the Chief Commissioner an order was made directing the Grand Trunk Railway Company of Canada to run every day throughout the length of its line of railway between the city of Toronto in the province of Ontario to the city of Montreal in the province of Quebec, at least one passenger train having in it third class carriages for passenger traffic; and that the fare or charge for each third class passenger by any train on the said portion of its railway do not exceed two cents for each mile travelled; and the company was ordered forthwith to file with the Board passenger tariffs for the aforesaid portion of its railway embodying the said rate of two cents per mile for third class passengers.

The Grand Trunk Railway Company were granted leave to appeal to the Supreme Court of Canada, and the order of the Board was stayed pending the appeal. The Supreme Court of Canada affirmed the order of the Board and dismissed the appeal.

Further appeal was taken to the Judicial Committee of the Privy Council in England, in which appeal the Grand Trunk Railway Company were unsuccessful. Subsequently the Grand Trunk Railway Company filed with the Board a new tariff for third class passenger traffic between the stations, Montreal and Toronto inclusive, effective on April 1, 1909, being C. R. C. No. 'E' 958; and otherwise conformed to the order of the Board.

# PROTECTION OF HIGHWAY CROSSINGS BY ELECTRIC BELLS.

Orders have been issued by the Board from time to time providing for the installation and maintenance of electric bells at highway crossings where the highway is crossed by the railway and the Board having received from time to time complaints alleging that the bells were not kept in satisfactory order by the railway companies, after due consideration of the matter, and pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued on the 3rd November, 1908, an order providing as follows:—

- 1. Every electric bell upon the line of any railway company subject to the legislative authority of the parliament of Canada, installed for the purposes of protection, shall be inspected every morning by the sectionman in whose division or section such bell is, and tested by placing a wire across the rail, upon each side of the crossing or by establishing electric connection by any other device or method which will indicate whether or not the bell is in good working order, and that if the bell fails to ring, or rings continuously, a flagman at once be placed at such crossing, whose duty it shall be properly to protect the same until such bell is repaired; and that notice of such non-repair be at once given to the station agent nearest to such bell, whose duty it shall be to report the matter at once to the department having charge of the operation and repair of such bells.
- 2. That failure to comply with the provisions of this order shall subject the defaulter to a fine of \$50, payment of which may be ordered by the Board upon proof of the offence.

# EQUIPMENT OF NON-PLATFORM CARS WITH OPERATING LEVERS.

The Board, having had under consideration the question of the equipment of non-platform cars with operating levers, and having had the matter investigated and reported upon by one of its officers, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued an order under date November 25, 1909, as follows:—

- 1. Every railway company subject to the legislative authority of the parliament of Canada, operating a railway by steam power, shall equip, within the time hereinafter mentioned, each of its non-platform cars, as for example, ordinary box and mail or baggage cars, with the proper operating lever for uncoupling cars, and dispense with the operating wheel where in use on the ends of such cars for that purpose.
  - (a) In cars to be constructed in the future for use in their said railways, before they are so used.
  - (b) In cars under construction or in shops undergoing repairs, within three months from the date of this order:
  - (c) In cars at present in use on their respective railways, within six months from the date of this order.
- 2. Every such railway company shall be liable to a penalty of a sum not exceeding fifty dollars for every failure to comply with the foregoing regulations within the time for their coming into force and thereafter.

## SMOKE NUISANCE.

The Board having been in receipt of complaints from several of the principal cities in the Dominion of Canada in regard to what is termed the smoke nuisance as applied to railway lecomotives, and having at several sittings heard evidence in

this connection, upon consideration of such evidence and the reports of certain of its officers, and pursuant to the powers conferred on it by sections 30 and 269 of the Railway Act, issued on November 25, 1908, an order containing the following provisions:—

- 1. Every locomotive steam engine operated in the province of Ontario by any railway company subject to the legislative authority of the parliament of Canada, shall be equipped so as to prevent the unnecessary and unreasonable omission therefrom to the atmosphere of dense or opaque smoke and every such locomotive steam engine shall, subject to clauses 2, 3, 4 and 5, while passing through or being operated within any city, town or village, be so operated as not to permit the unnecessary and unreasonable emission to the atmosphere of dense or opaque smoke.
- 2. Where it is necessary to clean out the fire-box or build a new fire, the necessary and reasonable emission of dense or opaque smoke within any city, town or village may be permitted for a period not to exceed six minutes in any one hour.
- 3. The necessary and reasonable emission of dense or opaque smoke from a locomotive steam engine standing at stations or in station yards in cities, towns or villages, may be permitted for a period of one minute in any ten minutes of any one hour.
- 4. This order shall apply to and be in force only in such cities, towns and villages in Ontario that have passed or may hereafter pass, by-laws for the control, regulation or prohibition of dense or opaque smoke from stationary steam engines, or a by-law or by-laws to the like effect.
- 5. In the ascent of the Scarboro grade easterly out of Toronto, or the grade east and west out of Hamilton, the necessary and reasonable emission of dense or opaque smoke may be permitted for a period not to exceed ten minutes in any one hour.
- 6. Every company or person offending against the foregoing regulations, or any of them, shall be subject to a penalty of twenty-five dollars for every such offence.
  - 7. This order shall take effect on January 1, A.D. 1909.

## EQUIPMENT OF CARS WITH AIR BRAKES.

The Board having had under consideration the question of equipment of cars with air brakes, and having had the matter investigated and reported upon by one of its officers, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act issued under date of November 25, 1908, an order containing the following provisions:—

(1) Every railway company subject to the legislative authority of the parliament of Canada is, and it is hereby forbidden to handle freight cars in through main line passenger trains, unless such freight cars are equipped with air-brakes, steel tired wheels and special trucks designed for use in through-passenger train service.

Provided, however, that every such company shall be at liberty to use such freight cars in its through-passenger service when its baggage cars, or freight cars, especially equipped as aforesaid, become disabled or unfit for use while in transit, and such cars only are available to receive the baggage or freight, as the case may be, to avoid unnecessary delay in forwarding the same. In this event, the cars must not be loaded beyond their marked capacity, and the speed of the train must not exceed thirty-five miles an hour.

(2) Every such railway company failing to comply with the foregoing requirements shall be liable to a penalty of not exceeding fifty dollars for every such offence.

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# EQUIPMENT OF PASSENGER COACHES WITH FIRE ETINGUISHERS.

The Board having had under consideration an application of the Canadian Pacific Railway Company to amend order of the Board No. 3238, dated July 3, 1907, requiring the railway companies in Canada subject to the jurisdiction of the Board to equip passenger coaches with two fire extinguishers, upon the report and recommendation of its Inspector of Railway Equipment and Safety Appliances, issued an order under date of May 5, 1908, varying order No. 3238, aforesaid, by permitting the railway companies to equip their passenger coaches with one fire extinguisher instead of two. The order also provides that unless the Board further directs, the equipment of said passenger coaches with one fire extinguisher shall be taken to be, and deemed, a compliance with the said order No. 3238.

## PROTECTION OF BRIDGES.

The question of the protection of wooden trestles from fire during the months of the year in which fires were likely to occur having received a good deal of consideration at the hands of the Board, more particularly in connection with accidents the result of wooden trestles or wooden bridges having been burnt, the Board, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued the following order:—

Order No. 5103.

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Thursday, the thirtieth day of July, A.D. 1908.

### PRESENT:

Hon. J. P. Mabee, Chief Commissioner. Hon. M. E. Bernier, Deputy Chief Commissioner. James Mills, Commissioner.

In pursuance of the powers conferred upon it by sections 30 and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf,—

The Board doth order and direct, that every railway company subject to the legislative authority of the parliament of Canada, operating by steam power any railway or railways, any part or parts of which is or are constructed of or upon wooden trestles, do, during the months of May, June, July, August, September and October of each year, provide, place and keep a watchman, track-walker, fire alarm signals, ballast flooring, or fire-proof paint, as hereinafter directed, for the purpose of protecting the said trestles from fire, and thereby preventing trains from being burned, derailed or otherwise damaged at or on such trestles, each such company being allowed the option of adopting any one of the said foregoing methods of protection:—

- 1. Every such company shall place and maintain at each end of every wooden trestle on its line or lines of railway a barrel of a capacity not less than forty-five gallons; and on every such trestle over 200 feet in length, every such company shall place and maintain barrels of similar capacity at distances of not less than 150 feet—provided, however, that pile trestles over streams or other bodies of water need not be furnished with any such barrels.
- 2. Every such company shall keep and maintain the said water barrels in good repair and good condition for holding water, and see that they are kept full of water at all times.

3. Every such company shall remove all brush and dead grass from beneath and around every such trestle, and keep the whole width of its right of way under and

along every such trestle free from all kinds of combustible material.

4. Every such special watchman or track-walker, on or in the neighbourhood of timber lands and in localities distant from settlement, shall carry a pail or satisfy himself that a pail is at each of the different trestles under his care, in such a place that it cannot be taken away or used for any other purpose than that for which it was provided.

5. Where the protection provided is by a track-walker, all trestles, long and short, shall be regularly inspected, two inspections to be made every twenty-four

hours on main lines, and one every twenty-four hours on branch lines.

- 6. Every such special watchman or track-walker, whenever any such trestle is injured by fire, shall, as soon as possible thereafter, report the same to the roadmaster on whose division he is working; and in the event of any such barrel or pail not being in good and efficient condition for the holding of water, every such special watchman or track-walker having charge of the same shall promptly report such condition to the said roadmaster; and whenever the height of water in any such barrel is lowered by evaporation or otherwise, say ten inches from the top of the barrel, every such special watchman or track-walker shall promptly report such condition to the said roadmaster.
- 7. Every such railway company failing or neglecting to comply with any of the foregoing regulations shall be subject to a penalty of thirty dollars.
- 8. Every such special watchman or track-walker failing or neglecting to make inspection of any such trestle in accordance with the foregoing regulations, or failing or neglecting to make any of the reports hereinbefore required of him and as so required, shall be subject to a penalty of fifteen dollars for each such failure or neglect.

9. That the order of the Board No. 3239, dated the 3rd day of July, A.D. 1907, be

and the same is hereby rescinded.

(Sgd.) J. P. MABEE,

Chief Commissioner,

Board of Railway Commissioners for Canada.

# LIGHTING OF RAILWAY CARS.

The Board after having given considerable care and consideration to the question of the lighting of cars, and having had the matter investigated and reported upon by certain of its officers, pursuant to the powers conferred upon it by sections 30 and 269 of the Railway Act, issued an order, effective on and after the first of January, 1909, relative to the lighting of railway cars, providing as follows:—

1. That every railway company subject to the legislative authority of parliament of Canada, operating a railway by steam power, cause, subject to any exception or exceptions hereinafter contained in this order, the equipment of each and every car requiring lighting used on the railway or portion of railway operated by it, with

one of the following lighting systems, namely:-

(a) The Pintsch Compressed Oil-Gas System.

(b) Acetylene gas, under what is known as the 'Absorbent or Commercial Acetylene System.'

2. That the Pintsch Compressed Oil-Gas System may be used subject to and

upon the terms and conditions following, namely:-

(a) That the tanks be tested and tight at three hundred (300) pounds pressure to the square inch; and that they stand such tests without distortion: Provided that where, at the original date of issuance of this order, any railway company may have had in use tanks tested to a pressure not exceeding two hundred  $20c-3\frac{1}{2}$ 

and ninety-four (294) pounds to the square inch, it shall be sufficient that the tanks be tested and tight at two hundred and ninety (290) pounds pressure to the

square inch, and that they stand such tests without distortion;

Provided, further, that when, at any date subsequent to the original date of issuance of this order, any railway company instals the Pintsch system on its cars, or where any railway company already using the Pintsch system instals new tanks, the said tanks shall, in each and every case, meet the requirement that they be tested and tight at three hundred (300) pounds pressure to the square inch, and that they stand such tests without distortion.

(b) That the maximum working pressure be one hundred and fifty (150)

pounds to the square inch.

(c) That every gas tank attached to a railway car, be equipped with an extra heavy stud valve securely fastened to every such tank.

(d) That the equipment necessary for the installation of the said system be

provided with-

(d1) A pressure gauge with a dial reading either from one pound to three hundred pounds, or reading by atmospheres from zero to fifteen atmospheres, to show the exact pressure of gas carried.

(d2) A recharging valve to attach to the charging station hose.

(d3) A regulating valve, to reduce the pressure of gas contained in the

tank before it enters the main line piping and lamps on the car.

(e) That all piping between the regulating valves and stud valves be of extra heavy seamless steel or iron tubing; and that all elbows or tees be of extra heavy fitting, provided that heavy flange brass fittings may be used in lieu of such equipment.

(f) That the high pressure piping and fittings be carefully threaded before being screwed together—the ripe thread to be carefully tinned after being screwed

up, and the piping to be sweated to the fittings.

(g) That standard tubing be used to connect the low pressure side of the regulating valve with the lamps of the cars; and that a main line cock, to turn on and off the gas, be placed on the inside of each car in a convenient and continuous location.

(h) That, in order to locate leakages, soap suds be used; and that lighted

natches or torches be not used for this purpose.

(i) That printed regulations defining and explaining the use of the system e posted inside of each car, in close proximity to the main line cock; and that tank stud valve key, a main line cock key, and such other keys as may be necesary for the use and operation of this equipment, be supplied to and always carried by all conductors and brakemen while on duty in charge of any train or cars provided with this equipment; and that the regulations required by this section to be posted up, shall state that such keys are in the possession of the conductor and brakeman or brakemen of the said trains or cars.

(j) That every car lighted by this system be placed under the charge of a competent and reliable employee of the railway company using such system—every such employee to be specially instructed in regard to the proper working and

operating of the same.

3. That the acetylene, or what is known as the 'Absorbent or Commercial Acetylene Storage System,' may be used, subject to and upon the following terms and con-

ditions, namely:-

(a) That the tanks used in connection with the said system be properly safeguarded against the possibility of explosion, and to be tested and tight at four times the maximum working pressure, and be able to stand such test without distortion; and that the said tanks be protected by an effective and durable preventative of rust.

(b) That the service tank pressure do not exceed one hundred and fifty

(150) pounds to the square inch.

(c) That the acetylene gas be compressed; and that where tanks are charged elsewhere than at the generating station, plans showing in detail the location of all appliances used in connection therewith, including intended location of cars, be submitted to the Board for its approval, all gas to be thoroughly dried and purified.

(d) That car equipment be inspected and tested at least once every sta

months.

(e) That generators, charging apparatus and other details, be under expert supervision at all times.

(f) That acetylene gas generators be not installed in or upon cars or other

railway rolling stock, except by leave of the Board.

(g) That every gas tank attached to a railway car be equipped with an extra heavy stud valve securely fastened to every such tank.

(h) That the equipment necessary for the installation of the said system be

provided with-

(1) A pressure gauge with a dial reading from one pound to 300 pounds to the square inch, to show the exact pressure of gas carried.

(2) A recharging valve, to attach to the charging station hose.

(3) A regulating valve, to reduce the pressure of gas contained in the tank before it enters the main line piping and lamps on the cars.

And it is ordered and directed, That every such railway company may use free acetylene as a lighting medium, providing the same is not used under a pressure greater than ten pounds to the square inch; every such equipment to be submitted for and subject to the approval of the Board.

That these regulations neither prohibit the lighting of cars by electricity nor prevent or affect the lighting with what is known as 'Mineral Seal Lamp Oil.' On application the Board may, after a test has been conducted by the Board's Inspector of Railway Equipment and Safety Appliances, authorize the use of other oil or oils for car lighting. Any railway company or companies making application for such authorization must, at the time when such application is made, furnish samples of the said oil or oils to the said inspector for testing purposes.

That every railway company committing any breach of or failing to comply with any of the foregoing provisions be, for each such offence, liable to a penalty of one hundred dollars.

That every railway official or employee charged with any duty in respect of any of the matters aforesaid, who shall commit any breach of, or shall neglect to comply with the foregoing provisions, be liable to a penalty of twenty dollars for each such offence.

That these regulations take effect on and after the first day of January, 1909.

#### JUDGMENTS OF THE BOARD.

A summary of the principal judgments delivered by the Board for the year ending March 31, 1908, prepared by the law clerk, Mr. A. G. Blair, will be found under Appendix 'D.'

# ROUTINE WORK OF THE BOARD.

### RECORD DEPARTMENT.

Since the publication of the last report, this department has been placed under the charge of Mr. E. W. McNeill, who assumed his duties as Record Officer on March 1, 1909. Previous to Mr. McNeill's appointment, the department was under the

supervision of the Secretary of the Board, who, under the Board's authority, had delegated the working out of all details in this connection to Mr. A. E. Ecclestone, his secretary. Owing, however, to the large increase in the work of the Commission in connection with the secretary's department, it was found impossible for either the secretary or for Mr. Ecclestone to give that care and attention which is absolutely essential in connection with the proper keeping of the Board's records. Before taking over his duties as Record Officer the Board deemed it desirable, on the suggestion of the secretary, that Mr. McNeill in company with Mr. Ecclestone should make a personal inspection of the system of keeping records adopted by the State Commissions of Maine and the State of New York and the Interstate Commerce Commission at Washington and authorized their visiting Boston, New York and Washington, in the month of March last, which they accordingly did, deriving therefrom much information of use to them in this work. By reference to the subjoined table, it will be seen that the number of applications and filings received and orders issued for the past year have materially increased, more particularly the orders, which have increased approximately 25 per cent.

With regard to the cases heard by the Board at sittings during the year covered by this report, it might be mentioned that......folios of testimony were taken by the Board at these sittings. The following is a table of formal applications (including informal complaints) received under the Act, documents filed and orders issued

by the Board, compared with those for the year ending March 31, 1908.

_	April 1, '07 to March 31, '08.	April 1, '08 to March 31, '09.	Increase.
Applications, including 464 informal complaints	3,125	3,479	3 54
	45,425	51,913	6,488
	1,787	2,249	462

The outgoing letters numbered 23,530.

It will be noted that the above does not include correspondence or filings of the other departments of the Board, such as the Traffic Department, for which see Appendix B.

### INFORMAL COMPLAINTS.

It is desirable to call attention to the large number of informal complaints dealt with by the Board. These number some 464. The applications heard at the public sittings of the Board, and so disposed of, number some 737, deducting this number from the total of 3,479 applications filed with the Board, it will be noted, that approximately 2,742 applications including the informal complaints, were disposed of without the necessity of a hearing.

## SECRETARY'S DEPARTMENT.

Since the publication of the last Annual Report, the office of Assistant Secretary to the Board has been created by the appointment of Mr. E. A. Primeau, formerly registrar and accountant, to this position, by virtue of order in council dated the

first day of July, 1908.

It was considered desirable that there should be an assistant secretary to the Board, having a thorough knowledge of French, whose chief duty would be to deal with all French correspondence connected with the Board. In addition to the duties assigned to him by the Board, Mr. Primeau has still charge of the Accounting Department.

#### TRAFFIC DEPARTMENT.

No increase has been made in the staff of this department since the publication of the last report. One resignation has taken place, namely, that of Mr. C. N. Ham, and the vacancy caused by his resignation has not yet been filled. The Board has, however, made recommendation to the Governor in Council to fill the vacancy. The statement of the freight, passenger, telephone and express schedules filed with the Board between April 1, 1908, and March 31, 1909, will be found in conjunction with the report of the Chief Traffic Officer of the Board under Appendix 'B.'

#### ENGINEERING DEPARTMENT.

As stated in the last annual report, the Board had under consideration the appointment of an additional engineer, and Mr. N. Cauchon was appointed to the position under date of an order in council, 1st day of May, 1908, as assistant engineer with headquarters at Ottawa. A list of the examinations and inspections made by the engineering department for the year ending March 31, 1909, will be found under Appendix 'F.'

#### ACCIDENT DEPARTMENT.

As stated in the previous report, the Board has had under consideration the reorganization of this department, with the two-fold object in view of, first, securing greater promptness in dealing with accidents, and, secondly, of reducing expenses in connection with the holding of investigations. The Board, therefore, passed a regulation allotting certain provinces of the Dominion to certain inspectors, who should report to and be under the immediate supervision of a Commission. The following was the apportionment made:—

The province of Ontario, not including Port Arthur or west of Port Arthur, to be assigned to Inspectors Jas. Ogilvie and Jas. Clarke, having their headquarters at Ottawa, and to be under the supervision of the Assistant Chief Commissioner, D'Arcy Scott.

The province of Quebec and the maritime provinces to be assigned to Inspector E. C. Lalonde, having his headquarters at Montreal, and to be under the supervision of the Deputy Chief Commissioner, the Hon. M. E. Bernier.

The provinces of Manitoba and Saskatchewan and Ontario, from and including Port Arthur westward, to be assigned to Inspector W. S. Blyth, having his head-quarters at Winnipeg, and to be under the supervision of Commissioner S. J. McLean.

The provinces of Alberta and British Columbia to be assigned to Inspector M. J. McCaul, having his headquarters at Calgary, Alta., and to be under the supervision of Commissioner Jas. Mills.

It was also provided that no expense for witness fees or detention of witnesses is to be incurred unless by direction of a Commissioner, and that in the absence from Ottawa of the Commissioner having supervision of the particular district, such direction might be given by any member of the Board. It was further directed that the Board or a Commissioner might at any time require any inspector or inspectors to make any special report upon any question or matter without reference to the assignment of the inspector to the particular province or district. Each Commissioner was authorized to deal with all reports upon matters in the provinces assigned to him, or to refer the same to the Board. In addition to dealing with accidents, the inspectors are to report on railway equipment and rolling stock. This arrangement came into

force in the month of December, 1908, and it is expected that satisfactory results will follow the arrangement outlined. The report of accidents investigated, covering the year ending March 31, 1909, will be found under Appendix 'G.'

#### OFFICES OF BOARD.

Owing to the increase in the number of the Commissioners from three to six, and the consequent increase in the staff of the Board, the Board finds that its present quarters, which were inadequate and ill-adapted, particularly as regards light and ventilation for offices, before such increase, are now very much more so, causing the Board a good deal of inconvenience and also militating against the effective carrying on of the work of the Board, which has largely increased during the last two years. It is, therefore, very necessary that the Board should have increased accommodation at an early date, in fact, in order to meet the present requirements of the Board, and to provide for the future requirements, double the accommodation now at the Board's disposal is required.

The Board, therefore, trusts that this matter will receive early attention at the hands of the government, and a suitable suite of offices provided.

#### COMMISSION.

As will be noted by reference to the first portion of the report dealing with amendments to the Railway Act, the number of the Commissioners has been increased from three to six. One of the Commissioners thus created, was designated Assistant Chief Commissioner, and having all the powers of the Chief Commissioner, with the limitation, that such powers shall not be exercised by him except in the absence of the Chief Commissioner. The following were the appointments made by the Governor in Council to fill the positions so created.

That of Assistant Chief Commissioner was filled by the appointment of Mr. D'Arcy Scott, barrister, Ottawa, by order in council, dated the 17th day of September, 1908. Mr. Scott, was at the time of his appointment, senior member of the firm of Scott & Curle, barristers of Ottawa, and mayor of the city of Ottawa, which office he resigned after his appointment to the Board. Mr. Scott received his education at Ottawa University, Ottawa, and Osgoode Hall, Toronto, Ont.

That of Commissioner, by the appointment of the Hon. Thomas Greenway of Crystal City, Manitoba, by order in council, dated the 17th day of September, 1908.

That of Commissioner, by the appointment of Simon James McLean, M.A., L.L.B., Ph.D., by order in council, dated the 17th day of September, 1908. Mr. Mc-Lean was, at the time of his appointment, professor in that branch of the Department of Political Economy in Toronto University having special reference to transportation and commerce. In 1901, he was appointed by the Dominion government, a Commissioner to report on railway rate grievances, and investigated the rates complained against in Canada, his report being published in the year 1902; and it was on the basis of the recommendations set forth in his report that the legislation providing for the organization of the Board of Railway Commissioners was drafted and embodied in the Railway Act, 1903. He also acted in an advisory capacity to Mr. A. S. White, K.C., ex-Attorney General of New Brunswick, now Judge of the Supreme Court of New Brunswick, who was commissioned by the Dominion government to draft the Bill embodying the provisions of the Railway Act, 1903. It should also be mentioned that Mr. McLean, during the years 1899 and 1901, prepared a report to the late Hon. A. G. Blair, who held at that time the portfolio of Minister of Railway and Canals, on railway commissions and their work, in England and the United States.

The Commissioners took office shortly after their appointment with the exception of the Hon. Thomas Greenway, who, on his arrival in the city of Ottawa, was taken ill and died within a short time afterward, his death, under the circumstances, being peculiarly sad. The vacancy caused by his death has not been filled by the appointment of a successor.

J. P. MABEE,

Chief Commissioner.

D'ARCY SCOTT,

Assistant Chief Commissioner.

M. E. BERNIER,

Deputy Chief Commissioner.

JAMES MILLS, Commissioner.

S. J. McLEAN,

Commissioner.

March 31, 1909.

# APPENDIX A.

# STAFF OF THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA FOR THE YEAR ENDING MARCH 31, 1909.

# TRAFFIC DEPARTMENT.

Name.	Occupation.	Appointment.	Amount.	
James Hardwell A. F. Dillinger G. A. Brown C. E. McManus C. C. Routhier C. N. Ham H. W. Messinger J. S. Allen G. T. Riddell F. Lalonde J. R. Usher C. Chapman		April 6, 1907 Oct. 3, 1904 Sept. 1, 1904 Aug. 14, 1906 Oct. 3, 1904 July 8, 1904 May 6, 1907 " 1, 1905 " 6, 1907 " 6, 1907	\$ cts. 3,800 00 1,800 00 2,000 00 1,050 00 1,050 00 1,000 00 950 00 900 00 800 00 900 00 750 00 600 00	
G. A. Mountain	Engineer. Assistant engineer. Electrical engineer. Clerk.	Oct. 3, 1904 June 25, 1906 July 1, 1908 May 15, 1906	4,800 00 2,500 00 2,500 00 2,500 00 1,500 00 800 00	
	RECORD DEPARTMENT.			
E. W. McNeill. J. W. Thompson C. S. Huband W. A. Jamieson J. E. Martin T. G. Britton D. I. Langelier F. R. Demers	Record officer. Clerk	Feb. 8, 1909 Sept. 1, 1904 May 1, 1905 Aug. 14, 1906 May 6, 1907 " 6, 1907 July 20, 1904 Aug. 14, 1905	1,500 00 1,150 00 900 00 750 00 700 00 700 00 650 00 600 00	

# SECRETARY'S DEPARTMENT.

Name.	Occupation.	Date of Appointment.	Amount.
E. A. Primeau A. E. Ecciestone. J. B. Arbick G. F. Periey. A. Larocque. A. Lapointe. B. Chevrier (Miss). E. A. H. Barber (Miss).	Assistant secretary. Secretary to secretary. Clerk. Clerk and stenographer. Clerk. Stenographer.	Aug. 14, 1906 Dec. 23, 1904 Jan. 2, 1908 Dec. 31, 1908 May 6, 1907 July 20, 1904	\$ cts 2,500 00 1,100 00 700 00 600 00 700 00 700 00 900 00 550 00
ACCIDEN	I AND EQUIPMENT DEPARTM	ENT	
E. C. Lalonde.  Jas. Ogilvie. M. J. McCaul. W. S. Blythe Jas Clarke	Inspector	May 4, 1907 . 6, 1907 . 6, 1907	2,200 00 2,200 00 2,100 00 2,100 00 1,800 00
	LAW DEPARTMENT.		
A. G. Blair	Law clerk Stenographer and librarian	July 20, 1904 May 1, 1905	2,500 00 750 00
PRIVATE SE	CCRETARY TO CHIEF COMMISS	SIONER.	
R.•Richardson		May 1, 1905	1,600 00
	STENOGRAPHERS.		
M: Hache (Miss) L. J. Lewis (Miss).		Dec. 31, 1907 May 7, 1904	700 00 500 00 750 00 550 00 700 00
	MESSENGERS.		
T. Chandler. J. Dionne. T. D. Latour. E. S. Barbeau.	Chief messenger and court usher Messenger.	May 15, 1904 27, 1907 Dec. 31, 1907 31, 1907	800 00 500 00 500 00 500 00
	CAR 'ACADIA.'		
Geo. Taylor	Cook.		. 720 00

# 9-10 EDWARD VII., A. 1910 APPROPRIATIONS, EXPENDITURES AND RESOURCES.

Appropriations.			expendit during 12 mont om Apr 1908.	hs	- Unexpend Balance	
A STATE OF THE STA			\$	cts.	\$	cts.
Amount allowed by statute for salaries of members of commission and secretary	55,000 (	00	39,499	16	15,500	84
of the board	103,000	00	94,623	3 72	8,376	28
with reference to cases before Railway Commission	10,000	00	2,846	5 29	7,153	71

Certified correct,
EUG. A. PRIMEAU,
Assistant Secretary.

Ottawa, April 1, 1909.

# APPENDIX B.

# REPORT OF THE CHIEF TRAFFIC OFFICER OF THE BOARD.

OTTAWA, May 21, 1909.

Sir,—I have the honour to submit the report of the traffic department of the Railway Commission to March 31, 1909.

Subjoined is a statement of the freight, passenger, express and telephone schedules filed with the Board between November 1, 1904, when, by the order of the Board, under the authority of section 311 of the Railway Act, 1903, the railway companies commenced filing their tariffs, and March 31, 1909, and from April 1, 1908, to March 31, 1909, inclusive:—

GRAND TOTAL OF ALL SCHEDULES RECEIVED FROM NOVEMBER 1, 1904, TO AND INCLUDING MARCH 31, 1909.

Freight—			
Local tariffs. Supplements. Joint tariffs. Supplements. International tariffs Supplements.	3,030 4,120 5,886 13,276 20,884 52,519	7,150 19,162 73,403	99,715
Passenger—			
Local tariffs. Supplements. Joint tariffs. Supplements. International tariffs Supplements.	2,580 1,671 1,150 1,262 5,015 3,812	4,251 2,412 8,827	15,490
Express—			
Local tariffs Supplements. Joint tariffs. Supplements. International tariffs. Supplements.	2,119 10,477 1,010 4,547 1,541 474	12,596 5,557 2,015	20,168
Telephone—			
Local tariffs Supplements. Long distance tariffs. Supplements. International tariffs. Supplements.	673 396 1,121 444 304 1,604	1,069 1.565 1,908	4,542
Combined totals, all schedules			139,915

TARIFFS AND SUPPLEMENTS RECEIVED FROM APRIL 1, 1908, TO AND INCLUDING MARCH 31, 1909.

Freight—			
Local tariffs. Supplements. Joint tariffs. Supplements. International tariffs Supplements.	664 1,164 1,803 4,551 4,349 13,850	1,828 6,354 18,199	26,381
Passenger—			
Local tariffs Supplements. Joint tariffs. Supplements. International tariffs Supplements.	788 730 315 670 1,283 1,439	1,518 985 2,722	5,225
Express—			
Local tariffs Supplements. Joint tariffs. Supplements International tariffs. Supplements.	451 6,621 313 3.251 109 205	7,072 3,564 314	10,950
Telephone—			
Local tariffs Supplements. Long distance tariffs Supplements International tariffs. Supplements	18 24 35 80 4 733	42 115 737	- 894
Combined totals, all schedules			43,450

The following are the more important orders and regulations relating to traffic issued by the Board to March 31, 1909, namely:

March 9, 1904.—Order permitting railway companies to continue their reduced fares to clergymen; also to students of universities, colleges and schools, to and from their homes.

June 28, 1904.—Reduction ordered in the rates on oiled clothing in carloads from Toronto to Halifax, Winnipeg and Calgary.

July 16, 1904.—Canadian Freight Classification No. 12, with supplement No. 1 and ruling circular No. 1, approved.

July 30, 1904.—Order reducing rates on cooperage stock in carloads.

July 30, 1904.—Railway companies ordered to cease charging prohibitive rates on cedar lumber, ties, &c., and to substitute tolls which shall not discriminate between cedar and other woods; also to amend the Canadian Freight Classification by including rails, fence posts, telegraph poles and ties with other forest products, instead of carrying these commodities, as formerly, by 'special contract' only.

July 30, 1904.—Railway companies directed to reduce their rates on glass bottles, in carlcads, from Wallaceburg, Ont., to Toronto, Hamilton, Berlin, London and

Montreal.

October 3, 1904.—Order regarding special rates on material and machinery for new industries. Companies directed to report applications to the Board, which will deal with each on its merits.

October 3, 1904.—Application of Grand Trunk Railway Company for permission to charge a less rate on coal to Cobourg, Ont., for manufacturing purposes than charged to ordinary consumers and dealers declined.

October, 1904.—Reduction ordered in the rates on coal from the Niagara and Detroit frontiers to Almonte.

October 10, 1904.—Application of the United Factories for a special rate on logs, Penetanguishene to Newmarket, Ont., declined.

October 10, 1904.—Order revising and reducing the classification of fruit, and prescribing a maximum charge for icing fruit cars in transit.

October 10, 1904.—Order reducing rate on split peas, for export, to the same basis as flour, for export.

October 31, 1904.—Railway companies directed to desist from charging higher rates on cedar lumber from the mills in British Columbia than charged on pine, fir and spruce.

December 29, 1904.—Disallowance of certain advanced freight tariffs on grain products from Ontario to the maritime provinces, which had been issued without legal notice. Companies directed to make restitution to shippers.

February 9, 1905.—Conditions prescribed under which railway companies may make and report to the Board special rates in certain cases, under section 275 of the Railway Act, 1903.

February 9, 1905.—Order prescribing under what circumstances the Board will receive telegraphic notices of proposed changes in freight rates under emergency conditions.

February 9, 1905.—Canadian Northern Railway Company authorized to carry material and machinery for new industrial works at Fort Frances, Ont., at reduced rates.

March 6, 1905.—Lower rates ordered on cattle from Ontario points to Montreal, St. John, West St. John and Portland, for export, so as to bring them more into harmony with those paid by United States shippers.

April 15, 1905.—Railway companies ordered to discontinue charging higher rates on grain between local points in Ontario and Quebec than charged on flour and other grain products between the same points.

June 2, 1905.—Preferential coal rates from Port Stanley and Rondeau, Ontario,

ordered discontinued.

July 5, 1905.—Restoration ordered of rates formerly charged on metallic shingles, the increase of which had checked shipments.

July 13, 1905.—Cartage and other allowances by railway companies to shippers to offset disadvantages of location ordered discontinued, unless published in the companies' tariffs.

July 25, 1905.—Grand Trunk Railway Company ordered to provide reasonable and proper facilities for the interchange of traffic at London, Ont., and its tolls prescribed for switching traffic to and from the Canadian Pacific Railway.

July 25, 1905.—Reduction ordered in rates from Ontario on all freight traffic to Montreal, Quebec and the Atlantic seaboard, for export.

September 5, 1905.—Railway companies required to place their rates on coal from frontier ports of entry and lake ports to interior points in Ontario on an equal mileage basis.

1905.—Equalization of freight rates ordered to points between North Bay and Sault Ste. Marie, Ont., as between Toronto and Collingwood shippers.

September 19, 1905.—Order reducing rate charged at New Westminster, B.C., for switching grain to the distillery at Sapperton, and prescribing switching tolls within the New Westminster terminals.

October 14, 1905.—Reduced rates prescribed on stone from Manitoba quarries to Winnipeg.

October 17, 1905.—Canadian Pacific and Canadian Northern Railway Companies ordered to interchange carload freight without transhipment at Winnipeg and St. Boniface, Man., for shipment from or delivery at those points.

October 31, 1905.—Reduced rates ordered on beams, in carloads, from shipping points in Ontario.

November 15, 1905.—Provision made for the fair distribution of empty cars at Lake Huron and Georgian Bay ports, for the movement of Northwest grain during car shortage.

November 28, 1905.—Interchange facilities ordered at Lindsay, Ontario, between the Grand Trunk and Canadian Pacific Railways, and tolls prescribed for switching local traffic.

December 14, 1905.—Reduced rates prescribed on extra compressed hay and fodder in carloads, from Grand Trunk and Canadian Pacific Railway stations in Quebec

to Atlantic ports north of and including Boston, for export.

December 14, 1905.—Ordered that rates on grain and grain products, in carloads, from points west of Montreal to and including Cornwall and Finch, Ont., and south of the St. Lawrence in the counties of St. Johns, Laprairie and Napierville, Chateauguay and Huntingdon, to points east of Lévis, province of Quebec, shall not exceed the rates from Montreal to the same points by more than 2 cents per 100 pounds, nor by more than the differences existing at date of order.

January 6, 1906.—New car service or 'demurrage' rules, more favourable to the public than the old, promulgated by the Board for use on all railways subject to its

jurisdiction.

February 14, 1906.—Order reducing the rate charged by the Red Mountain Rail-

way Company for switching ore at Rossland, B.C., for the Trail smelter.

February 14, 1906.—Reduction ordered in the rate on grain, in carloads, from the Canadian Pacific Company's elevator at Owen Sound to unloading sidings within the company's terminals at the same place.

February 19, 1906.—Canadian Northern Railway Company directed to replace the siding to Messrs. Robinson & Son's coal and wood yard at Winnipeg, which had

been removed.

March 24, 1906.—Reduced minimum carload weights prescribed for freight loaded in box cars longer than the standard length of 36 feet 6 inches.

March 24, 1906.—Additions ordered to the articles which may be shipped in mixed

carloads at carload rates.

March 24, 1906.—Reductions in minimum chargeable weight for light and bulky articles requiring platform cars for carriage.

May 21, 1906.—Promulgation of additional regulations relating to the publication

and filing of freight and passenger tariffs.

June 6, 1906.—The minimum carload weight of charcoal authorized by the Canadian Freight Classification not to be exceeded in commodity tariffs. Revision of commodity rates from Sault Ste. Marie ordered accordingly.

June 29, 1906.—Reduced rates ordered on packing house products, in carloads,

from packing point in Ontario to Montreal, for export.

July 18, 1906.—Tolls prescribed to be charged by the Canadian Pacific Railway Company for switching traffic interchanged with the Grand Trunk Railway Company for loading or unloading at London, Ont.

July 19, 1906.—Authority granted the Dominion Atlantic Railway Company to charge the express rate on fresh fish on special freight trains making express time, Halifax to Yarmouth, N.S., for export to Boston; when so consigned, and in quantities beyond the handling capacity of the express company.

July 31, 1906.—Renewal of the Montreal to Toronto westbound rate ordered on wall paper from Toronto to Montreal and Ottawa, and as the maximum to intermediate

points, with corresponding reductions to points east of Montreal.

August 1, 1906.—Order supplementing order of July 30, 1904, requiring the carriage of railway ties to Canadian points at rates not exceeding the non-competitive special tariff rates on common lumber; also to United States joint rate points. Order

of July 30, 1904, against the Kingston and Pembroke Railway Company made applicable to all railway companies.

August 11, 1906.—Railway companies ordered to abolish the additional arbitrary rate of 5 cents per 100 pounds hitherto charged to British Columbia coast points on transcontinental traffic from eastern Canada; also to substitute the minimum carload weights of the Canadian Freight Classification for the higher minima previously charged on the said traffic when loaded in cars longer than the standard car of 36 feet 6 inches; also to reduce the weight allowance on lumber used for bracing or otherwise safeguarding carload shipments of the said transcontinental traffic requiring such protection, to the basis allowed elsewhere in Canada.

October 13, 1906.—Supplement No. 7 to Canadian Freight Classification No. 12, approved.

October 13, 1906.—Nelson and Fort Sheppard and Canadian Pacific Railway Companies ordered to furnish adequate and suitable accommodation and facilities for the carriage and interchange of lumber, shingles, &c., from Salmo and Ymir, B.C., to eastern Canadian points.

November 9, 1906.—Rates reduced and prescribed on freight traffic to rail points and lake ports of call in the district of Kootenay and Yale, B.C.

November 12, 1906.—Supplement No. 8 to Canadian Freight Classification No. 12, approved.

November 13, 1906.—Express companies' forms of contract temporarily approved, pending inquiry.

November, 16, 1906.—Order amending order of February 14, 1906, regarding switching tolls to be charged by the Red Mountain Railway Company at Rossland, B.C.

November 19, 1906.—Promulgataion of regulations relating to the publication and filing of express tariffs.

November 19, 1906.—Grand Trunk and Canadian Pacific Railway Companies authorized, under certain conditions, to refund to exporters of cheese the tolls collected for cartage to the Montreal wharfs during the season of navigation, 1905, on joint application of the said railway companies and exporters.

December 6, 1906.—Promulgation of regulations relating to the publication and filing of tariffs of telephone tolls.

February 15, 1907.—Grand Trunk and Canadian Pacific Railway Companies authorized, under certain conditions, to refund to exporters of cheese the tolls collected for cartage to the Montreal wharfs during the season of navigation, 1906, on joint application of the said railway companies and exporters.

March 13, 1907.—Reduced rate prescribed on logs, in carloads, from Brule Lake, Ont., to Renfrew, Ont.

March 18, 1907.—Canadian Pacific and Grand Trunk Railway Companies ordered to reduce their passenger rates on all their lines in Canada, east of and including the line of the Calgary and Edmonton Railway Company, to a maximum basis of 3 cents per mile.

April 11, 1907.—Approval of Supplement No. 8 to Canadian Freight Classification No. 12.

April 12, 1907.—Telephone companies directed to file particulars of any free service or tolls lower than the published tariff tolls allowed by the Board, granted by them; also particulars of cases in which the service of the companies is given wholly or in part for considerations other than monetary payments.

April 24, 1907.—Extending the time fixed in order of December 18, 1906, to July 1, 1907, for the filing and approval of tariffs of express tolls.

May 22, 1907.—Granting leave to the St. John Ice Company, to institute legal proceedings against the New Brunswick Southern Railway Company for permitting 20c—4

W. E. Scully to obtain lower rates of transportation than authorized or in force, and for transporting ice at less than the published tolls, in violation of the Railway Act.

May 23, 1907.—Further extending time for the filing and approval of express com-

panies' tariffs until August 1, 1907.

May 23, 1907.—Time fixed by order of November 13, 1906, extended to August 1, 1907, authorizing the use of contracts, conditions, by-laws and regulations of express companies.

May 30, 1907.—Authorizing the Canadian Pacific Railway Company to grant reduced rate from British Columbia points to Montreal and return to members of Bisley

June 4, 1907.—Authorizing the Niagara, St. Catharines and Toronto Railway Company to reissue its Standard Freight Tariff with such additional mileages as are required to cover extensions to Welland and Niagara-on-the-Lake, and dismissing application of the company to conform to the Canadian Freight Mileage Tariff by advancing certain of the rates previously in force on the older lines.

June 7, 1907.—Extending the time for the approval of the Bell Telephoné Com-

pany's tariffs of tolls until August 13, 1907.

June 11, 1907.—Additional extension of time for approval of tariffs of express companies to November 1, 1907, authorized.

June 22, 1907.—Approving form of general certificate of concurrence by express companies in Canada in joint tariffs of international express freight rates from points in the United States.

June 25, 1907.—Directing the Grand Trunk Railway Company to furnish cars and all proper facilities for receiving, loading and transporting import traffic received over the wharfs at Montreal, irrespective of cartage companies through whom the traffic is offered.

June 29, 1907.—Approving Canadian Freight Classification No. 13 (See Appendix

July 2, 1907.—Ordering that the rate on imported iron and steel, in carloads, from Montreal harbour to Simplex Railway Appliance Company at Bluebonnets be 21 cents per 100 pounds, including the service of checking the goods from the carter to the car.

July 3, 1907.—Approving Supplement No. 9 to Canadian Freight Classification No. 12.

July 4, 1907.—Requiring railway companies to furnish the Board with certain information regarding junction points and joint tariffs, preparatory to the consideration of joint tariffs generally.

July 5, 1907.—The Grand Trunk Railway Company ordered to issue third-class tickets at 2 cents per mile, and to run third-class carriages daily between Toronto and Montreal.

July 6, September 23, November 13, 1907.—International Rate Order. The Grand Trunk, Canadian Pacific, Michigan Central, Pere Marquette, Wabash, Toronto, Hamilton and Buffalo and Canadian Northern Ontario Railway Companies ordered to revise and republish their special local class freight tariffs (known as 'town tariffs') in the territory east of and including North Bay, and east of the Georgian Bay, Lake Huron and the St. Clair and Detroit rivers, and south of the Ottawa river, on a uniform and modified mileage scale prescribed by the Board; also to revise and republish their through freight rates from central and western Ontario to eastern Canadian points, the maximum rates from Canadian points on the Detroit and St. Clair river frontier to all points east to the Atlantic and north to the Ottawa river not to exceed the rates on international traffic from Detroit and Port Huron to the same points: the revised rates to become effective not later than January 1, 1908. (See Appendix D).

July 6, 1907.—Requiring the railway companies to furnish to the Board various particulars relating to their traffic operations, not covered by section 375 of the Railway Act.

July 17, 1907.—Authorizing the Canadian Pacific Railway Company to provide rates to British Columbia coast terminals on grain and mill stuffs, for export to Asia, by the issue of special rate notices.

July 26, 1907.—Standard passenger rate of Alberta Railway and Irrigation Company reduced to 4 cents per mile. Company also required to furnish return tickets for

transportation of passengers at one and two-third times single fare.

August 6, 1907.—Vancouver, Westminster and Yukon Railway Company and the Canadian Pacific Railway Company ordered to furnish adequate and suitable accommodation and facilities for the carriage of traffic from points on the Vancouver, Westminster and Yukon Railway to points on the Canadian Pacific Railway.

August 6, 1907.—Crowsnest Southern Railway Company and the Canadian Pacific Railway Company ordered to furnish adequate and suitable accommodation and facilities for the carriage of traffic from points on the Crowsnest Southern to

points on the Canadian Pacific Railway.

November 1, 1907.—Extending to March 1, 1908, the time for the filing and

approval of the Bell Telephone Company's tariffs of tolls.

November 1, 1907.—Further extension of time to May 1, 1908, authorizing the use of existing contracts, conditions, by-laws and regulations of express companies.

November 1, 1907.—Extending the time for the filing and approval of the tariffs

of tolls of the express companies, March 1, 1908.

November 1, 1907.—Extending the time for the filing and approval of the North

American Telegraph Company's tariffs of tolls to March 1, 1908.

November 4, 1907.—The Grand Trunk Railway Company ordered to reduce its rates from Rouse's Point, New York, to Coteau Junction and St. Polycarpe, province of Quebec, to 80 cents per gross ton on anthracite and 70 cents on bituminous coal.

November 21, 1907.—Requiring the Grand Trunk Railway Company to change its tariff, C.R.C. No. E 425, so that the tolls to be charged upon the class of paper covered by said tariff from Merritton, St. Catharines and Thorold to Montreal shall not be greater than the rates published therein from Brantford to Montreal.

November 22, 1907.—Temporarily approving the bills of lading, contracts, &c.,

of the National and American Express Companies until March 1, 1908.

November 22, 1907.—Temporarily approving the bills of lading, contracts, &c., of the United States and Great Northern Express Companies until March 1, 1908.

December 10, December 28, 1907, January 15, January 30, 1908.—Orders relating to arrangements for proper connections for passenger and mail traffic at Brockville, to be furnished by the Grand Trunk and Canadian Pacific Companies.

December 17, 1907.—Temporarily approving the Pacific Express Company's con-

tract forms until March 1, 1908.

December 19, 1907.—Approving certain traffic forms of the Maritime Express Company until March 1, 1908.

December 19, 1907.—Approving forms of contract for the transportation of live stock of the Nelson and Fort Sheppard, Vancouver, Victoria and Eastern and the Red Mountain Railways.

January 30, 1908.—Authorizing the chairmen of the official, western and southern classification committees to file with the Board copies of their freight classifications and supplements on behalf of United States railway companies which file international freight tariffs governed by these classifications.

February 26, 1908.—Extending till June 1, 1908, the time within which the North American Telegraph Company shall file and receive approval of its tariff of

tolls.

February 26, 1908.—Extending till June 1, 1908, the time within which the Bell Telephone Company shall file and receive approval of its tariff of tolls,

February 26, 1908.—Extending till June 1, 1908, the time in which express com-

panies in Canada shall file and receive approval of their tariffs.

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Order No. 4533, March 25, 1908.—Railway companies authorized to issue to secretaries of railroad Y.M.C.A.'s located on their lines, of which their employees are members and for their household effects, free or reduced transportation, when travelling on secretarial duties or being transferred.

Order No. 4680, May 7, 1908.—Carload rating of third-class prescribed for books. Order No. 4682, May 5, 1908.—Intercolonial and Grand Trunk Railway Company absolved from agreement with Canadian Pacific Railway re freight rates to Fredericton, New Brunswick, on traffic from points west of Montreal. St. John, New Brunswick, basis of rates restored to Fredericton.

Order No. 4781, May 27, 1908.—Grand Trunk Railway and Wabash Railroad Companies ordered to interchange passenger tickets between all stations in Ontario

through which the railways of both companies run passenger trains.

Order No. 4784, April 23, 1908.—Grand Trunk and Canadian Pacific Railway Companies ordered to arrange with Canadian Northern Ontario Railway Company for joint tariffs of passenger tolls and facilities for passengers to and from non-competitive points on the Canadian Northern Ontario Railway.

Order No. 4796, May 29, 1908.—Fixing the toll to be paid the Michigan Central Railroad Company by the John Campbell Milling Company at St. Thomas, for switching their traffic received from and destined to points on or via Grand Trunk Railway and directing the Michigan Central Railroad Company to refund overcharges with interest.

Order No. 4884, June 17, 1908.—Revised classification of military stores and

ordnance approved.

Order No. 4886, June 18, 1908.—Reduction and re-alignment of rates on sugar from Vancouver to points in Alberta, Saskatchewan and Manitoba, on complaint of British Columbia Sugar Refining Company.

Order No. 4988, July 8, 1908.—Prescribing uniform tolls for terminal inter-

switching services by all companies subject to the Railway Act.

Order No. 5117, July 30, 1908.—Permitting railway companies to file tariffs of

tolls through outside agents, under powers of attorney filed with the Board.

Order No. 5774, December 3, 1908.—Authorizing Vancouver, Victoria and Eastern Railway and Navigation Company to meet on the Pacific Coast, by special competitive tariffs, the competition of independent water carriers not subject to the Railway Act.

Order No. 5954, December 21, 1908.—Directing railway companies to publish

and file complete tables of distances between stations.

Order No. 5955, December 15, 1908.—Canadian Pacific Railway and Canadian Northern Railway Companies to publish and file joint tariff on grain and grain products from points on the line of the Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Company to points in British Columbia.

Order No. 6147, January 21, 1909.—Limiting the stop-over toll that the Canadian Pacific Railway Company may charge on western grain and grain products held

for orders at Cartier.

Order No. 6148, January 21, 1909.—Limiting the stop-over toll that the Grand Trunk Railway Company may charge on lumber and forest products held at Sarnia Tunnel for orders.

Order No. 6166, January 13, 1909.—Reducing the rates on western grain, exvessel, from Kingston to points in Quebec and the maritime provinces.

Order No. 6167, February 4, 1909.—Directing express companies to carry acetylene gas, and prescribing condition of carriage.

Order No. 6168, February 3, 1909.—Reducing the rate on coal from Niagara

frontier points to Lindsay, Ontario.

Order No. 6186, February 1, 1909.—Prescribing allowance to be made by railway companies to shippers who have to supply temporary grain doors to cars in which to ship grain.

Order No. 6242, February 8, 1909.—Prescribing form of release of responsibility tor freight shipped to flag stations upon lines of all railway companies subject to

the Railway Act.

Order No. 6612, February 23, 1909.—Prescribing a basis of joint rates on lumber and forest products from local points on the Vancouver, Westminster and Yukon Railway to points on the Canadian Pacific Railway west of Winnipeg not reached by the Great Northern Railway or its connections.

Order No. 6689, March 29, 1909.—Directing all railway companies subject to the Railway Act to file standard tariffs of maximum sleeping and parlour car tolls.

Order No. 6701, February 19, 1909.—Prescribing allowance to be made by railway companies to shippers who have to furnish temporary protective doors to enable

cars to be used for shipments of coal.

Order No. 6702, March 25, 1909.—Directing that railway companies subject to the Railway Act shall not charge higher rates on wooden telegraph, telephone and trolley poles, between points east of Port Arthur, loaded on single cars, than they charge on lumber under non-competitive conditions; and prescribing basis of rates and minimum weights to be charged on poles requiring more than one car for shipment.

Order No. 6749, February 11, 1909.—Reducing rates on coal from Bienfait, Sask., to certain points in Manitoba and Saskatchewan.

Order No. 6763, February 19, 1909.—Prescribing allowance to be made by railway companies to live stock shippers who are not supplied with stock cars for live stock shipments, and have to furnish lumber for doors to box cars.

Order No. 6859, February 6, 1909.—Prescribing tolls to be charged by the Canadian Pacific and Canadian Northern Railway Company for interswitching grain held in transitu at Winnipeg for milling, treatment or storage and reshipment.

Certain standard freight tariffs of the undermentioned companies have been approved by the Board in accordance with section 327, The Railway Act, as follows:—

Order No. 4573, April 7. 1898.—Niagara, St. Catharines and Toronto Ralway Company's stations on new lines, omitting stations on main line between Port Dalhousie and Niagara Falls, Ont., C.R.C., No. 288.

Order No. 4684, May 7, 1908.—Alondike Mines Railway Company's standard freight tariff, C.R.C., No. 2.

Order No. 5024, July 7, 1908.—Supplement to Canadian Pacific Railway Company's standard freight tariff, C.R.C. No. E 1, applying on stations on new lines in Ontario (St. Mary's and Western Ontario Railway, Walkerton and Lucknow Railway and Listowel branch of Guelph and Goderich Railway.)

Order No. 5166, August 11, 1908.—Canadian Northern Ontario Railway Company's standard freight tariff, C.R.C., No. 74, applying between stations, Toronto and

Sudbury.

Order No. 5168, August 13, 1908.—Canadian Pacific Railway Company, C.R.C.. No. E 1244, applying between stations, Toronto and Sudbury.

Order No. 5194, August 18, 1908.—Brantford and Hamilton Electric Railway

Company's standard freight tariff, C.R.C. No. 1.

Order No. 5413, October 9, 1908.—Canadian Northern Railway Company's standard freight tariff, supplement No. 2 to C.R.C. No. 38 between stations west of and including Maryfield, Sask.

Order No. 5414, October 8, 1908.—Montreal Terminal Railway Company's stand-

ard freight tariff, C.R.C., No. 3.

Order No. 6087, January 18, 1909.—Grand Trunk Pacific Railway Company's standard freight tariffs, Nos. 2, 3 and 4; Winnipeg to Victor, Manitoba; Welby, Sask., to Wainwright, Alberta; Westfort, Ontario, to Lake Superior Junction, Ontario.

Order No. 6112, January 26, 1909.—Grand Valley Railway Company's standard freight tariff, C.R.C., No. 1.

The following standard passenger tariffs have been approved by the Board in accordance with section 331, The Railway Act:—

Order No. 5165, August 12, 1908.—Canadian Northern Ontario Railway Com-

pany, C.R.C., No. 26, between Toronto and Sudbury and Moose Mountain.

Order No. 5195, August 18, 1908.—Brantford and Hamilton Electric Railway, C.R.C., No. 1.

Order No. 5564, November 3, 1908.—Ottawa and New York Railway, C.R.C.,

No. 31, standard passenger tariff of bridge tolls for bridge section at Cornwall.

Order No. 5837, December 14, 1908.—Chatham, Wallaceburg and Lake Erie Railway Company, C.R.C., No. B 2, applying between Chatham and Erie Beach, Ontario Order No. 5972, December 18, 1908.—Orford Mountain Railway Company's C.R.C., No. 20.

Order No. 6006, January 18, 1909.—Grand Trunk Pacific Railway Company's

C.R.C., No. 2, stations east of Edmonton.

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

J. HARDWELL,

Chief Traffic Officer.

A. D. CARTWRIGHT, Esq. Secretary.

# APPENDIX C.

LIST OF APPLICATIONS HEARD AT PUBLIC SITTINGS OF THE BOARD COVERING THE PERIOD FROM APRIL 1, 1908, TO MARCH, 1909.

861. Application of the Chatham, Wallaceburg and Lake Erie Railway Company, under section 261 of the Railway Act, for leave to operate its line of railway for the carriage of traffic in the city of Chatham, on the following streets, that is to say:— From Dover street along and upon Union street and the Aberdeen bridge to King street and on King street, and on Third street, Wellington street and Raleigh street, and from Raleigh street through park lot No. 6 to Queen street, and from Queen street on a private right of way to William street and on William street to Queen street; and also applies for leave to operate temporarily and until such time as the protection plant can be installed, the crossing of the Canadian Pacific Railway on Raleigh street and the crossing of the Grand Trunk Railway at William street. (Application 5548. Case 2491.)

Note.—The portion to be dealt with at this sitting is that relating to the temporary crossing of the Grand Trunk Railway at William street, Chatham, Ont.

Temorary order issued granting leave to cross until August 1, 1908:-

S€2. Application of the Canadian Northern Ontario Railway for an order, under section 178 of the Railway Act for authority to take the following lands:—

- 1. That part of Park Drive located on lot 19, concession 2 F.B., in the township and county of York, lying east of the westerly limit of the right of way of the Toronto belt line railway, and extending to its junction with Bayview avenue deviation.
- 2. That portion of Bayview avenue extending northerly from a point thirty-three (33) feet south of the north limit of the city of Toronto to the junction with Bayview avenue deviation on lot 20 in the said concession; all of Bayview avenue deviation as located on lots 20, 19 and 18, in the said concession and about four hundred and fifty-nine and eight-tenths (459%) feet of Bayview avenue, measured northerly from the south limit of Bayview avenue deviation at its junction with Bayview avenue near the limit between lots 18 and 19 in the said concession.
- 3. A trespass road in the city of Toronto, on lots 15 and 16, concession 1 F. B., in the township and county aforesaid, extending northerly from Winchester street near the Canadian Pacific Railway subway to the south limit of Bayview avenue aforementioned, by substituting therefor a highway of sixty-six (66) feet in width, extending from the most northerly limit of that portion of Bayview avenue, herein sought to be closed to the north limit of Park avenue aforementioned, passing under and to the west of the right of way of the Toronto Belt Line Railway and a highway eighty (80) feet in width, extending from the south limit of Park drive aforementioned across lots 19 and 20, concession 2 and lot 16, concession 1 F. B., to the junction with the Rosedale ravine drive. (Application 5833. Case 2434.)

Judgment of the Board holding that the landowners are entitled to a voice in new location, and if by reason of a change in such location the company is unable to obtain conveyance of the lands covered by its agreement with the city the appli-

cation fails.

863. Application of the Kingston and Pembroke Railway Company, under sections 227, 228 and 229 of the Railway Act for an order amending order of the Rail-

way Committee of the Privy Council, dated November 2, 1895, and order dated September 10, 1896, amending same and directing that the station master of the Kingston and Pembroke Railway at Harrowsmith be no longer responsible that trains and engines on the Bay of Quinte are not allowed to pass the crossing in said order named unless the distant signals on the Kingston and Pembroke Railway are first set at danger, and that the trains and engines of the Kingston and Pembroke are not allowed to pass the said crossing unless the distant signals of the Bay of Quinté Railway are first set at danger, and that such responsibility be placed upon and borne by the Bay of Quinté Railway. (Application 70. Case 2895.)

Stands for further consideration.

864. Application of Edward Scott Brennen, of the city of Hamilton, Ontario, in the county of Weutworth, for an order, under section 26 of the Railway Act, for a writ of sequestration to be issued to sequester the goods, chattels and personal estate and the rents, issues and profits of the real estate of the Grand Trunk Railway Company.

Also for an order that the said company pay him \$6,731.96, being the amount shown in statement of damages delivered by the applicant to the Grand Trunk Railway on the 15th day of February, 1907, and for such further or other order or relief as the circumstances may require and the Board deems best. (Application 2001.)

Application dismissed.

865. Application of the Grand Trunk Railway Company of Canada, under sections 176 and 227 of the Railway Act, authorizing it to connect the branch line of railway which it was authorized to construct by order of the Board, dated July 25, 1906, extending from a point on its railway south of the concession road between the 6th and 7th concession of the township of Crowland, in the county of Welland, Ontario, thence northwesterly 'and along, upon and across the said concession road to the premises of the Ontario Iron and Steel Company, Limited, situate on lot 25 in the said concession of the said town, with the branch line of railway to the said premises of the Ontario Iron and Steel Company which the Michigan Central Railroad were authorized to construct by order of the Board, dated 27th October, 1906. (Application 2497. Case 3117.)

Application granted. Order issued.

866. The application of the Grand Trunk Railway Company of Canada, under sections 256 and 257 of the Railway Act, directing the Canadian Pacific Railway Company to reconstruct and maintain in a good and proper condition of repair the subway carrying the line of the Brockville and Ottawa Railway (now owned and operated by the Canadian Pacific Railway Company) under the main line of the applicant company's railway at mile post 124.96, a short distance east of the applicant company's station in the city of Brockville, Ontario, so that the same shall be safe for the passage thereover of the traffic on the applicant company's railway, and also directing the Canadian Pacific Railway Company to repay to the applicant company the amounts heretofore expended by it in making repairs in the said subway. (Application 6972. Case 3015.)

Order made authorizing applicant company to reconstruct at the subway, at

the expense of the Canadian Pacific Railway.

867. Application of the municipal corporation of the township of Saltfleet, in the county of Wentworth, Ontario, for an order under section 187 of the Railway Act of 1903, directing the Toronto, Hamilton and Buffalo Railway Company to build and maintain a subway for vehicles under their railway near its intersection with the Lee Mountain road in the said township. (Application 6892. Case 2943).

Application refused. Leave granted township to make fresh application. Subsequently order made directing certain changes and alterations at the crossing at the expense of company.

868. Application of the Grand Trunk Railway Company of Canada, under section 227 of the Railway Act, for leave to cross with its second track the track of

the United Counties Railway (operated by the Quebec, Montreal and Southern Railway) at St. Hyacinthe Junction, P.Q. (Application 6954. Case 2991.)

Application granted. Order issued. Expense to be borne by the Montreal and

Southern Railway.

869. Application of the Canada Atlantic Railway Company, as lessees of the Central Counties Railway Company, for leave to construct, maintain and operate a branch line of railway and six spurs, extending from a point on its railway in the town of Hawkesbury to the premises of the Riordon Paper Mills Company, North Main street, in the said town, as shown on plan and profile filed. (Application 6253. Case 2646.)

Note.—In conjunction with this application will also be heard the application of the Canadian Northern Ontario Railway Company to construct a branch line to the Riordon Paper Mills, and the application of the Canadian Northern Railway Company to connect its spur with the Grand Trunk tracks at the Riordon paper

mills.

Application granted. Order issued.

\$70. Application of the Canadian Pacific Railway Company, under sections 222 and 227 of the Railway Act, for an order granting the authority of the Board to construct, maintain and operate a branch line of railway, or spur, from a point on its most southerly track northwest of its stock yards on the Richmond road, in the city of Ottawa, situated about 340 feet northeasterly from the northwestern side of said Richmond road, and thence northeasterly and easterly through its station yard, across the property of Mr. William J. Campbell, and across the track of the Grand Trunk Railway on northwest side of said Richmond road, to and into the property of William J. Campbell, to a connection with a spur of said Grand Trunk Railway on the property of said William J. Campbell, for a total length of 570 feet. (Application 5504. Case 2147.)

Application granted. Order issued.

871. Application of the Canada Atlantic Railway Company, under sections 222 and 227 of the Railway Act, for authority to construct, maintain and operate a branch line of railway or siding extending from a point on the applicant company's line of railway on the Richmond road in the city of Ottawa, province of Ontario, thence northeasterly across parts of lots 38 and 39, concession A, township of Nepean, now in the city of Ottawa, to the premises of W. J. Campbell. (Application 5662. Cace 2291.)

Application granted. Order issued.

872. Application of the city of Ottawa and the corporation of the county of Carleton, under sections 237 and 238 of the Railway Act, for an order directing the Canada Atlantic Railway Company, the St. Lawrence and Ottawa Railway Company, the Canadian Pacific Railway Company and the Montreal and Ottawa Railway Company to submit to the Board a plan and profile of such portions of their respective railways as are constructed across the Richmond road, a public highway, in the city of Ottawa, and directing the construction by the said railway companies, or by some or one of them, of such works as may be necessary to carry the said highway over their said railways and such change in the location of the portions of their said railways which cross the said highway as may facilitate the construction of the said 5662. Case 2291.)

Application granted. Order issued. Work to be completed by July 1, 1909. Costs to be apportioned as follows: —

436 by county of Carleton. 936 by city.

439 by county of Carleton.

873. Application of the Grand Trunk Railway Company of Canada, under the Railway Act, for an order settling the terms of the lease which the applicant com-

pany was directed to make to the Canadian Pacific Railway Company under paragraph 6 of the order of the Board, dated the 11th July, 1905, made upon the application of the Guelph and Goderich Railway Company for leave to take possession of, use and occupy certain lands and premises belonging to the applicant company, in the city of Guelph, province of Ontario. (Application 1308. Case 2303.)

Settled by parties.

874. Application of the Canadian Pacific Railway Company under section 227 of the Railway Act for an order authorizing the crossing of the tracks of the Grand Trunk Pacific Railway by its Pheasant Hills branch, by means of an overhead bridge at mileage 457.1 of the said Pheasant Hills branch, section 27, township 40, range 23 west of the 3rd meridian. (Application 5538. Case 2183.)

Application granted. Order issued.

875. Application of the corporation of the city of Ottawa for an order under section 50 of the Railway Act, directing the Canadian Pacific Railway Company, the Grand Trunk Railway Company and the New York Central Railway Company to so construct all locomotive steam engines used by the said companies on their railways within the city of Ottawa as to consume their own smoke or as to prevent the emission therefrom of dense or opaque smoke, or to use upon the said engines such appliances as will prevent the emission therefrom of dense or opaque smoke, or to use in connection with such locomotive steam engines smokeless coal or coal which will not produce dense or opaque smoke. (Application 6595. Case 3023.)

General order issued covering this and similar applications. Order to take effect

January 1, 1909.

876. Application of the municipality of Delta for an order allowing costs incurred by the municipality in connection with the application of the Vancouver, Victoria and Eastern Railway and Navigation Company, for leave to carry its railway along river road, on the south bank of the Fraser river, municipality of Delta, British Columbia. (Application 4307. Case 967.)

Applications granted. Costs to be fixed by secretary of previous application.

S77. Application of the Grand Trunk Railway Company of Canada for an order under section 29 of the Railway Act, varying or amending paragraph 5 of the order of the Board, dated the 5th April, 1904, made upon the application of the Niagara, St. Catharines and Toronto Railway Company for an order to rescind or vary an order of the Railway Committee of the Privy Council, bearing date the 27th day of April, 1898, approving of the place and mode of crossing by the branch line from the Grand Trunk Railway Company's main line at the village of Merritton, to the paper and cotton mills in that village, of the main line of the Niagara, St. Catharines and Toronto Railway, by requiring the Niagara, St. Catharines and Toronto Railway Company to place and maintain a watchman at the said crossing between the hours of 8 a.m. and 6 p.m. of each day, not including Sundays, instead of between the hours of 8 a.m. and 8 p.m. of each day, not including Sundays, as in said clause mentioned, and that the wages of the watchman employed at said crossing shall not exceed twelve and a half (12½) cents per hour. (Application 397. Case 1251.)

Application dismissed.

878. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 227 of the Railway Act for authority to construct, maintain and operate a branch line of railway and spurs therefrom extending from a point on the applicant company's railway in the city of Hamilton, east of the point where the Toronto, Hamilton and Buffalo Railway's (belt line) industrial spur passes under the tracks of the applicant company, from Hamilton to Niagara Falls, thence westerly, crossing by means of an overhead bridge the tracks of the Toronto, Hamilton and Buffalo Railway's (belt line) industrial spur to the premises of the Berlin Machine Works, Limited. (Application 6664. Case 2818.)

Settled by agreement between the parties.

(Subsequently)—Application granted. Order issued.

879. Application of the Canadian Northern Ontario Railway Company, under section 317 of the Railway Act, for an order directing the Grand Trunk Railway Company and the Canadian Pacific Railway Company to provide facilities for passengers desiring to travel from or through points on the lines of the respondent companies, or either of them, to points on the line of the applicant company and its connections, and to issue tickets at through rates accordingly. (Application 6812.)

Order made that application company and respondent company publish and file tariffs of joint passenger tolls to apply on passenger and traffic interchange between the said companies other than that having its origin at the respondent company's points or with companies that connect and deliver to respondent company and destined to points common to applicant company's and respondent company's lines.

The other requests contained in the application refused.

880. Complaint of the Fredericton board of trade respecting freight tariffs in force by railways in Canada on goods coming to Fredericton, New Brunswick, from points west of Montreal, Quebec, as against freight rates from the same points in the west to St. John, New Brunswick, and St. Stephen, New Brunswick. (Application 1600.)

Order issued directing Grand Trunk Railway to restore to Fredericton the St.

John basis of rates on traffic originating west of Montreal.

881. Aplication of the Railway Trainmen of Ontario to consider and settle the

proposed uniform code of train rules. (Application 1750.)

Note.—The Board will also consider at the above sittings the following matters submitted by the joint committee of the legislative board of the Brotherhood of Railroad Trainmen as follows:

1. That company employees be allowed to attend investigations held by the Board's inspectors of accidents, on request of witness.

2. That witness fees to be paid at such investigations be increased.

- 3. That the Board order an increase in the number of men on trains for flagging purposes.
- 4. That telegraph operators be not employed under the age of twenty-one and evidence be furnished of their having one year's experience in railroad work.
- 5. That the Board's inspectors be required to ride on and inspect the conditions of locomotives.
- 6. That all engines be equipped with dump ash pans such as will avoid the necessity of a man going under the engine to clean the same.

The Board will also consider the following matters presented to it by memorial through the Ontario Brotherhood of Railroad Trainmen:—

- 1. That all brakes, dogs and ratchets be placed on the top of the car instead of on the step at the end of the car.
- 2. That all cars used as caboose be equipped with air-brakes, gauge, conductor's valve, platform, steps and cupola.
- 3. That operating levers be placed on both sides of the draw-bar along the end of the car
- 4. That no obstructions be piled on the tops of any box cars while being hauled by the train crew.
  - 5. That any order requiring men to ride on the top of trains be abolished.
  - 6. That safety hand-holds and steps be placed on engines.
  - 7. That obstructions and structures be placed not less than six feet clear of rail.
- 8. That not less than five men be placed on any train, and not less than three men on light engines.
  - 9. That there be a car limit as to number.
- 10. That passenger brakemen have one year's experience in yard or freight service.
- 11. That steps be taken to prevent the handling of crippled cars on trains, except on wreck trains.

Order issued, for terms of which see first portion of annual report, page 48.

882. Application of the Saraguay Electric Light and Power Company, under section 246 of the Railway Act, for leave to carry power transmission lines across the tracks of the Grand Trunk Railway at Coté St. Paul road, Turcot village, Quebec. (Application 6351. Case 2684.)

Application granted and order issued.

883. Application of the corporation of the city of Peterborough, under sections 237 and 238 of the Railway Act, directing the Canadian Pacific Railway Company to provide for the protection and maintenance of the highway at the level crossings of the said railway with Aylmer street in the city of Peterborough. (Application 6580. Case 2786).

Note.—The question for consideration in connection with the above application is the apportionment of the cost of the protection of the said crossing referred to in the letter of the city solicitor, Peterborough, dated 10th April, 1908, and the letter of C. Drinkwater, assistant to the president Canadian Pacific Railway, in connection with the report of the Board's chief engineer, dated 24th March, 1908.

Application granted. Cost of watchmen to be borne as follows:

3 by the railway company.

1 by the city.

884. Application of the corporation of the City of Peterborough, under sections 237 and 238 of the Railway Act, for an order directing the Grand Trunk Railway Company of Canada, to provide protection at the level highway crossing of the said railway at Reid street in the city of Peterborough. (Application 6581. Case 2785.)

Note.—The question for consideration in connection with the above application is the apportionment of the cost of the protection of the said crossing, as referred to in the letter of the city solicitor, Peterborough, dated April 4, 1908, and the letter of M. K. Cowan, K.C., dated April 21, 1908, in conjunction with the report of the board's engineer, dated March 24, 1908.

Application granted. Order issued. Cost to be divided as follows:-

Two-thirds of cost of providing shelter and accommodation for watchmen and wages to be borne by the Grand Trunk Railway.

One-third by applicant.

885. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 237 of the Railway Act, for authority to construct, maintain and operate a branch line of railway or spur from a point on lot No. 157, parish of St. Blaise, Quebec, thence in a westerly direction across lot No. 158, in the said parish, the Grand Bernier road, and lot 157, to the premises of the People's Specialty Co., Grand Ligne. (Application 5910. Case 2485.)

Application granted. Order issued. Trains of applicant company to stop at

crossing.

886. Application of the Southwestern Traction Company of London, Ontario, under section 246 of the Railway Act, for leave to erect, place and maintain transmission wires across the track of the Grand Trunk Railway Company at a point approximately one mile north of St. Thomas, at the road known as the Lynhurst road. (Application 5244. Case 1861.)

Application granted. Order issued.

887. Application of the Canadian Pacific Railway for an order amending order of the Board No. 3238, dated July 3, 1907, requiring railway companies in Canada subject to the Board's jurisdiction, to equip passenger coaches with two fire extinguishers. (Application 4739. Case 1858.)

Order issued amending previous order and providing for one fire extinguisher in

each car.

888. Application of the Grand Trunk Pacific Railway, under section 159 of the Railway Act, for the approval of the location of its line through the city of Fort William. (Application 1519. Case. .)

Stands pending approval of Bill 25, an Act respecting the joint section of the Canadian Pacific Railway Company and Grand Trunk Pacific Railway Company at

Fort William, Outario, by Parliament of Canada.

889. Application of the Canadian Northern Railway Company, under section 45 of the Railway Act. for order amending order of the Board No. 558, dated July 18. 1905, approving and sanctioning the location of the Canadian Pacific Railway (Wolseley-Reston branch) so far as it affects the land covered by the Hartney-Regina branch of the applicant company. (Application 1539. Case 2458.)

Application dismissed.

890. Application of the Grand Trunk Pacific Railway Company, under section 227 of the Railway Act, for leave to cross the track of the Canadian Pacific Railway Company (Pheasant Hills branch), section 27, township 29, range 22, west of the 2nd meridian, Saskatchewan. (Application 5485. Case 2108.)

Order made declaring Canadian Pacific Railway senior company, and directing

applicant company to bear all expenses.

S91. Application of the stone quarry operators for an order, under section 323 of the Railway Act, disallowing the proposed increase in freight rates for the carriage of stone upon the railways of the Canadian Pacific Railway and the Grand Trunk Railway Company. (Application 4456. Case 2965.)

Application dismissed. Order, however, contained provision that stone rates of the said railway companies from the towns of Galt, Guelph. Niagara Falls, Longford, St. Marys and Ivanhoe to Toronto and common points do not exceed rates from other quarry points of similar or greater distances, and that the present rates in force be amended accordingly.

892. Application of the Morang Educational Company, Limited, of Toronto, Ontario, under section 327 of the Railway Act, for an order fixing a proper freight classification throughout Canada for public school books. (Application 7338. Case 3203.)

Order made amending car classification No. 13, by the addition of C. L. rating

of third class on books in boxes or cases. Order effective May 20, 1908.

893. Application of the Winnipeg Jobbers' and Shippers Association, under the Railway Act, for an order directing that railway companies (a) where the traffic warrants it to erect a freight shed and appoint a permanent agent in charge of the business at such station; (b) not to reduce any regular station with an agent in charge to a flag station without an agent; (c) not to close any regular or flag station without the approval of the Board of Railway Commissioners. (Application 4205. Case 871.)

Partially dealt with by judgment of the Chief Commissioner, dated the 2nd November, 1908. The companies required to appoint and maintain permanent agents at stations where the total freight and passenger earnings amount to \$15,000 per year, and at points where the business consists of shipping grain where such shipments amount to at least 50,000 bushels per year, and at points of shipment where telegraph operators are located for handling of trains, such operators should be provided with the necessary equipment to take care of traffic.

894. Application of the Canadian Northern Quebec Railway Company for an order, under sections 222 and 237 of the Railway Act, for authority to (a) construct a spur line to the Lakefield Portland Cement Company on lot 74. parish of Pointe aux Trembles, county of Hochelaga; (b) and cross with the said spur the intervening tracks of the Montreal Terminal Railway Company. (Application 7109.

Case 3079.)

Application granted. Order issued.

895. Application of the Canadian Pacific Railway Company, under section 194 of the Railway Act, 1903, for an order that the Peoples' Telephone Company be required to substitute wires for the existing iron wires that cross the right of way of

the railway company on College street in the village of Lennoxville, Quebec. (Application 4052. Case 722.)

Order made directing telephone company to standardize crossing.

896. Application of the town of Notre Dame de Grace, under section 250 of the Railway Act, to construct a sewer under the tracks of the Grand Trunk Railway Company, near the village of Turcot, Quebec. (Application 6891. Case 2964.)

Application granted. Order issued. Work to be done under supervision of Grand Trunk Railway engineer. Expenses of engineer to be paid by applicants.

897. Application of the Canadian Pacific Railway Company, under section 256 of the Railway Act, for approval of the plans of the proposed abutments and piers under existing bridge at mileage 19.86, Farnham section crossing, Richelieu street, St. Johns, province of Quebec. (Application 5133. Case 2893.)

Application granted. Order issued.

898. Application of the Peoples' Telephone Company for an order, under section 245 of the Railway Act, directing the Canadian Pacific Railway Company to permit the applicants to make telephonic connection and communication with the ticket office in the station and with the freight office of the said company in the city of Sherbrooke. (Application 6639. Case 2897.)

Judgment reserved.

Subsequently general form of order for this and like applications settled upon and order in this case granted.

899. Complaint of Dr. Charette, mayor of Notre Dame des Neiges, of the failure on the part of the Montreal Park and Island Railway Company to file and receive approval by the Board of its standard passenger tariffs, and that the Montreal Park and Island Railway Company charges passenger fares of 5 cents each from points in the city of Montreal to Dellingham avenue, and an additional 10 cents each from Dellingham avenue to Coté des Neiges, while it previously sold tickets at the rate of 6 for 25 cents for transportation to Notre Dame des Neiges. (Application 6320.)

Order made dismissing the complaint.

900. Application of the Napierville Junction Railway Company, under section 277 of the Railway Act, for leave to join its tracks with the tracks of the Canadian Pacific Railway Company, and to cross the tracks of the Canadian Pacific Railway. Company at a point one mile east of St. Constant station, on the line of the Canadian Pacific Railway. (Application 5076. Case 2364.)

Settled in the terms of agreement between the parties filed with Board.

901. Application of the Grand Trunk Railway Company of Canada, under section 227 of the Railway Act, for authority to cross with two tracks leading from its main line at Turcot to its new freight yards and terminals at Turcot, the tracks of the Montreal Park and Island Railway Company at two different points, namely, near the eastern and western extremities of said freight yards. (Application 6023. Case 2564.)

Application removed from list. Leave granted to either party to reinstate on ten days' notice.

902. Application of the corporation of the village of Papineauville, in the county of Labelle, in the province of Quebec, for an order granting leave to the applicants to construct a street crossing on the tracks of the Canadian Pacific Railway between Papineau avenue No. 122 of the Cadastre of the parish of Ste. Angelique and the lots Nos. 103, 98 and 99 of the said cadastre, and ordering that the railway company supply and construct the said crossing. (Application 5545. Case 2507.)

Application granted. Cost of maintaining crossing between tracks to be borne

by railway company.

903. Complaint of Joseph Legault with regard to cement culverts of the Grand Trunk and Pacific Railway Companies on lots 50 and 51 cadastral, parish of Pointe Claire, near Lakeside station, Quebec. (Application 6063.)

Complaint withdrawn.

904. Application of the Canadian Pacific Railway Company, under sections 221, 222, 227 and 237 of the Railway Act for leave to construct branch lines in the city of Montreal, Quebec—

1. To the premises of Shearer, Brown & Wallace, crossing St. Patrick and land streets; and

2. To the premises of the Sherman-Williams Paint Company, crossing St. Patrick street and connecting with spur of the Grand Trunk Railway Company. (Application 5508. Case 2154.)

Application granted. Order issued subject to the conditions set forth in the

order.

905. Complaint of the Truro Condensed Milk Company, Limited, against the Grand Trunk Railway Company of Canada, with respect to rates and service on milk shipments. (Application 4838.)

Complaint dismissed.

906. In re protection of the crossing of the tracks of the Grand Trunk Railway Company of Canada by the tracks of the Canadian Pacific Railway Company in the village of Lennoxville, Quebec. (Application 419.)

Order made directing Grand Trunk Railway to install interlocking plant May

15, 1908. Cost to be borne by Grand Trunk Railway.

907. Application of the Canadian Northern Ontario Railway Company, under section 237 of the Railway Act, for authority to place a second track across Winchester street, at rail level, Toronto, Ontario. (Application 5346. Case 1979.)

Note.—This application is set down for the purpose of settling the terms and

conditions on which order shall issue herein.

Application granted. Order issued. Crossing to be protected by gates and watchman at the expense of the applicant company, with leave to the city to apply to protect the crossing by means of a bridge.

908.—In re complaint of the municipal council of the town of Bowmanville, Ontario, regarding unprotected state of the railway crossing directly east of the Grand Trunk Railway Company's station on the leading road from the town to the lake, commonly known as the wharf road. (Application 7292.)

Application refused.

909. Application of the Canadian Pacific Railway Company, as lessee exercising the franchises of the Toronto, Grey and Bruce Railway Company, under section 237 of the Railway Act for an order authorizing it to cross, with its grade revision, already approved, the road allowance between lots 10 and 11, concession 8, township of Vaughan, county of York, Ontario, at mile 12.55 of the said revision. (Application 6373. Case 2698.)

Note.—This application is set down for the purpose of settling the terms and conditions on which order shall be issued herein.

Order made granting application to cross by means of a subway. Expense of excavation to be borne by the township of Vaughan.

910. Application of the Grand Trunk Railway Company of Canada, under section 227 of the Railway Act, for leave to cross with its additional track on Ferguson avenue, Hamilton, Ontario, which the applicant company was authorized to construct by order of the Board, No. 3977, dated October 30, 1907, the two tracks of the Hamilton Street Railway Company on Barton street, where it is intersected by Ferguson avenue, Hamilton, Ontario. (Application 5824. Case 2426.)

Note.—This application was set down for the purpose of settling the terms and conditions on which order should issue herein.

Order made settling terms and conditions of crossing. Crossing to be protected by one-half interlocker.

Cost of installation to be borne by Hamilton street railway.

911. Application of the municipal council of Weston in re Grand Trunk Railway bridge crossing the Weston road at the north end of the town. (Application 4393. Case 1046.)

Application dismissed.

912. Application of the Grand Trunk Railway Company of Canada, under section 29 of the Railway Act, for an order amending the order of the board, dated July 14, 1904, made upon the application of the Preston and Berlin Street Railway Company, Limited, authorizing that company to cross with its track the spur line of the Grand Trunk, running from the main line in the town of Waterloo and crossing Wilmot street and the switches leading from the said spur line of the Grand Trunk by Charles and Joseph streets, in the town of Berlin, by directing the said Preston and Berlin Street Railway Company, Limited, at its crossing of the Grand Trunk's Charles street spur to install derails in the Preston and Berlin Street Railway main tracks and spurs therefrom. (Application 718. Case 2505.)

Application dismissed.

913. Application of William J. Miller and Benjamin F. Miller, under section 198 of the Railway Act, 1903, for an order directing the Michigan Central Railroad Company (or the Canada Southern Railway) to provide and construct a suitable farm crossing where the said railway intersects lot 10, in the 4th concession, township of Bertie, county of Welland, Ontario. (Application 6403. Case 2724.)

Application dismissed.

914. Application of the Walkerton and Lucknow Railway Company, under section 227 of the Railway Act, for an order granting authority to construct, maintain and operate certain railway crossings and junction in the town of Hanover, Ontario, in connection with said spurs in said town marked L-1, L-2, and the spur to the furniture factory, as shown on plan filed with the Board, the first of said crossings being a crossing of the narrow gauge track of the Hanover Portland Cement Company by the spur marked A-1; and the second of said crossings being a crossing of a track operated by the Grand Trunk Railway Company on land belonging to said Hanover Portland Cement Company, and being at chainage 1455-07 of said spur L-2, the said junction being a junction with a track operated by the Grand Trunk Railway Company, as a spur to the furniture factory at a point opposite the property belonging to J. Campbell on John street, opposite lot 87 on the eastern side of said John street, said point of junction being at chainage 1458-58-3 of said spur to the furniture factory. (Application 6819. Case 2905.)

Application granted.

915. Application of the Walkerton and Lucknow Railway Company, under section 222 of the Railway Act, for an order authorizing the construction, maintenance and operation of branch lines in the town of Hanover, Ontario, from a point on its main line, being a point on lot 6, to a point in lot 3, to the premises of the furniture company, and also, firstly, from a point in lot 4, to a point in lot 2, and, secondly, from a point in lot 3 to a point in lot 2, being for the purpose of reaching the premises of the cement company and making connection with the tracks of the Grand Trunk Railway at this point, the whole being in the town of Hanover, concession 1, N. township of Bentinck, county of Grey, Ontario. (Application 6400. Case 2420.)

Application granted.

916. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 237 of the Railway Act, for an order authorizing it to construct, maintain and operate five branch lines or sidings which have been constructed at the town of Hanover, Ontario—two for the Hanover Portland Cement Company, Limited, and the remainder for the Knechtel Furniture Company, Limited. (Application 6743. Case 2854.)

Application granted.

917. Application of the Walkerton and Lucknow Railway Company, under section 178 of the Railway Act, for authority to take additional lands adjoining their

railway in the village of Priceville and township of Artemisia, Ontario, for the convenient accommodation of the public and of the traffic on its railway, and to secure the efficient construction, maintenance and operation of the railway. (Application 6818. Case 2904.)

Application granted. Order issued.

918. Application of the Grand Trunk Railway Company of Canada, for an order under the Railway Act authorizing it to cross with its second track from North Parkdale station to Toronto Junction, which it was authorized to construct by order of the Board No. 3163, dated May 22, 1907—

1. The track of the Owen Sound section of the Canadian Pacific Railway Com-

pany.

2. The tracks of the Ontario and Quebec Railway, now leased and operated by the Canadian Pacific Railway Company, at a point east of Weston road, in the town of Toronto Junction, Ontario.

3. To move easterly from its present position the track of the Owen Sound section of the Canadian Pacific Railway, where the same crosses Weston road in the town of Toronto Junction, Ontario. (Application 6071. Case 2584.)

Order made granting the application in terms set forth in order.

919. Application of the corporation of the town of Waterloo, Ontario, for an order, under sections 30 and 32, repealing, rescinding, or varying on order made by the Railway Committee of the Privy Council, dated September 27, 1894, and directing the Grand Trunk Railway Company to furnish further protection by means of gates or otherwise at the crossing at King street, Waterloo, Ontario. (Application 5728. Case 2338.)

Order issued directing protection by gates. Cost of installation, maintenance

and operation to be divided among the three corporations interested.

920. Application of the Canadian Pacific Railway Company, under section 186 of the Railway Act, 1903, for leave to cross with its Sudbury-Kleinburg branch, certain highways in the township of Vespra, county of Simcoe, Ontario. (Application 3911. Case 605.)

921. Application of the city of Hamilton, under sections 30 and 269 of the Railway Act, for an order prohibiting the Grand Trunk, the Toronto, Hamilton and Buffalo, and the Canadian Pacific Railaway Companies from using soft coal on locomotives used by them for shunting purposes, within the limits of the city of Hamilton, and directing that anthracite coal only be used on such locomotives. (Application 5807. Case 2408.)

Covered by general order.

922. Application of the corporation of the city of Hamilton for an order, under the Railway Act, directing the Toronto, Hamilton and Buffalo Railway Company and the Canadian Pacific Railway Company to provide and construct a suitable highway bridge over the tracks of the company at the intersection of the line of the company at Garth street, in the city of Hamilton, Ontario. (Application 1592. Case 2739.)

Order made directing Toronto, Hamilton and Buffalo Railway Company to pro-

vide a highway bridge.

923. Application of the Niagara, St. Catharines and Toronto Railway Company, under the Railway Act, for an order authorizing the company to close up or divert the street or road in the town of Thorold known as Welland avenue, in the manner and as shown on the plan showing the proposed closing up or deviation. (Application 6811. Case 2901.)

Application refused.

924. Application of the Grand Trunk Railway Company of Canada, under subsection (x) of section 3 of the Lord's Day Act, 6 Ed. VII, cap. 27, permitting the said company by its servants, workmen, and agents, in order to prevent undue delay to traffic, to do any Sunday, work incidental to the continuance to its destination of

freight in transit at the beginning of such Sunday, notwithstading that the cars containing such freight and forming part of any train so in trasit, may not have a common destination, but may require to be switched, shunted or otherwise dealt with at railway yards, divisional, or other points, for the purpose of being sent on to their several destinations.

And for an order also permitting the said company to do such work upon any Sunday as may be necessary for the purpose of furnishing to persons engaged in any manufacturing or other industry, or to shippers of live stock, a continuous railway service without which such persons would be unduly hampered and delayed in their said business.

And for such further and other order as to the Board may seem meet upon the evidence to be adduced before them. (Application 5689. Case 2460.)

Order made granting leave to Grand Trunk Railway to unload grain at lake ports between September 15 and June 1 of the year following upon the Lord's Day, and to do work for such purpose necessary to furnish a continuous service; also that all other companies carrying grain from Ontario lake ports be granted the same privilege.

925. Application of the corporation of the city of Toronto, under sections 237 and 238 of the Railway Act, for an order directing the Grand Trunk Railway Company to provide and maintain gates and a watchman at the crossing at Bloor street west by the tracks of the Northern Division of the Grand Trunk Railway Company of Canada. (Application 6791. Case 2891.)

Order made directing Grand Trunk Railway to establish gates within six months. Applicants to pay half the cost of installation and maintenance.

926. Application of the city of Toronto, under sections 237 and 238 of the Railway Act, and under section 5 of the Esplanade Tripartite Agreement, dated July 26, 1892, for an order directing the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company to properly plank between the tracks of the respective companies at the crossing of Church street, Toronto, and also to protect the said crossing by gates and watchmen. (Application 6955. Case 2993.)

Order made requiring railway companies to keep a flagman at crossing from April 15, to November 15 each year between 7 a.m. and 7 p.m. Cost to be borne by railway companies.

927. Application of the Toronto Suburban Railway Company, for an order amending order of the Railway Committee of the Privy Council dated November 22, 1892, and May 10, 1893, by fixing the responsibility for the protection of the said crossing of the Toronto Suburban Railway Company over the line of the Grand Trunk Railway Company and the Canadian Pacific Railway Company upon the said companies, and reducing the amount to be paid by the Toronto Suburban Railway Company towards the construction, maintenance, and protection of the said crossings as fixed by the said orders of the Railway Committee. (Application 132. Case 1353.)

Order made directing amendment of original order and apportioning cost as follows:—

1 by applicant company.

1 by city.

1 by Grand Trunk Railway.

1 by Canadian Pacific Railway.

928. Complaint of the city of Toronto, Ontario, in re protection at crossing of Queen street east, Don, Toronto, Ontario. (Application 43).

Complaint dismissed.

929. Complaint of H. L. Drayton, K.C., in *re the* level crossings of the Grand Trunk Railway Company at Windermere and Ellis avenues, in the township of York, Ontario. (Application 6994. Case 3026.)

Reserved until Toronto viaduct question is settled.

930. Application of the Ingersoll Telephone Company for an order, under section 245 of the Railway Act, permitting the applicant company to install a telephone

in the station of the Canadian Pacific Railway Company at Ingersoll, Ontario. (Application 6910. Case 2961.)

Application granted.

931. Application of the Canadian Pacific Railway Company, under section 221 of the Railway Act, for authority to construct, maintain and operate a branch line or spur from a point on its main line in the city of Toronto, about eighty feet northeasterly from the eastern side of Beachall street, and thence southwesterly across said Beachall street and across property belonging to the Ontario and Quebec Railway Company to Front street, and thence easterly along the southern side of Front street for a total distance of about 5,200 feet to the eastern side of Jarvis street, in the said city. (Application 4369. Case 1026.)

Application dismissed.

932. Application of the Toronto Suburban Railway Company, under the Railway Act, for an order restraining the Toronto and Niagara Power Company from maintaining and operating its power transmission lines and telephone lines over the tracks of the Toronto Suburban Railway Company at Weston road, immediately north of St. Clair avenue, in the town of Toronto Junction. (Application 3793. Case 506.)

Application granted. Order issued.

933. Application of the Toronto Suburban Railway Company, under the Railway Act, for an order restraining the Toronto and Niagara Power Company from maintaining and operating its power transmission lines and telephone lines over the tracks of the Toronto Suburban Railway Company at Davenport road, in the town of Toronto Junction, near the crossing the northern division of the Grand Trunk Railway Company. (Application 3794. Case 507.)

Application granted. Order issued.

934. Application of the Toronto Suburban Railway Company, under the Railway Act, for an order restraining the Toronto and Niagara Power Company from maintaining and operating its power transmission lines and telephone lines over the tracks of the Toronto Suburban Railway Company at Bathurst street, in the township of York, immediately north of the Canadian Pacific Railway Company's tracks. (Application 3795. Case 508.)

Application granted. Order issued.

935. Application of the Grand Trunk Railway Company of Canada, under section 175 of the Railway Act, 1903, for authority to construct a branch line or siding, and two spurs therefrom, from a point on its line of railway at or about the foot of Fraser avenue; thence extending northerly along Mowat avenue, Toronto, to the establishment of the Toronto Carpet Company and the Malta Vita Food Company, as well as the property of the city of Toronto on the westerly side of Mowat avenue. (Application 3764. Case 489.)

Application granted. Order issued.

936. Application of Jane Prittie to vary or rescind order of the Board No. 2336, dated the 12th of December, 1906, authorizing the construction and operation of a branch line in the town of Toronto Junction to the premises of the Union Stock Yards, Limited. (Adjourned hearing.) (Application 2112. Case 2500.)

Aplication dismissed.

937. Complaint of J. W. Borsbery, under the Railway Act, in re construction of a branch line by the Oshawa Railway Company on May street and crossing King street, in the town of Oshawa, Ontario.

Complaint withdrawn.

938. Application of the Grand Trunk Railway Company of Canada, under section No. 277 of the Railway Act, for leave to cross with its spur the track leading off the twentieth district of the applicant company's railway, the spur track of the

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Canada Southern Railway in the applicant company's south yard at Fort Erie, Ontario. (Application 6883. Case 2913.)

Application granted. Order issued.

939. Application of the city of Toronto, under the Railway Act, for an order directing the Grand Trunk Railway Company of Canada, in accordance with the provisions of an agreement made between the applicants and the Grand Trunk, dated October 12, 1903, to protect, by means of gates and semaphores and derails in the tracks of the Toronto Railway Company, the crossing of Front street, in the city of Toronto by the Grand Trunk's branch line or siding to its John street freight yards, authorized to be constructed by order of the Railway Committee of the Privy Council, dated October 17, 1903. (Application 231. Case 3254.)

Order made directing protection of crossing by gates, semaphores and derails

at expense of the Grand Trunk Railway Company.

940. Application of the Canadian Pacific Railway Company, under the Railway Act, for a proposed connection between the Canadian Pacific and Grand Trunk Railway Companies at Galt, Ontario. (Application 1380. Case 1731.)

Order made directing Canadian Pacific Railway Company to make connection at Galt before January 1, 1909. Cost to be borne by Canadian Pacific Railway Com-

pany.

941. Consideration of memorandum of judgment of the Board, dated December 26, 1907, in re interswitching, in conjunction with report of Chief Traffic Officer, dated December 18, 1907. (Application 6713. Case 2846.)

This application dealt with by general interswitching order.

942. Application of the boards of trade of Berlin, Galt, Preston, Hespeler and Waterloo, Ontario, under section 228 of the Railway Act, for an order directing the Canadian Pacific Railway Company, the Grand Trunk Railway Company, the Galt, Preston and Hespeler Street Railway Company and the Preston and Berlin Street Railway Company to connect their lines of tracks in the towns of Berlin, Galt, Preston, Hespeler and Waterloo, as to admit of the safe and convenient transfer or passing of engines, cars and trains from the tracks or lines of one of the above railways to those of the others, and that such connections shall be maintained and used by the said Canadian Pacific Railway Company, the Grand Trunk Railway Company, the Galt, Preston and Hespeler Street Railway Company and the Preston and Berlin Street Railway Companies, respectively.

Also to determine by what company or companies or other corporations or persons, and in what proportions the cost of making and maintaining any such connections shall be borne, and upon what terms traffic shall be thereby transferred from the lines of one railway to those of another or any other railway or railways that might hereafter enter the said towns of Galt, Preston, Hespeler, Berlin and Waterloo. (Application Nos. 1762, 1763, 1758 and 1761. Cases 2394, 2393, 2392 and 2391.)

Application dismissed.

943. Complaint of the Canadian Manufacturers' Association, the Huntsville Lumber Company and others, under section 252, 253 and 254 of the Railway Act, 1903, against the Grand Trunk Railway Company of Canada *in re* interswitching charges at Toronto, Ontario. (Application 4459. Case 1356.)

Disposed of under general interswitching order.

944. Complaint of the W. Booth Lumber Company, Limited, Toronto, Ontario, in re interswitching charges of the Grand Trunk Railway Company at Toronto. (Application 4459. Case 1182.)

Disposed of under general interswitching order.

945. Application of the Winnipeg manufacturers (Canadian Manufacturers' Association) for an order that the transportation charges made by the Canadian Pacific and Canadian Northern Railway Companies in their established tariffs applying to and from their respective terminals in the cty of Winnipeg be extended to

cover the terminal switching expenses of the delivering or initial carriers, as the case may be, on non-competitive business in and out of the said city. (Application 4200. Case 865.)

Disposed of under general interswitching order.

946. Complaint of W. J. Lovering, lumber merchant, Toronto, in re interswitching charges of the Grand Trunk Railway Company at Toronto, Ontario. (Application 4459. Case 1126.)

Disposed of under general interswitching order.

947. Complaint of Messrs. Leak and Company, Toronto, Ontario, re interswitching charges of the Grand Trunk Railway Company at Toronto, Ontario. (Application 4459. Case 2230.)

Disposed of under general interswitching order.

948. Complaint of Messrs. T. Dexter and Son, of London, Ontario, in re switching charges of the Grand Trunk Railway Company on wheat to Canadian Pacific Railway at London from Point Edward to Goderich, Ontario. (Application 6799).

Disposed of under general interswitching order.

949. Complaint of the Boake Manufacturing Company, Limited, Toronto, in reinterswitching charges of the Grand Trunk Railway Company at Toronto, Ontario. (Application 4459. Case 1217.)

Disposed of under general interswitching order.

950. Complaint of the Peterborough Sandstone Brick Company, Peterborough, Ontario, in *re* interswitching charges of the Canadian Pacific Railway Company and the Grand Trunk Railway Company at Peterborough, Ontario. (Application 5500. Case 2144).

Disposed of under general interswitching order.

951. Complaint of McColl Brothers and Company, oil merchants, Toronto, respecting release of responsibility demanded by the Canadian Pacific Railway Company on oil shipments to flag stations. (Application 6943.)

Application dismissed.

952. Complaint of the John Campbell Company, Limited, St. Thomas, Ontario, re interswitching charges of the Michigan Central Railroad Company at St. Thomas, Ontario. (Application 3991. Case 910.)

Order made fixing toll to be charged by railway company at \$3 per carload, refund to be made by railroad company of excess charged between 19th July, 1907, and

the date of order with interest at five per cent.

953. Complaint of J. Malkin and Sons re freight rates on tan bark to Berlin and London, Ontario, from points on the line of the Grand Trunk Railway Company. (Application 3882.)

Application dismissed.

954. Application of the town of Lindsay, hereinafter called the 'applicants,' under the Railway Act, 1903, for an order directing the Grand Trunk Railway Company of Canada, the Lindsay, Bobcaygeon and Pontypool Railway Company, and the Canadian Pacific Railway Company as lessees of the Lindsay, Bobcaygeon and Pontypool Railway Company, to make all necessary arrangements and afford to all persons and companies all reasonable and proper facilities for the receiving, forwarding and delivering of traffic upon and from their several railways, and for the interchange of traffic between the said railways in the town of Lindsay, and for forwarding rolling stock from one of the said railways to the other, in the said town, and for the return thereof. (Application 1397.)

Case struck off the list.

955. Application of the Windsor, Essex and Lake Shore Rapid Railway Company, under the Railway Act, for an order directing the Pere Marquette Railway to interchange traffic with the Windsor, Essex and Lake Shore Rapid Railway Company at Kingsville, Ontario. (Application 6817.)

Covered by general interswitching order.

956. Application of the Grand Trunk Railway Company of Canada, under section 29 of the Railway Act, for an order varying the order of the Board No. 358, dated February 23, 1905, authorizing the applicant company to take certain lands situate in the city of Toronto, for the purpose of a passenger station and passenger station yards therefor, and for such purposes as are necessary or usually connected therewith, by extending for the period of three years the times fixed in the said order for the commencement and completion of the station and appurtenances referred to in the said order. (File 588. Case 2828.)

Order made varying order No. 358 by extending time fixed by paragraph 4 for

further period of 12 months from 22nd August, 1908.

957. Application of the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company, in pursuance of paragraph 6 of order of the Board dated the 23rd February, 1905, for an order fixing the compensation to be paid by the Canadian Northern Railway Company (formerly the James Bay Railway Company), for the use of the Union station property at Toronto, including the service and accommodation provided, and at present and for some time past used and enjoyed by the Canadian Northern Ontario (formerly James Bay) Railway Company. (Application 588. Case 3208.)

Order made directing the Canadian Northern Ontario Railway to pay to Grand Trunk Railway amount fixed under agreement, 7th November, 1906, up to date of order. Companies to make arrangements between themselves for subsequent user

and grounds.

958. Application of the city of Toronto, under the Railway Act, for an order compelling the Grand Trunk Railway Company of Canada to provide better protection at the level crossing known as the Sunnyside Crossing of the company's tracks at the western end of the city of Toronto, and for the lowering of the rate of speed of trains at the said crossing. (Application 4606. Case 1311.)

Note.—The Board will consider the question of the construction of a bridge at Sunnyside crossing and the appointment of the expenses thereof between the city

and the railway companies interested.

Stands to be considered when Toronto viaduct application is disposed of.

959. Application of the corporation of the city of Toronto, under section 186 of the Railway Act, 1903, permitting the said corporation to construct a high level bridge crossing the Don improvement and the tracks of the Canadian Pacific and Grand Trunk Railway Companies crossing King street (or Queen street) east, in the city of Toronto, and for an order determining the proportion to be borne by the said railways and other parties interested of the costs and expenses incident to the construction and maintenance of said bridge, including damages to any property which may be injuriously affected thereby. (Application 1621.)

Stands to be dealt with when Toronto viaduct question decided.

960. Application of the Canadian Pacific Railway Company for authority to lay an extra track across the public road at Janetville, Ontario. (Application 5324. Case 2702.)

Order made granting leave to cross.

961. Application of the Essex Terminal Railway for authority to construct its railway across the Windsor, Essex and Lake Shore Rapid Railway on the gravel road, township of Sandwich, East, Ontario. (Application 3846. Case 544.)

Application granted. Order issued. Question of cost of providing and maintaining interlocking plant reserved until disposition of appeal to Supreme Court.

962. Application of the Canadian Northern Quebec Railway for authority to take part of lot No. 448 in the parish of St. Stanislaus for purposes of deviating highway on the west side of River Batiscan. (Application 3986. Case 3126.)

Order made granting application.

963. Complaint of the municipal council of the county of Victoria and township of Emily re Grand Trunk Railway station at Omemee, Ontario. (Application 1342.)

Order made directing Grand Trunk Railway trains each way to stop at the outer or junction station, and certain other trains to stop at the new down-town platform. Service to commence September 15, 1908. Platform ordered on Sturgeon street.

964. Application of the Canadian Pacific Railway Company for authority to construct branch line to premises of Shearer, Brown and Wills and the Sherwin-Williams Paint Company, Montreal. (Application 5508. Case 2154.)

Application granted. Order issued.

965. Application of the Grand Trunk Railway Company for authority to construct a branch line to the premises of the George Matthews Company, Limited. Peterborough, Ontario. (Application 5653. Case 3022.)

Application granted. Order issued.

966. Application of the Ontario Power Company re crossing with transmission wires over the Grand Trunk Railway between concessions 6 and 7, lots 23 and 24, township of Crowland. (Application 7587. Case 330.)

Application granted. Order issued.

967. Application of the town of Montreal west and others, for an order directing the Canadian Pacific Railway to continue to maintain a public highway crossing between Crescent and Fenwick avenues, Montreal west, Quebec. (Application 7455. Case 3257.)

Application granted. Order made continuing the injunction. Compelling rail-

way company to maintain public highway crossing.

968. Application of the Canadian Pacific Railway Company for authority to construct tracks across and along St. Patrick street and Atwater avenue, Centre street and River St. Pierre, Montreal, Quebec. (Application 6550. Case 2777.)

Application granted. Order issued.

969. Application of the Canadian Pacific Railway Company for authority to construct a spur to the premises of the Canada Sugar Refining Company, Montreal, Quebec. (Application 6352. Case 2685.)

Application granted. Order issued.

970. Application of the Canadian Pacific Railway Company for authority to construct its tracks across and along St. Patrick, Richmond and Richardson streets, Montreal, Quebec, in connection with Canada Sugar Refining Company spur. (Application 6352. Case 2776.)

Application granted. Order issued.

971. Application of the Canadian Pacific Railway Company for authority to construct a branch line to premises of Sherwin-Williams Paint Company, Montreal, Quebec. (Application 6350. Case 2683.)

Application granted. Order issued, subject to conditions set forth in order.

972. Application of the Canadian Pacific Railway Company for an order rescinding or varying order of the Railway Committee, dated May 18, 1898, re trestle bridge carrying branch line to Dickson's Mills, Peterborough, Ontario. (Application 3784. Case 500.)

Stands. Subsequently an order was issued dismissing the application.

973. Application of the Peterborough Radial Railway for an order amending order dated June 16, 1904, re Lock street, Peterborough, Ontario. (Application 650. Case 2996.)

Application granted. Amending order issued.

974. Application of the Canadian Pacific Railway Company for leave to construct branch lines in the town of Parry Sound, Ontario. (Application 3098.)

Order issued, granting application in terms of consent.

975. Application of the Canadian Northern Ontario Railway for authority to construct a branch line in the town of Parry Sound, Ontario. (Application 3939. Case 625.)

Order issued, granting application in terms of consent.

976. Application of the Canadian Northern Ontario Railway for authority to construct and maintain a deviation of the Great North Road, Parry Sound, Ontario.

Application granted.—Order. issued.

977. Application of the Grand Trunk Pacific Railway for authority to cross the tracks of the Winnipeg Electric Street Railway at Pembina highway, Winnipeg, Manitoba. (Application 6991. Case 3025.)

Application granted. Order issued. The protection to be agreed upon between

parties.

978. Application of the Winnipeg Electric Railway for authority to cross with transmission wires the Canadian Pacific Railway tracks in St. Boniface, Manitoba. (Application 2290. Case 3077.)

Application granted. Order issued.

979. Application of the Winnipeg Electric Railway for authority to carry transmission wires across Canadian Pacific Railway tracks at Canadan Pacific Railway Lac du Bonnet branch, section 35, township 13, range 9, west of 1st meridian, Manitoba. (Application 2293, Case 3075.)

Application granted. Order issued.

980. Application of the Winnipeg Electric Railway for leave to carry transmission wires across Canadian Pacific Railway tracks in section 25, township 12, Manitoba. (Application 2291. Case 3075.)

Application granted. Order issued.

981. Application of the Winnipeg Electric Railway for authority to carry transmission wires across the Canadian Pacific Railway tracks in section 17, township 12, Manitoba. (Application 2292. Case 3074.)

Application granted. Order issued.

982. Application of the Canadian Northern Ontario Railway for authority to carry telegraph wires across Grand Trunk Railway tracks near Gamebridge, Ontario. (Application 3937. Case 623.)

Application granted. Order issued.

983. Application of the Canadian Northern Quebec Railway for authority to cross the tracks of the Canadian Pacific Railway east of Lorette, Quebec. (Application 5337. Case 1944.)

Application granted. Order issued.

984. Application of the Canadian Pacific Railway for an order fixing compensation to be paid by the Grand Trunk Railway for use and enjoyment of the right of way between Nipissing Junction and North Bay, including service and accommodation provided at present and since July 2, 1907. (Application 7439. Case 3243.)

Application dismissed. Leave granted to appeal to Supreme Court.

985. Complaint of J. R. Sonley, Blackwater, Ontario, re damage to his farm property by the Grand Trunk Railway. (Application 4539. Case 1209.)

Application dismissed.

986. Application of the town of Steelton, Ontario, for an order directing the Canadian Pacific Railway to operate a station with proper accommodation and facilities at Steelton, Ontario. (Application 1525. Case 3113.)

Application withdrawn.

987. Application of the Ottawa Electric Railway for authority to cross Chaudiere branch of the Grand Trunk Railway into the Export Lumber Company's yards, Ottawa. (Application 7263. Case 3134.)

Application dismissed.

988. Application of the city of Ottawa, Ontario, for an order amending order No. 3684, dated March 13, 1907, in re widening of Somerset street bridge, Ottawa, Ontario. (Application 326. Case 396.)

Application granted. Order issued directing bridge to be built within 6 months

from date.

989. Application of the Georgian Bay and Seaboard Railway for authority to cross the tracks of the Lindsay, Bobcaygeon and Pontypool Railway in the town of Lindsay, Ontario. (Application 3187.)

Application granted. Order issued.

990. Complaint of Dr. Charette, Notre Dame des Neiges, re Montreal Park and Island Railway. (Application 6320. Case 2864.)

Complaint dismissed.

991. Application of the Windsor, Essex and Lake Shore Rapid Railway for an order directing the Pere Marquette Railway to interchange traffic at Kingsville. Ontario. (Application 6817.)

Application struck off list. To be reinstated at request of applicant.

992. Application of the Quinze and Blanche River Railway for approval of location through part of the township of Guigues, Quebec, across Quinze river, through adjoining Indian reserve and township of Nedeles and through township of Casey, Harley and Dyment to New Liskeard, Ontario. (Application 7452. Case 3253.)

Application granted. Order issued.

998. Application of E. D. Smith, of Winona, Ontario, for joint freight tariffs between the railway companies at Hamilton and the Hamilton, Grimsby and Beamsville Electric Railway. (Application 6789.)

Application withdrawn.

994. Application of the Canadian Northern Ontario Railway, under section 194 of the Railway Act, for leave to erect, place and maintain its wires across the tracks of the Grand Trunk Railway north of Mount Albert, Ontario. (Application 3935 Case 621.)

Application granted. Order issued.

995. Application of the Grand Valley Railway, under section 59 of the Railway Act, for approval of its location between the city of Brantford and the city of Woodstock, Ontario. (Application 737. Case 3116.)

Application granted. Order issued.

996. Application of the Sarnia Street Railway, under section 235 of the Railway Act, for authority to cross the tracks of the Grand Trunk Railway at Sarnia, Ontario. (Application 7347. Case 3211.)

Application granted. Order issued on consent of all parties.

997. Application of the Guelph and Goderich Railway, under section 227 of the Railway Act, for authority to cross the tracks of a spur of the Grand Trunk Railway in the town of Listowel, Ontario. (Application 7540. Case 3286.)

Application granted. Order issued.

998. Application of the Canadian Northern Ontario Railway, for an order, under section 227 of the Railway Act, granting authority to place its lines or tracks across the lines or tracks of the Canadian Pacific Railway at a point on lot 11, concession 2, township of Nepean, county of Carleton, near Bell's Corners, Ontario. (Application 6254. Case 2647.)

Order made for overhead crossing, provision made for double tracking. If grade changed; extra expense caused to be borne by Applicant; or if disputed to be fixed by Board.

999. Application of the Canadian Northern Ontario Railway, under section 237 of the Railway Act, for authority to construct its railway across certain highways in the township of Clarence at mileages 29, 30, 31, 32 and 33 and across Mill street in the village of Rockland, Ontario. (Application 4843. Case 1526.)

Application granted. Leave reserved to corporation to apply for protection if

works prove dangerous.

1000. Application of the Grand Trunk Railway, under sections 256 and 257 of the Railway Act, for an order directing the Canadian Pacific Railway to reconstruct and maintain in a good condition of repair the subway carrying the line of the Brockville and Ottawa Railway under the main line of the Grand Trunk Railway at mile

post 124.96, a short distance east of the Grand Trunk Railway station in the city of Brockville, Ontario. (Application 6972. Case 3015.)

Order made for payment of amount to be expended by Grand Trunk Railway in repair of subway.

1001. Application of the Canadian Pacific Railway, under section 167 of the Railway Act, for an order to construct a new road from the proposed station location at mile post 22 on plan and profile filed with the Board, to the road that runs to the village of Bolton, Ontario. (Application 2023. Case 3235.)

Order made approving of location. Concrete culvert at forced road 5 x 6, gravel

to be 10 inches thick, and equal to top dressing of Toronto and Sudbury line.

1002. Application of the Toronto and York Radial Railway, under section 227 of the Railway Act, for authority to cross the tracks of the Grand Trunk Railway at the village of Sutton, Ontario. (Application 7460. Case 3333.)

Application granted. Order issued.

1003. Application of the city of Toronto, under sections 237 and 238 of the Railway Act, and in accordance with the provisions of an agreement made between the applicants and the Grand Trunk Railway dated October 12, 1903, for an order requiring the Grand Trunk Railway to protect by means of gates, semaphores, and derails the tracks of the Toronto Railway Company at the crossing of Front street, Toronto, Ontario. (Application 231. Case 3254.)

Application granted. Order issued, derails to be placed 100 feet from crossing. 1004. Application of the Grand Trunk Railway for authority to cross with two tracks the tracks of the Montreal, Park and Island Railway at two different points near the eastern and western extremities of the new freight yards at Turcot, province of Quebec. (Application 6023. Case 2564.)

Application removed from list. Leave given to either party to reinstate on ten days' notice.

1005. Application of the Canadian Pacific Railway Company, under section 257 of the Railway Act, for leave to construct new bridge at mile 19.86, Farnham section crossing Richelieu street, St. Johns, province of Quebec. (Application 5133. Case 2893.)

Application withdrawn.

1006. Application of the Canadian Pacific Railway, under the Railway Act, directing that a case be stated for the opinion of the Supreme Court of Canada as to the legal effect of the covenant contained in deed from David S. Leach and Dame Jessie R. Leach to the Atlantic and Northwest Railway Company, dated 28th of June, 1888, in connection with the application of the town of Montreal West and others for an order directing the Canadian Pacific Railway to continue to maintain and operate a public highway crossing at lot official No. 138, parish of Montreal, province of Quebec, at a point where it has heretofore maintained the said railway crossing between Fenwick avenue on the one side and Crescent avenue on the other. (Application 7455. Case 3257.)

Application dismissed.

1007. Application of the town of Ingersoll, under section 227 of the Railway Act, for an order directing the Grand Trunk Railway to provide gates and day and night watchman at Thames street where the Grand Trunk Railway crosses same in the town of Ingersoll, Ontario. (Application 5087.)

Note.—The question to be considered is the apportionment of the cost reserved as to whether or not gates should be installed as well as watchman.

Application granted. Order made directing Grand Trunk Railway to erect gates to be operated from 6 a.m. to 11 p.m. daily. Cost of erecting, maintaining and operating to be borne by Grand Trunk Railway. Work to be completed within 45 days from November 10, 1908.

1008. Application of A. Pilon, Casselman, Ontario, for an order fixing the additional sum to be charged by the Canada Atlantic Railway (Grand Trunk Railway) for switching and handling of traffic at his siding. (Application 5754. Case 2358.)

Application dismissed.

1009. Application of the Sydenham Glass Company for the extension of the commodity rates on glass bottles prescribed in the judgment of the Board, dated July 30, 1904, so as to include glass jars. (Application 1827. Case 1109.)

Settled by Père Marquette Railroad filing supplement to joint tariff, providing for rate of 13 cents per 100 pounds on glass fruit jars from Wallaceburg to Hamilton,

Ontario.

1010. Complaint of the British American Oil Company re refusal of the Grand Trunk Railway to carry crude oil originating at Stoy, Illinois, and destined to Toronto, Ontario, at fifth-class rate with official classification. (Application 7529. Case 3269.)

Judgment reserved. Delivered subsequent to March 31, after a re-hearing, and

will appear in next annual report.

1011. Application of the Canadian Pacific Railway under sections 284 and 317 of the Railway Act, for an order directing the Grand Trunk Railway to receive passenger and baggage cars, and also deliver same at the junction of the tracks of the Ottawa, Northern and Western Railway and the Canada Atlantic Railway, near Sapper's bridge, Ottawa, Ontario. (Application 4887. Case 1541.)

Application stands to be disposed of with Grand Trunk Railway application in re compensation by Canadian Pacific Railway for use of Central station, Ottawa.

Subsequently an order was made dismissing the application.

1012. Application of the Canadian Pacific Railway under provisions of certain cases from the Crown, fixing the terms and conditions under which the Canadian Pacific Railway may use the passenger station and passenger tracks and approaches in connection therewith, situated on ordnance lands of the Crown, that portion of the Rideau Canal reserve extending from Sappers bridge southward to Hurdman's bridge road, Ottawa, Ontario. (Application 3862. Case 415.)

Stands for judgment. Disposed of subsequent to March 31 after a rehearing,

and will appear in next annual report.

1013. Application of the Grand Trunk Railway, under section 178 of the Railway Act, for authority to take for the purposes of its railway part of lots Nos. 73 and 74 on the south side of Chestnut street, in the village of Bridgeport (now known as Jordan), county of Lincoln, Ontario, and immediately opposite the Grand Trunk Railway station at Jordan, Ontario. (Application 7836. Case 3504.)

Application granted. Order issued. Full compensation to be made for the lauds

taken.

1014. In re application of the Windsor and Tecumseh Electric Railway, under section 177 of the Railway Act of 1903, for leave to cross the line or track of the Grand Trunk Railway on Sandwich street, Walkerville, Ontario, and also two spurs or sidings of the Grand Trunk Railway in the township of Sandwich East, county of Essex. (Application 3803. Case 514.)

Application granted. Order issued. Electric cars to slow down to four miles per

hour at crossing and railway company to flag their cars across.

1015. Application of the Grand Valley Railway for authority to cross the tracks of the Grand Trunk Railway in the city of Brantford, Ontario. (Application 7550. Case 3299.)

Application granted. Order issued.

1016. Application of the Grand Valley Railway for authority to cross the tracks of the Toronto, Hamilton and Buffalo Railway near Brantford, Ontario. (Application 7551. Case 3294.)

Application granted. Order issued.

1017. Application of the Grand Valley Railway for authority to cross the tracks of the Brantford and Hamilton Electric Railway in the city of Brantford, Ontario. (Application 7552. Case 3295.)

Application granted. Order issued.

1018. Application of the township of the Front of Escott for an order directing the Grand Trunk Railway to provide and construct immediately to the east of the present crossing a suitable overhead crossing, two and a half miles west of Mallerytown, Ontario. (Application 4452. Case 1118.)

Application dismissed with leave to applicant to revive same.

1019. Application of the Walkerton and Lucknow Railway Company, under section 237 of the Railway Act, for authority to carry its line of railway across College, Bruce, Countess, Garafraxa, Elgin, Kincardine and Rock streets in the town of Durham, Ontario. (Application 4558. Case 1230.)

Note.—In connection with the above application will be heard the application of the town of Durham for consideration of the protection to be afforded at the said

crossings.

Order issued in terms of an agreement between the parties filed.

1020. Application of the Grand Trunk Railway Company, under section 29 of the Railway Act, for an order amending the order of the Board dated June 18, 1904, by directing the Peterborough Radial Railway to install and maintain derails on each side of the crossing of its railway of the tracks of the Grand Trunk Railway at (1) Charlotte street, (2) Water street, Peterborough, said derails to be placed 100 feet from the nearest Grand Trunk Railway track. (Application 650. Case 3464.)

Order issued, directing interlocker at Charlotte street. Application as to Water

street stands.

1021. Application of the Grand Trunk Railway Company for authority to construct a branch line to the premises of Schultz Brothers, Brantford, Ontario. (Application 7738. Case 3479.)

Application granted. Order issued. Leave reserved to city of Brantford to

renew application for planking between rails if so advised.

1022. Application of the Canadian Pacific Railway Company under section 178 of the Railway Act, for authority to take additional lands adjoining their railway in the township of Albion, county of Peel, being composed of the south half of the west half of lot 10, in the fifth concession of the township of Albion, county of Peel, Ontario. (Application 7654. Case 3342.)

Application granted. Order issued.

1023. Complaint of the town of Napanee re insufficient protection of highway crossing at Centre and Thomas streets by Grand Trunk Railway and Bay of Quinte Railway. (Application 3287.)

Complaint dismissed.

1024. Application of the Canadian Northern Quebec Railway for an order directing the Canadian Pacific Railway to stop its trains carrying passengers and mail at the crossing of the Canadian Northern Quebec Railway at St. Jerome at times convenient to afford reasonable opportunity for transfer of passengers and mail between said railways and to furnish reasonable facilities and accommodation for such purpose. (Application 7902. Case 3541.)

Order made directing Canadian Pacific Railway to stop its passenger trains at St. Jerome diamond. Applicant company to construct platform and supply proper

conveniences for transfer of passengers.

1025. Application of the Canadian Pacific Railway Company for an order approving proposed changes and alterations in its railway from its station at Pembroke, Ontario, to a point about 3,200 feet west of said station. (Application 5051. Case 1670.)

In connection with the above application will be noted that the applicant company have obtained an order in council, dated May 6, 1908, approving of the plans

of the trestle altered in accordance with the plans on file with the Board, and that these altered plans be now submitted to the Board for its approval.

Application granted. Order issued, in terms of consent agreed to by all parties. 1026. Application of the St. Paul Land and Hydraulic Company for an order varying and defining order of the Board dated October 4, 1906, upon the application of the Canadian Pacific Railway Company for a deviation of a portion of a branch line on the south side of the Lachine canal, Quebec. (Application 1088. Case 1537.)

Judgment of the Board vacating order of October 4, 1906. No order to issue for three months, during which time both companies are to consider their respective positions. Subsequently Canadian Pacific Railway made application for deviation, and Board, after hearing application, approved of deviation, subject to certain conditions agreed upon by counsel.

1027. Application of the Board of Trade of Portage la Prairie, Manitoba, under section 323 of the Railway Act, for an order disallowing the special freight tariffs of the Canadian Pacific Railway Company, Nos. W-1000, C.R.C., 644, and W-1006,

C.R.C., 652, as being illegal; and

The complaint of the Winnipeg and other boards of trade, mercantile bodies, and shippers objecting to the new tariffs recently put into force by the Canadian Pacific Railway Company of western Canada in substitution for the 'traders tariffs,' so-called, previously in existence. (Application 5664.)

Application refused.

1029. Application of S. H. Jones, of Sabrevois, Quebec, for an order directing the Dominion Express Company and the American Express Company to provide an efficient service for the carriage of express traffic from Sabrevois, Quebec, on Monday morning as well as on other days of the week. (Application 6815.)

Application dismissed.

1029. Application of the Grand Trunk Railway for a decision on the question of interlocking plants and responsibility of the senior company for accidents arising out of the negligence of the men in charge. (Application 7815.)

Judgment appears in appendix.

1030. Application of the Grand Trunk Railway Company under section of the Railway Act, for an order permitting the applicant company's engines and trains to approach and pass without stopping over the drawbridge carrying its main line of railway between Hamilton and Niagara Falls, Ontario, across the old Welland canal at the west end of the applicant company's yard at Merritton, Ontario. (Appli-

cation 7899. Case 3538.)

Application granted. Order issued. Grand Trunk Railway to keep the bridge

key and to open bridge upon application.

1031. Application of the Canadian Pacific Railway Company, under section 176 of the Railway Act, for an order fixing the compensation to be paid by the Grand Trunk Railway for the use and enjoyment of the right of way and tracks of the Canadian Pacific Railway between Nipissing Junction and North Bay, Ontario, and the terminals, stations and station grounds of the Canadian Pacific Railway at North Bay, including service and accommodation provided, and at present and since July 2, 1907, used and enjoyed by the Grand Trunk Railway without compensation being paid therefor. (Application 7439. Case 3243.) (Argument heard at Ottawa, June 24, 1908.)

Application dismissed. Leave granted to appeal to Supreme Court.

1032. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Pacific Railway at Yonge street, Fort William, Ontario. (Application 5585. Case 2281.)

Application granted.—Order issued.

1033. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Cana-

dian Pacific Railway at Mactavish street, Fort William, Ontario. (Application 5585. Case 2280.)

Stands adjourned at request of parties.

1035. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Northern Railway at Francis street, Fort William, Ontario. (Application 5585. (Application 5585. Case 2276.)

Application granted. Order issued.

1035. Application of the Moun McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Northern Railway at Francis street, Fort William, Ontario. (Application 5585. Case 2277.)

Stands adjourned at request of parties.

1036. Application of the Mount McKay and Kakabeka Falls Railway Company, under section 227 of the Railway Act, for authority to cross the tracks of the Canadian Northern Railway at Yonge street, Fort William, Ontario. (Application 5585. Case 2279.)

Note.—The above applications are set down for the purpose of enabling the parties to give such additional evidence as they may desire.

Application granted. Order issued.

1037. Application of the Grand Trunk Pacific Railway Company, under sections 222 and 235 of the Railway Act, for an Order authorizing it to construct, maintain and operate a branch line or spur along Neebing avenue from Montreal street to Kaministiquia river, Fort William, Ontario. (Application 6822. Case 3106.)

Application refused.

1038. Application of the corporation of the city of Fort William, Ontario, under section 262 of the Railway Act, for an order directing the Canadian Northern Railway Company to abandon using its loop line along Arthur and Vickers streets, in the city of Fort William, and further directing the said railway company to operate all its trains on the original straight line right of way established by the Port Arthur Duluth and Western Railway Company. (Application 5549. Case 2193.)

Application stands sine die at request of counsel for the town.

1039. Application of the Grand Trunk Railway Company, under section 237 of the Railway Act, for leave to cross with its spur the spur track of the Canada Southern Railway in the Grand Trunk Railway Company's south yard at Fort Erie, Ontario. (Application 6833. Case 2913.)

Application granted. Order issued.

1040. Application of the Napierville Junction Railway, under section 237 of the Railway Act, for leave to connect its track with the track of the Grand Trunk Railway near Lacolle, Quebec. (Application 6952. Case 2989.)

Application granted. Order issued.

1041. Application of the Canadian Pacific Railway Company as lessee of the Georgian Bay and Seaboard Railway, under section 177 of the Railway Act, 1903, for an Order authorizing the company to construct, maintain and operate a crossing of the Grand Trunk Railway Company's spur to an ice house for the town of Orillia, on the shore of Lake Couchiching. (Application 3021.)

Struck off list. Not to be placed on again except on notice.

1042. Application of the municipal council of the township of Hagar, under section 237 of the Railway Act, for an Order directing the Canadian Pacific Railway to provide and construct a suitable public crossing between lots 12 and 13, concession 3, in the said township. (Application 5055. Case 1642.)

Application granted. Order to issue in terms of consent minutes filed.

1043. Application of the St. John Railway Company for authority to continue to operate their line across the tracks of the Canadian Pacific Railway in the parish

of Lancaster, in the city and county of St. John, without installing any interlocking or other similar appliances for the space of twelve months from the date of application. (Application 2463.)

Order made amending Order of 14th June, 1906, and providing that municipality and St. John Railway pay applicant company & each of cost of watchman, also that municipality and St. John pay applicant company 3 wages of watchman from 1st July, 1906, to 18th January, 1909.

1044. Application of the Canadian Northern Ontario Railway, under section 159 of the Railway Act, for sanction and approval of the location of railway through townships of Westmeath, Pembroke and Stafford, county of Renfrew, mileage 73:5

to mileage 91.3 north from Ottawa. (Application 3561. Case 2579.)

Application granted. Order issued approving location as to the townships mentioned.

1045. Application of the Bell Telephone Company, under section 246 of the Railway Act, for leave to erect, place and maintain its wires across the tracks of the Schomberg and Aurora Railway Company, at public crossing, Main street, Schomberg, Ontario. (Application 7938. Case 3565.)

Application granted. Order issued.

1046. Application of the city of Ottawa, under sections 237, 238, 240 and 241 of the Railway Act, 1903, for an Order directing the Grand Trunk Railway to reconstruct the bridge by which the railway passes over Preston street, Ottawa, and to maintain the same in such manner as to afford safe and adequate facilities for all traffic passing under such structure. (Application 8120. Case 3690.)

Order made directing Grand Trunk Railway Company to build bridge, detail plans to be submitted by May 11, 1909. Bridge to be completed by October 10, 1909. Cost to be divided equally between applicant and railway company, but city's share

not to exceed the sum of \$3,000.

1047. Application of the Père Marquette Railway Company, under subsection (x) of section 3 of the Lord's Day Act, 6 Edward VII., chapter 27, permitting the said company, its servants, workmen and agents to do on Sunday any work incidental to the operation of their international car ferry, the Canadian port of which is Port Stanley, in Lake Erie, and which work is incidental to the continuance to its destination of freight in transit or in cars forming part of a train in transit at the beginning of such Sunday, notwithstanding that the cars containing such freight and forming part of any train so in transit have to be separated from the train for the purpose of loading the same or unloading the same from such car ferries, and awaiting the return of the car ferry with the remainder of the said train, and may require to be switched, shunted or otherwise dealt with, to enable such train to proceed to its destination. (Application 7588. Case 3301.)

Order made granting application.

1048. Application of James Greer, of Toronto, Ontario, under section 355 of the Railway Act, 1903, for an Order directing the Bell Telephone Company to provide him with a telephone at his residence, 230 Bleecker street, at the telephone rate of \$30 per annum, instead of as a business telephone at \$50 per annum. (Application 7746.)

Application dismissed.

1049. Application of the Canadian Association of Amateur Oarsmen, under subsection 3 of section 321 of the Railway Act, for an Order directing the railway comanies comprising the Canadian Freight Association, to give racing shells a rating under the Canadian classificaton No. 13, on the ground that the rates quoted by the railway companies for the transportation of racing shells are excessive, and in many instances prohibitive. (Application 7535.)

Stands sine die; to be brought up on notice.

1050. Complaint Canadian Canners, Limited, respecting freight charges on a carload of canned vegetables from Trenton, Ontario, to Englehart, Ontario, on the

Temiskaming and Northern Ontario Railway, via Central Ontario Railway to Central Ontario Junction, thence via Canadian Pacific Railway to North Bay. (Application 7922.)

Complaint dismissed.

1051. Complaint of H. S. Conn, merchant, Ottawa, Ontario, respecting intersection freight rates on hay from points on the Montreal and Ottawa section of the Canadian Pacific Railway. (Application 7019.)

Complaint withdrawn.

1052. Consideration and formulation of rules and regulations for the safe transportation of explosives and other dangerous articles. (Application 1717.)

Standing for judgment.

1053. Application of George Lawrence, M.P.P., on behalf of the residents of the vicinity of Killarney, Manitoba, for an Order requiring the Canadian Pacific Railway Company and the Canadian Northern Railway Company to provide a transfer track at Holmfield and Boissevain, Manitoba, for interchange of traffic. (Application 4929.)

Application granted. Order issued for transfer tracks to be constructed by company in three months. Half cost to be paid by Canadian Northern Railway upon

completion.

1054. Application of the Canadian Pacific Railway, under section 222 of the Railway Act, for authority to construct, maintain and operate a branch line or spur in township 11, range 4, east of the 1st meridian, commencing from a point on centre line of the Molson cut-off of the said railway, distant about 165 feet easterly, measured along the said centre line from the southerly boundary of the southeast quarter of section 23, in the said township, thence in a northerly direction along the road allowance between sections 23 and 24 and 25 and 26, to and into the premises of the Bird's Hill Sand Company, situate on the southeast quarter of section 35 in the said township, a distance of about 15,200 feet. (Application 5680. Case 2308.)

Application granted. Order issued.

1055. Application of the Canadian Pacific Railway Company for authority to expropriate certain additional lands, belonging to Samuel Buchanan, adjoining the station for the purpose of making a Y in the town of Neepawa, Manitoba. (Application 8217. Case 3764.)

Application granted. Order issued.

1056. Application of the city of Winnipeg, Manitoba, for Order directing the Canadian Pacific Railway Company to provide and construct a suitable highway crossing over its line of railway between Talbot avenue and Carter avenue, or in the alternative to allow the city to construct such crossing, or for such Order as the Board may deem meet. (Application 8223. Case 3769.)

Application granted. Expense of grading, planking, &c., required at crossings

to be borne by the city of Winnipeg.

1057. Application of the city of Winnipeg, Manitoba, under section 277 of the Railway Act, for an Order directing the Canadian Pacific Railway to provide and construct a suitable highway crossing, or in the alternative to allow the said city to construct such highway crossing over the spur track known as the Brown and Rutherford spur, where the extension of Sutherland avenue, in the city of Winnipeg, extending in right lines, intersects said spur under the right of way therefor. (Application 8224. Case 3770.)

Application granted. Order by consent for crossing at expense of applicants.

City to maintain and protect, if necessary.

1058. Application of the Canadian Pacific Railway Company, under section 258 of the Railway Act, for approval of its proposed new station and re-arrangement of its yards at St. Boniface, in the province of Manitoba. (Application 5472. Case 2096.)

Application granted. Order issued approving plan as amended.

1059. Complaint of the Winnipeg Jobbers' and Shippers' Association, respecting the form of siding agreement used for new sidings by the Canadian Pacific Railway Company. (Application 6770. Case 2877.)

Forms of agreement settled between the parties.

1060. Complaint of the rural municipality of Miniota that the Grand Trunk Pacific Railway Company is proposing to construct level crossings over certain highways in the said municipality of Miniota and application of the municipality for an order directing the railway company to cross the highways by means of overhead crossings. (Application 3680. Case 2883.)

Order made for overhead bridge at the crossing.

1061. Complaint of the municipality of Miniota respecting highway crossings of the Grand Trunk Pacific Railway Company north of the town of Arrow River.

1. Crossing at mileage 31.32 between ranges 25 and 26, W.P.M.

2. Crossing at mileage 31.52.

3. Crossing situated between sections 29 and 30, and 31 and 32, township 13, range 25, W.P.M.

(Application 2633.)

Order made providing for highway crossing to be protected by automatic bell at mileage 31·32. Crossing at mileage 31·52 to be done away with. Crossings between sections 29 and 30 and 31 and 32 granted; to be protected by automatic bell.

1062. Application of the Grand Trunk Pacific Railway Company, under section 237 of the Railway Act, for an Order granting to the company authority to lay its line of tracks across the line or tracks of the Winnipeg Electric Street Railway Company on Pembina highway, Winnipeg, Manitoba. (Application 6991. Case 3025.)

Application granted. Order issued.

1063. Application of the Grand Trunk Pacific Railway, under section 237 of the Railway Act, for an Order approving of its highway crossings from mile 124.00 to mile 141.39 in the province of Manitoba. (Application 6747. Case 2862.)

Application granted. Order issued; company undertaking to have all scrub re-

moved so that clear view of track may be had.

1064. Application of F. F. Brock and R. Muttleberry, of Winnipeg, under the Railway Act, for an Order directing the Grand Trunk Pacific Railway Company to treat with them as owners of certain property in the city of Winnipeg, through which the railway of the Grand Trunk Pacific Railway Company is intended to pass, as to the purchase of the said property. (Application 3272. Case 3798.)

Order issued cancelling order approving location, in so far as it affects the

applicants' lands.

1065. Application of Messrs. Short, Cross and Biggar, Edmonton, Alberta, under the Railway Act, for an order directing the Grand Trunk Pacific Railway Company to treat with Messrs. Graves and Ferris as owners of certain property, being on the northeast quarter of section 16-52-21, through which the railway of the Grand Trunk Pacific Railway Company is intended to pass, respecting the purchase of said property. (Application 5401. Case 3796.)

Order made that unless railway company proceed to arbitrate within thirty days from date of location of line, through lands of applicants disallowed, and order

allowing location rescinded in part.

1066. Application of the John Arbuthnot Company, Limited, Winnipeg, Manitoba, under the Railway Act, for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicants as owners of certain property in the city of Winnipeg, through which the railway of the Grand Trunk Pacific Railway Company is intended to pass as to the purchase of the said property. (Application 8271. Case 3797.)

Order made cancelling order approving location in so far as affects applicants' lands.

1067. Complaint of the Northern Elevator Company of Winnipeg against the rates charged by the Canadian Pacific Railway for hauling feed cars from the Northern Elevator Company, Winnipeg, to the Canadian Pacific Railway team tracks. (Application 6806.)

Complaint dismissed.

1068. Application of the Western Live Stock Shippers' Association under sections 284 and 317 of the Railway Act, for an Order directing the Canadian Pacific. Railway Company and the Canadian Northern Railway Company to furnish certain facilities for the receiving, unloading, accommodation and transportation of live stock traffic. (Application 8234. Case 3774.)

Referred to operating assistant to traffic officers to inspect live stock shipping facilities in western provinces and report to the Board. In meantime matter stands.

1069. Complaint of the Independent Coal Company of Regina, Saskatchewan, re excessive demurrage charges by the Canadian Pacific Railway on shipments to the complainants at various points. (Application 5903.)

Order made directing refund to be made by Canadian Pacific Railway of demurrage charged to complainant company.

1070. Complaint of Stockton and Mallinson, Limited, of Regina, Saskatchewan, respecting freight on oranges from California points to Regina. (Application 6622.) Complaint dismissed.

1071. Application of the Board of Trade of Portage la Prairie, Manitoba, under section 323 of the Railway Act, for an Order disallowing the special freight tariffs of the Canadian Pacific Railway, Nos. W-1000, C.R.C. 644, and W-1006, C.R.C. 652, as being illegal; and

The complaint of the Winnipeg and other boards of trade, mercantile bodies and shippers objecting to the new tariffs recently put in force by the Canadian Pacific Railway in western Canada in substitution for the 'traders' tariffs,' so-called, previously in existence. (Application 6664.)

Application re Kootenay rates dismissed. Application re Manitoba rates dismissed, but reserved as to application of Ontario town tariffs to western provinces, and as to power of Board to order commodity rates.

1072. Application of the Canadian Northern Railway Company, under section 159 of the Railway Act, for an Order sanctioning and approving of location of its Goose lake branch through the town of Saskatoon, Saskatchewan, and through townships 36, 31, range 5-12, west of the 3rd meridian, mile 0 to 57.96, Saskatchewan. (Application 5891. Case 2469.)

Application granted.—Order issued.

1073. Application of the Canadian Northern Railway Company for an Order under section 237 of the Railway Act, authorizing the company to construct its line of railway across avenues A to P in Spadina Crescent, in the city of Saskatoon, Saskatchewan. (Application 6256. Case 2650.)

Application granted. Order issued.

1074. Application of the Brantford and Hamilton Electric Railway Company, under section 235 of the Railway Act, for authority to carry its railway across Alfred and Murray streets, Brantford, Ontario. (Application 8298. Case 3810.)

Application granted. Order issued.

1075. Application of the township of Cornwall to review, vary or reseind the order of the Board dated the 28th of July, 1908, directing the Grand Trunk Railway Company to install an electric bell at the crossing where the company's railway intersects the public highway in the township of Cornwall. (Application 7285. Case 3152.)

Order made rescinding order No. 5107.

1076. Petition of the residents of Barrington, province of Quebec, on the line of the Grand Trunk Railway Company, county of Huntingdon, regarding proposed change of location of the railway station at that point. (Application 7901.)

Petition dismissed.

1077. Application of the Canadian Pacific Railway Company, under section 178 of the Railway Act, for authority to take additional lands adjoining its railway in the town of St. Paul, province of Quebec. (Application 8388. Case 3875.)

Application granted. Order issued.

1078. Application of the Grand Trunk Railway Company, under sections 222, 235 and 237 of the Railway Act, for leave to construct, maintain and operate a branch line or siding and spurs therefrom, extending from a point in the applicant's railway east of St. Elizabeth avenue, in St. Henri ward, Montreal, thence westerly across St. Elizabeth avenue and upon and along and across Acorn street to the premises of the Simonds Canada Saw Company, Jenkins Brothers, Lang Manufacturing Company and other industries. (Application 3048. Case 3552.)

Application granted. Order issued. Adjacent landowners to be compensated for lands injuriously affected by spur crossing St. Elizabeth avenue, if there be any

injury.

1079. Application of the Canadian Northern Ontario Railway Company, under sections 158 and 237 of the Railway Act, for approval of the location of its Udney-Orillia branch line from mileage 0.0 in the township of Mara, in the county of Ontario, to mileage 5.25 in the same township, and for authority to cross the several existing highways. (Application 8437. Case 3913.)

Application withdrawn.

1080. Application of the Brantford and Hamilton Electric Railway Company for an order granting leave to the applicant to operate its cars over the crossing of the tracks of the Tilsonburg branch of the Grand Trunk Railway, Brantford, Ontario, under order of the Board dated March 12, 1908, pending the installation of the interlocking and derailing plant directed to be installed at said crossing. (Application 5847. Case 2443.)

Application granted. Order issued in terms of consent filed by parties.

1081. Complaint of Olive Pringle, barrister, Ottawa, and others, of failure on the part of the Canadian Pacific Railway and Grand Trunk Railway to make connections at Brockville, Ontario, as required by order of the Board dated January 30, 1908. (Application 5320, Case 2863.)

Stands for settlement of terms of Order submitted by Board.

1082. Discussion of regulations proposed by the Board and forwarded to all rail-way companies subject to the jurisdiction of the Board, under cover of circular No. 23, dated September 16, 1908, relative to equipment and loading of cars, operation of trains, requirements as to train employees and telegraph operators, covering of open drains and handling of crippled cars. (Application 4135 and 1750.)

Dealt with under order No. 5888.

1083. Complaints of H. S. Conn, merchant, Ottawa, re rates on hay from West Moncton, Ontario, on the line of the Canadian Pacific Railway Company, from Mitchell and Harley, Ontario, on the line of the Grand Trunk Railway Company to Temagami, Ontario, on the line of the Temiskaming and Northern Ontario Railway, via North Bay, Ontario. (Applications 7920 and 7932.)

Complaints dismissed.

1084. Application of the Toronto, Hamilton and Buffalo Railway, under sections 237, 238, 256 and 257 of the Railway Act, for an Order authorizing the company to renew, reconstruct or alter the highway bridge under which its railway crosses the public highway in the township of Brantford, in the county of Brant, at a point about three miles east of the city of Brantford, and to divert the said highway and

bridge, and authorizing the acquiring of additional land for the company for such purpose. (Application S017. Case 3626.)

Application refused.

1085. Application of Henry New, Hamilton, Ontario, for an Order, under sections 252 and 253 of the Railway Act, directing the Toronto, Hamilton and Buffalo Railway to provide and construct a suitable crossing where its railway abuts the lands of the applicant, being parts of lots 5 and 6, in the 3rd concession, township of Barton, county of Wentworth, Ontario. (Application 7811. Case 3493.)

Order made directing Toronto, Hamilton and Buffalo Railway to provide cross-

ing at expense of applicant. Crossing to be constructed at once.

1086. Complaint of the town of Welland, Ontario, in regard to dangerous condition of crossing of Grand Trunk Railway and Michigan Central Railroad tracks at Main street, Welland, and applies for protection of said crossing. (Application 8154.)

Order made directing Grand Trunk Railway Company to protect Main street crossing by gates and watchmen. Michigan Central Railroad crossing on South Main

street to be protected by flagmen.

1087. Application of the Simpson Brick Company, under the Railway Act, for an order directing the Toronto, Hamilton and Buffalo Railway to supply adequate and suitable accommodation for the receiving and loading of brick and other material on the premises of the Simpson Brick Company, Hamilton, Ontario. (Application 7655. Case 3343.)

Application granted. Order issued.

1088. Application of the Grand Trunk Railway Company, under sections 222 and 237 of the Railway Act, for authority to construct, maintain and operate certain branch lines of railway or sidings in the city of Hamilton, Ontario, and crossing certain roadways to the premises of the Hamilton and Toronto Sewer Pipe Company and the Fowlers Canadian Company. (Application 7035. Case 3051.)

Application granted. Order issued.

1089. Complaint of the citizens of Fort Erie, Ontario, that the freight rates of the Michigan Central Railroad Company from Black Rock, New York, to Fort Erie, Ontario, are discriminatory with respect to the company's rates to Bridgeburg, Ontario, the latter place having been given a preference. (Application 7009.)

Application dismissed.

1090. Application of Charles Slade, under the Railway Act, for an Order directing the Michigan Central Railroad to provide a farm crossing where the tracks of the railway affect his property at lot 12, concession 8, township of Raleigh, Ontario. (Application 914. Case 3238.)

Application granted. Order issued directing crossing to be on the lot line.

1091. Application of Robert MacVicar, of the township of Brooke, county of Lambton, Ontario, for Order, under the Railway Act, directing the Michigan Central Railroad Company to provide and construct two suitable farm crossings where the company's railway intersects his farm on the east half of lot No. 13, and in the west half of lot No. 14, each containing 100 acres, and both in the 5th concession of the township of Brooke, County of Lambton, Ontario. (Application 5023. Case 1641.)

Order for one crossing on the dividing line between the two lots, the railway

company to furnish the material, the applicant to do the grading.

1092. Application of the Bell Telephone Company, under the Railway Act, for an order directing the Windsor, Essex and Lake Shore Rapid Railway Company to bear the cost of certain changes in construction of the lines of the applicant, and of certain protection devices rendered necessary by reason of the construction and operation of the railway. (Application 8248. Case 3784.)

Application dismissed without costs.

1093. Application of the corporation of the city of Chatham, under the Railway Act, for an Order directing the Canadian Pacific Railway to provide, construct and

maintain suitable gate or gates at the crossings of the said railway on Wellington and Centre streets, in the said city of Chatham, and electric bells or other automatic system of warning at the crossings of the said railway on Princess, Colborne, Jeffrey, Raleigh, West and Lacroix streets, and further directing that a watchman be kept at each street crossing of the said railway where gates are now provided and maintained, namely, the crossings of King, Adelaide, William and Queen streets, and also at the crossings on Wellington and Centre streets. (Application 3799. Case 2398.)

Order made dismissing the application.

1094. Application of the Windsor, Essex and Lake Shore Railway Company, under the Railway Act, for leave to carry its railway across the highways in the township of Gosfield south and the township of Mersea, and the town of Leamington, county of Essex, Ontario. (Application 6692. Case 2831.)

Application granted. Order issued. Notice of motion to be amended by adding the words 'along and across the highways in' after the word 'and' in the 6th line of

the application.

1095. Application of Père Marquette Railway Company, under the Railway Act, for approval of the character of the work in construction of a bridge fifty-two feet in length over the drain known as the Whitebread Tap Drain, where the said drain crosses the lands of the Père Marquette Railway, such drainage work being constructed under and pursuant to the report of F. W. Flater, C.E., under by-laws of the municipal council of the township of Sombra, in the county of Lambton, Ontario, and of the township of Chatham, county Kent, Ontario. (Application 6920. Case 3930.)

Application refused.

1096. Application of the Chatham, Wallaceburg and Lake Erie Railway Company, under the Railway Act, for an order providing for the interchange of freight traffic between Chatham, Wallaceburg and Lake Erie Railway Company, county Kent, Ontario, and at the town of Wallaceburg, county Kent, Ontario, and regulating the rates to be charged therefor by the respective roads interested. (Application 1821. Case 1665.)

Application withdrawn.

1097. Application of the Windsor, Essex and Lake Shore Rapid Railway Company, under the Railway Act, for an order directing the Père Marquette Railway Company to interchange traffic with the Windsor, Essex and Lake Shore Rapid Railway Company at Kingsville, Ontario. (Application 6817.)

Application granted. Order issued in terms of letter dated October 17, 1908, from

A. Patriarche to F. E. Low.

1098. Application of the Canadian Pacific Railway for Order, under the Railway Act, directing the Père Marquette Railway Company to afford suitable and sufficient accommodation for the proper interchange and interswitching of traffic between the railway of the Père Marquette Railroad Company and the railway of the applicant in the city of Chatham, Ontario. (Application 7990. Case 3598.)

Stands pending settlement of formal Order by railway companies interested.

1099. Complaint of Wellington Wigle, under the Railway Act, of refusal on the part of the Père Marquete Railway Company to carry passengers on its local freight trains. (Application 8348. Case .)

Application dismissed. If applicant desires to continue application he will only

be allowed to do so upon payment of costs.

1100. Complaint of Wellington Wigle, of Kingsville, Ontario, alleging excessive passenger rates charged by the Windsor, Essex and Lake Shore Rapid Railway Company on passenger traffic. (Application 8347. Case .)

Application dismissed. If applicant desires to continue application he will only

be allowed to do so upon payment of costs.

1101. Application of the Montreal and Southern Counties Railway Company, under section 157 of the Railway Act, for approval and sanction of its line of railway

between Montreal and St. Lambert, province of Quebec. (Application 6731. Case 2692.)

Application granted. Order issued.

1102. Application of the Canadian Pacific Railway, under the Railway Act, for an order to compel the People's Telephone Company, of Sherbrooke, province of Quebec, and E. P. Smith, of Johnville, province of Quebec, to remove their telephone wires where they cross the tracks of the applicant company, near Johnville station, province of Quebec. (Application 6827. Case 3574.)

Order issued authorizing crossing, subject to usual conditions.

1103. Application of Calixte Franche, of Wendover, Ontario, under sections 252 and 253 of the Railway Act, for an Order directing the Canadian Northern Railway to provide a suitable farm crossing where his property is affected by the railway. (Application 7858. Case 3512.)

Application dismissed.

1104. Complaint of the municipal council of the township of Somerville of failure on the part of the Grand Trunk Railway to provide and maintain a proper station at the centre line in the township of Somerville, for the loading and unloading of traffic. (Application 7991).

Complaint withdrawn pending negotiations for a settlement. Leave to reinstate

on ten days notice without application.

1105. Petition of the residents of Fern Glen or Wells Crossing (a flag station on the Canada Atlantic division of the Grand Trunk Railway) that the Grand Trunk Railway Company be required to stop its passenger trains, so as to afford accommodation to the travelling public at that point. (Application 7249.)

Order made to stop mixed trains on flag. Railway company may at any time

move to rescind Order.

1106. Application of the Canadian Northern Ontario Railway, under Section 227 of the Railway Act, for leave to operate its trains under the tracks of the Canadian Pacific Railway where it crosses under same at Little Key river, township of Mowat, District of Parry Sound, Ontario. (Application 1863. Case 3588.)

Application granted. Slow Order removed upon Canadian Pacific Railway submitting plans providing for 16 foot clearance and remodelling to provide for same.

Applicant company to pay half the cost. Work to be done in fifty days.

1107. Application of the Canadian Northern Ontario Railway, under section 177, for approval of the location of interlocking plant and equipment at the Canadian Northern Ontario Railway crossing of the Grand Trunk Railway at Hawkesbury, Ontario, (Crossing Order No. 2030, dated November 12, 1906.) Application 2527. Case 2123.)

Order made directing telephone connection to be installed by Canadian Northern

Ontario Railway within ten days.

1108. Application of the Canadian Northern Quebec Railway to take part of lot 8, parish of Longue Pointe, belonging to Montreal Protestant House of Refuge and Industry, county of Hochelaga, said land being necessary for the construction of a 'Y.' (Application 8651.)

Application granted. Order for expropriation of the triangle marked 4 on plan

and for 50 feet on south side of track running through the lands in question.

1109. Complaint of Hon. Senator Tessier, of refusal by the Ottawa Electric Railway Company, to furnish free transportation to him as a member of the Senate of Canada over its lines of railway. (Application 8049.)

Complaint withdrawn.

1110. Application of the St. Maurice and Champlain Telephone Company, under section 245 of the Railway Act, for an Order directing the Canadian Pacific Railway to permit the applicants to make telephonic connection and communication with the ticket office and freight office of the company at Louiseville, Maskinonge county,

Yamachichi, St. Maurice county; Batiscan, Ste. Anne de la Perade and Lac a la Tortue, Champlain county. (Application 8581. Case 4021.)
Application granted. Order issued in usual terms.

1111. Application of the Canadian Pacific Railway under section 176 of the Railway Act, for authority to take possession of parts of the south halves of lots 34 and 35, 3rd concession, township of Humphrey, district of Parry Sound, Ontario, belonging to the Canadian Northern Ontario Railway. (Application 7522. Case 3271.)

Order granted for taking of lands as shown on plan and in the application.

1112. Application of the Grand Trunk Railway, under sections 222 and 237 of the Railway Act, for authority to construct, maintain and operate certain branch lines of railway, on lot No. 5 in the 12th concession of the township of Tay, county of Simcoe, Ontario, thence northerly crossing part of said lot 5, the side road between lots 5 and 6 in said concession, part of lot 6 in said concession, the concession road between the 11th and 12th concessions of said township, part of lot No. 7 in said 11th concession to a point on the Grand Trunk Railway on said lot No. 7. (Application 7924. Case 3554.)

Application granted. Order issued.

1113. Application of H. Bingham and Joseph Quenneville, of the unincorporated village of Crysler, in the township of Finch, in the county of Stormont, Robert Stevens and Thomas Fleming, of the said township of Finch, and Louis A. Landry, of the township of Cambridge, in the county of Russell, for an Order directing the Ottawa and New York Railway Company to rebuild their railway station at the said unincorporated village of Crysler at a point on the northeast side of their railway line about 1,657 feet in a northeasterly direction from the site of their previous sta-(Application 8699, Case 4077.)

Application withdrawn.

1114. Application of A. A. McFall, Bolton, Ontario, re proposed removal by the Canadian Pacific Railway of old main line and switches leading past his elevators near the old station at Bolton. (Application 2023.)

Settled. See order made in application 2023 re Bolton station.

1115. Application of St. Paul Land and Hydraulic Company, under the Railway Act, for an Order varying and defining Order of the Board dated October 4. 1906, upon the application of the Canadian Pacific Railway for a deviation of a portion of a branch line on the south side of the Lachine canal, province of Quebec. This application is set down to speak to the terms of the Order. (Application 1088. Case 1537.)

Application refused.

1116. Application of the Superior Copper Company, Limited, district of Algoma, Ontario, for an Order under section 227 of the Railway Act, granting leave to the applicants to join its railway line or track with those of the Algoma Central and Hudson Bay Railway Company. (Application 7904. Case 3623.)

Application struck off the list. New application to be made.

1117. Application of the city of Ottawa, under section 250, for an Order permitting the applicant to permanently construct, maintain and operate an aqueduct for water works purposes through, along, upon and across the lands and under the railway of the Canadian Pacific Railway along a course composed of a part of lot 39, concession A, Ottawa front of the township of Nepean (now within the limits of the city of Ottawa.) (Application S450. Case 3922.)

Application granted. Order issued. Reinforcing of the concrete to be accept-

able to experts of railway company.

1118. Application of the Canadian Northern Ontario Railway under section 222 of the Railway Act, for authority to construct a branch line partly within the town of Hawkesbury and partly within the town of West Hawkesbury from its main line;

also under section 237 to make a junction of such branch line with the tracks of the Grand Trunk Railway at Riordan's mills, Hawkesbury. (Application 5570. Case 2219.)

The question to be considered is the switching rate to be charged on traffic transferred in connection with this junction and spur.

Order issued providing for interswitching rate.

1119. Application of the Grand Trunk Railway for an Order that as and from the 12th December, 1905, day and night watchmen be placed at the crossing of the Grand Trunk Railway by the Berlin and Waterloo Street Railway at King street, Berlin, Ontario, authorized by Order of the Railway Committee of the Privy Council, 1895, and that the Berlin and Waterloo Street Railway Company bear any increased cost of operating the protective appliances at the said crossing entailed by the carrying out of this Order beyond the cost of protection at the said crossing prior to the use of the crossing by the electric cars of the said Berlin and Waterloo Street Railway Company. (Application 113. Case 1252.)

Order 5661 rescinded. Berlin and Waterloo Railway to pay the Grand Trunk Railway 85 cents per day from November, 1905, to the 1st May, 1907, and the light commissioners of Berlin to pay the Grand Trunk Railway Company 90 cents per

day from the 1st May, 1907.

1120. Application of the Canadian Pacific Railway, under section 178, for authority to take additional lands adjoining its railway in the township of Vaughan, county of York, Ont., the property of Mrs. Marion Long, for the convenient accommodation of the public and of the traffic of its railway, and to secure the efficient construction, maintenance and operation of the railway. (Application 8466. Case 3937).

Matter arranged by agreement between parties.

1121. Complaint of the town of Walkerton, Ontario, respecting alleged dangerous condition of the Walkerton and Lucknow Railway Company bridge over the Saugeen river about lot 71, north of Wellington street. (Application 6813.)

Order made subject to terms of an agreement between the railway company and

the town till construction and maintenance of bridge be approved.

1122. Application of the Guelph and Goderich Railway Company, under section 237 of the Railway Act, for authority to lay its tracks across the road allowances on its Listowel branch through the townships of Wellesley, county of Waterloo, and the townships of Mornington and Elma, in the county of Perth, Ontario. (Application 7742. Case 3480.)

Application granted. Order issued, subject to various conditions set forth in the Order. Question of further protection reserved for further consideration of Board.

1123. Complaint of H. J. Gibney, J. J. Cain, and other residents of Alliston, Ontario, against the closing of Nelson, Wellington and Queen streets, in the said town, where such streets are intersected by the Canadian Pacific Railway. (Application 8181.)

Complaint dismissed.

1124. Application of George Elliott of Woodbridge, Ontario, under the Railway Act, for an order directing the Canadian Pacific Railway to protect his property from floodings, which is alleged to result from the construction of the Canadian Pacific Railway Bolton grade revision across the east half of lot 11, concession 8, township of Vaughan, Ontario. (Application 5760.)

Order issued in terms of consent minutes filed.

1125. Application of the Grand Trunk Railway under sections 222 and 237 of the Railway Act, for authority to construct, maintain, and operate certain branch lines of railway or sidings in the city of Hamilton, Ontario, and crossing certain roadways to the premises of the Hamilton and Toronto Sewer Pipe Company and the Fowlers Canadian Company. (Adjourned hearing.) (Application 7035. Case 3051.)

Application granted. Order issued.

1126. Complaint of the township of Foley of the alleged dangerous condition of the public road railway crossings of the Canadian Pacific Railway, Canadian Northern Ontario Railway, and Grand Trunk Railway Companies, in the township of Foley. (Application 8435.)

Order made for overhead bridge at Halplead Road, that approaches to Parry Sound Road Church Hill crossing Badgers crossing. Oastlers crossing comply with section 242 Railway Act; also approaches to Moore Road, Gaughs Road and Rat Portage Bay Road. Canadian Pacific Railway to complete work by June 1, 1909.

1127. Application of Andrew Oastler of James Bay Junction, Ontario, under sections 252-253 of the Railway Act, for an Order directing the Canadian Northern Ontario Railway to provide and construct four suitable culverts where the company's railway intersects his farm on lots 135 and 136 in the township of Foley, district of Parry Sound, Ontario. (Application 8422. Case 3993.)

Order issued on consent providing for two culverts to be built by railway com-

pany at its own expense by June 17, 1909.

1128. Application of Andrew Oastler, of James Bay Junction, Ontario, under sections 252 and 253 of the Railway Act, for an Order directing the Canadian Northern Ontario Railway to provide suitable farm undercrossing where the company's railway intersects his farm lot 135, concession 3, township of Foley, district of Parry Sound, Ontario. (Application 8529. Case 3984.)

Order made directing railway company to build a cattle pass at its own expense.

Work to be done by June 17, 1909.

1129. Application of Andrew Oastler, of James Bay Junction, Ontario, under section 154 of the Railway Act, for an Order instructing the Canadian Northern Ontario Railway to provide and construct a suitable watering place where the company's railway intersects his farm in lot 134, concession 3, of the township of Foley, district of Parry Sound, Ontario. (Application 8552. Case 3994.)

Order made directing railway company to maintain fence so as to enable appli-

cant's cattle to get to water. Work to be done by June 1, 1909.

1130. Complaint of the residents of the township of Sydenham and the town of Owen Sound, Ontario, respecting dangerous condition of highway crossing over the Canadian Pacific Railway near what is known as Murray's Cut. (Application 7440.)

Application dismissed with leave to applicant's to apply for installation of elec-

tric bell at said crossing.

1131. Application of the Canadian Pacific Railway, under section 229 of the Railway Act, for an Order amending Order dated July 29, 1908, authorizing the Grand Trunk Railway to cross the tracks of the Owen Sound section of the applicant company's railway, and the tracks of the Ontario and Quebec Railway Company at a point east of Weston road, in the town of Toronto Junction, Ontario. (Application 4564. Case 4002.)

1132. Application of the Grand Trunk Railway, under section 229 of the Railway Act, for an order directing the installation and maintenance at the expense of the Canadian Pacific Railway of a complete interlocking plant, with derails on the lines of both railway companies, the said derails to be interlocked with home and distant signals, at the point where the applicant company's railway is crossed on the level at Brampton, Ontario, by the Canadian Pacific Railway (formerly the Credit Valley Railway) in accordance with detail plans thereof to be submitted and approved by the engineer of the Board. (Application 8462. Case 3934.)

Application granted. Order issued placing cost on the junior road.

1133. Application of the Grand Trunk Railway, under section 229 of the Railway Act, for an Order directing the installation and maintenance at the expense of the Canadian Pacific Railway of a complete interlocking plant, with derails on the lines of both railway companies, the said derails to be interlocked with home and distant signals, at the point where the applicant's railway is crossed on the level

at Drumbo by the Canadian Pacific Railway (formerly the Credit Valley Railway) in accordance with detail plans thereof to be submitted and approved by the engineer of the Board. (Application 8461. Case 3933.)

Application granted. Order made placing the cost on junior road.

1134. Application of Mrs. H. A. McLeod, of Staney Brae, Ontario, under the Railway Act, for an Order directing the Canadian Northern Ontario Railway to provide a suitable farm crossing opposite her property. (Application 6708.)

Application granted. Order issued in terms agreed upon.

1135. Complaint of the council of the township of Somerville of failure on the part of the Grand Trunk Railway to provide and maintain a proper station at the centre line in the township of Somerville for the loading and unloading of traffic. (Application 7991.)

Stands—upon application by the township to be brought on upon 10 days' notice. 1136. Complaint of the Canadian Pacific Railway of failure of the Toronto Suburban Railway to instal a diamond at the crossing on St. Clair avenue, between Keele street and Western road, in the town of Toronto Junction, in accordance with requirements of Order of the Board No. 3130, dated May 3, 1907. (Application 2560. Case 252.)

Order made directing diamond to be installed immediately. Cost of installation to be borne by junior road.

1137. Complaint of the Grand Trunk Railway respecting position of certain poles, the property of the Toronto Electric Light Company, near the tracks of the railway company east of Scott street, in the city of Toronto, Ontario, being poles marked 'A,' 'B,' 'C' and 'D' on Grand Trunk Railway plan No. 9052, Toronto middle division. (Application 7809.)

Order made directing Toronto Electric Light Company to remove the poles within four months. Electric Light Company granted leave to apply to vary Order if within that time construction of viaduct is gone on with.

1138. Application of the Canadian Pacific Railway, under section 175 of the Railway Act, for leave to construct branch lines in the town of Parry Sound, as shown on plan filed with the Board. (Application 3098.)

Order issued in application No. 3939, Case 625, covers this also.

1139. Re speed of trains of the Grand Trunk Railway, Canadian Pacific Railway and the Canadian Northern Railway Companies crossing Bay and Yonge streets, in the city of Toronto, Ontario. (Application 4177. Case 844.)

Order made limiting speed of all trains on all railway crossings between Yonge and Bay streets to not more than 4 miles per hour between 7 a.m. and 12 p.m. from May 1 to October 15 in the terms of the statute requiring such limitations.

1140. Application of the city of Toronto, under sections 237 and 238 of the Railway Act, for an Order directing the Grand Trunk Railway to provide gates and watchmen at the crossing of Jameson avenue, in the said city, by the tracks of the railway. (Application 7442. Case 3247.)

Application granted. Order made for erection of gates and watchmen being

placed. Cost to be divided equally between city and railway company.

1141. Application of the township of Wellesley, for an Order under sections 257 and 258 of the Railway Act, authorizing the Guelph and Goderich Railway Company to remove its water tank in connection with its station premises at Linwood to some point further away from the main line leading to Linwood, or that in the alternative an Order be made directing the Guelph and Goderich Railway to break cars so as to leave the said main road open when any train from the west is taking water from said tank. (Application 8438. Case 3914.)

Order made as in application No. 7742. Case 3480. If conditions not lived up to by railway company upon proof of breach by affidavit, Order will go for removal of tank.

1142. Application of J. S. Dignam of Toronto, under the Railway Act, for an Order directing the Bell Telephone Company to furnish him with a copy of their latest Official Telephone Directory for Western Canada and the United States. (Application 7539. Case 3285.)

Application dismissed.

1143. Application of F. W. Wegenast, Brampton, Ontario, under section 315, of the Railway Act, for an Order directing the Grand Trunk Railway to issue to him a 55 trip ticket for use between Brampton and Toronto, similar to those in use between Oakville and Toronto, at the same rate as those between Oakville and Toronto are sold, that is, \$7.15. (Application 7287. Case 3378.)

Application dismissed.

1144. Application of the R. Laidlaw Lumber Company, Limited, Toronto, for an Order directing the Grand Trunk Railway to refund to the applicants certain switching charges collected by the company prior to September 1, 1908, the date on which the company's interswitching tariff No. C.R.C. 1380 became effective. (Application 4459. Case 1356.)

Application dismissed.

1145. Application of the Algoma Central and Hudson Bay Railway Company, for an Order under section 7, 317, 333, 334 and 338, for joint tariff with the Grand Trunk Railway. (Application 2232.)

Application dismissed.

1146. Application of the Boards of Trade of Galt, Preston, Hespeler, Waterloo and Berlin, under section 222 of the Railway Act, for an order directing the Grand Trunk Railway, the Canadian Pacific Railway, the Berlin, Waterloo, Wellesley and Lake Huron Railway Company and the Preston and Berlin Street Railway Company, to connect their lines of tracks in the towns of Galt, Treston, Hespeler, Waterloo and Berlin so as to admit of the safe and convenient transfer or passing of engines, cars or trains from the tracks or lines of one of the above railways to those of the other, and that such connections shall be maintained and used by the said Canadian Pacific Railway, Grand Trunk Railway, Berlin, Waterloo, Wellesley and Lake Huron Railway Company, and the Preston and Berlin Street Railway Company, respectively.

Also to determine by what company or companies, or other corporations or persons, and in what proportions the cost of making and maintaining any such traffic shall be thereby transferred from the line of one railway to those of another, or any other railways or railways that might hereafter enter the said towns of Galt, Preston, Hespeler, Berlin and Waterloo. (Adjourned hearing.) (Applications 1761,

case 2391; 1758, 2392; 1763, 2393; 1762, 2394.)

Application dismissed so far as connection with electric roads is asked, upon want of jurisdiction. Cost of connection between Grand Trunk Railway and Can-

adian Pacific Railway to be paid by Canadian Pacific Railway.

1147. Application of the Commercial Acetylene Company and the Canadian Northern Railway Company) for an Order approving of the lighting of cars of the railway company with commercial acetylene gas. (Application 4739. Case 2395.)

Order made permitting the use of acetylene gas under what is known as the

Absorbent or Commercial Acetylene System.

1148. Application of the Crow's Nest Pass Coal Company, Limited, for an Order requiring the Canadian Pacific Railway Company to provide a special tariff of tolls to be charged by the railway company to the Coal Company under the provisions of the agreement between the British Columbia Southern Railway Company, the Canadian Pacific Railway Company, and the Kootenay Coal Company (now the Crow's Nest Pass Coal Company) bearing date July 30, 1907. (Application 8398. Case 3880.)

Application refused.

1149. Application of the Grand Trunk Railway under section 176, for an Order to fix the compensation to be paid to the Grand Trunk Railway Company by the Guelph and Goderich Railway Company, for the use made of the lands and property

of the Grand Trunk Railway at the town of Goderich, as provided in Order No. 4002, dated October 30, 1907, and which said Order authorized the Guelph and Goderich Railway Company to use and occupy the lands and premises of the Grand Trunk Railway for the construction of a bridge or grain carrier over the tracks of the Grand Trunk Railway in the said town of Goderich, Ontario. (Application 4733. Case 4067.)

1150. Application of the Niagara, St. Catharines and Toronto Railway Company, under section 246 of the Railway Act, for authority to cross with its tracks and wires the wires of the Hamilton Cataract Power, Light and Transmission Company, at station 247, -01 and station 282-94, main line and station 280 T. H. & B. connection, lot 27, concession 5 and 6, township of Crowland, county of Welland, Ontario. (Application 8777. Case 4126.)

Application granted. Order issued.

1151. Application of the Niagara, St. Catharines and Toronto Railway Cmpany, under section 227, for authority to connect its tracks with the tracks of the Toronto, Hamilton and Buffalo Railway Company, in lot 27, concession 6, township of Crowland, county of Welland, Ontario. (Application 8838. Case 4176.)

Application granted. Order issued.

1152. Application of the Niagara, St. Catharines and Toronto Railway Company, under section 178, for authority to take part of lot 27, concession 6, township of Crowland, county of Welland, Ontario, the property of W. H. Singer, for the purpose of securing the efficient operation of its railway. (Application 8837. Case 4175.)

Application withdrawn.

1153. Application of Cameron & Company, of Ottawa, Ontario, under sections 226 and 234 of the Railway Act, for an Order directing the Grand Trunk Railway to provide and construct a line of railway making connection between the private siding or branch line of the applicants with the main line of the Grand Trunk Railway, Atlantic Division, at or near Aylen Lake station, Ontario. (Application 8768. Case 4121.)

Stands adjourned, parties to settle. Settlement subsequently made.

1154. Complaint of Henri Frenette, of Portneuf, P. Q., of failure of the C.P.R. and the National Transcontinental Railway to provide proper drainage on right of way through his farm in the village of Portneuf, province of Quebec. (Application 8613.)

Stands. Refered to Board's engineer to report.

1155. Application of the Grand Trunk Railway, under sections 222 and 237, for leave to construct, maintain, and operate two branch lines of railway or spurs, from a point on the applicant company's railway on Bethune street in the city of Peterborough.

One crossing Bethune street to lot No. 9, north of Dalhousie street, and No. 2 crossing Bethune street to lot No. 9, north of Wolfe street, in the said city of Peterborough, Ontario. (Application 6492. Case 2737.)

Revision of order No. 5132. Order No. 5132 stands and application city of Peter-

borough to revise same dismissed.

1156. Application of the Grand Trunk Railway, under section 50, for an Order extending the time for the construction of the branch line and station authorized to be constructed between the Grand Trunk Railway's main line, east of the Port Hope viaduct, and a point on the Northern Division, north of Ontario street, Port Hope, Ontario, by Order of the Board, No. 2333, dated 16th December, 1906, for a period of two years from the 18th day of December, 1908. (Application 3675. Case 411.)

Application dismissed.

1157. Complaint of Amos Morgan, Crookston, Ontario, that in the construction of the Havelock section of the Canadian Pacific Railway at mileage 89.9, the railway company damaged his property situate on lot 1, concession 9, on the town line between

Rawdon and Huntingdon, near Crookston, Ontario, by diverting the watercourse as it then existed along the right of way at or near station 31-48. (Application 7634.)

Order made directing railway company to clean ditches and deepen off-take ditch

through complainant's land, work to be completed by 1st May, 1909.

1158. Complaint of the Honourable Senator Tessier of refusal by the Ottawa Electric Railway Company to furnish free transportation to him as a member of the Senate of Canada over its lines of railway. (Adjourned hearing.)

Complaint withdrawn.

1159. Complaints of residents of the township of Montcalm, province of Quebec, against the train service and condition of the Montford Branch of the Canadian Nor-

thern Quebec Railway Company. (Application 7063.)

Order made directing the railway company to put the branch line in order by ballasting the track, &c. Also to provide suitable platform by April 30, 1909. Also to supply baggage cars and suitable passenger cars. Also appoint a permanent agent at Montfort. The company to be liable to a penalty not exceeding \$50 for every day on which any violation of the provisions of this Order occur.

1160. Application of Thomas Crockett, shipper of lumber, shingles and ties, of Rivière du Loup station, province of Quebec, for an order to compel the Intercolonial Railway and its connecting companies to conform to the tolls section of the Railway Act and the previous orders of the Board relative to the carriage of cedar railway ties; referring more particularly to shipments from Rivière du Loup station to Bennington, Vermont. (Application 6836.)

Board after hearing application decided that it could exercise no measure of con-

trol which would in any way benefit the complainants and made no Order.

1161. Application of the Commercial Acetylene Company of New York, re classification for transportation by express companies in Canada subject to the Board, of acetylene gas when shipped under the so-called safety storage system? (Application 8801. Case 4146.)

Order made that express companies operating in Canada and under the jurisdiction of the Board are directed to accept and carry acetylene gas under the rules and regulations prescribed in connection therewith in the official classification No. 18, and at the rating therein provided. Also that a supplement be issued to express classification No. 16 as now in effect to provide for the said change becoming effective not later than May 1, 1909. Subsequently rescinded on ground of want to jurisdiction. Judgment will appear in next annual report.

1163. Complaint of the Transportation Bureau of the Montreal Board of Trade against stop-over charge made by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain consigned to Cartier for Order and reshipment. (Applica-

tion 8641.)

Order made that the charge of one cent per 100 pounds imposed by the Canadian Pacific Railway at Cartier on western grain and grain products in carloads consigned to Cartier for Orders under supplement No. 13, and by the Grand Trunk Railway at Sarnia tunnel on grain and grain products in carloads originating in western Canada destined to points in eastern Canada routed via Chicago, Chicago Junction or Milwaukee to Sarnia tunnel, Ontario, for orders under supplement No. 3, to the Canadian tariff C. R. C. No. 1-E-II-0-I, be disallowed and the stop-over charge of 25 cents per car for the first forty-eight hours and the car service toll thereafter substituted therefor. Order to become effective not later than February 15, 1909.

1164. Complaint of the Board of Trade of Guernsey, Saskatchewan, that the Canadian Pacific Railway Company's rate on grain to Fort William for re-shipment to points east, discriminates against Guernsey in favour of other shipping points in the

same territory. (Application 8525.)

Complaint dismissed.

1165. Complaint of Robert Train, Nashville, Ontario, that the Canadian Pacific Railway Company have closed a highway or road allowance in the ninth concession of

the township of Vaughan, being allowance for road between lots 25 and 26, 9th concession, township of Vaughan. (Application 8769.)

Complaint struck off the list, Board held it had no jurisdiction to award damages. 1166. Application of the Peters Coal Company, under section 226, for an order directing the Canadian Pacific Railway Company, to construct, maintain and operate a suitable switch and branch line or spur from the company's railway into the applicant's coal yard, situate on the north east corner of Elizabeth and Maria streets in the city of West Toronto and known as lots 1, 2, 3, 4 and 5, on the north side of Maria street, plan 740. (Application 8839. Case 4177.)

Application granted. Railway company to construct branch line by February 8, 1909. Applicants to deposit \$500 in some chartered bank to defray costs of con-

struction.

1167. Application of the Grand Trunk Railway, under section 50, for an Order extending the time for the construction of the branch line and station authorized to be constructed between the Grand Trunk Railway's main line east of the Port Hope viaduct, and a point on the northern division, north of Ontario street, Port Hope, Ontario, by order of the Board No. 2333, dated December 16, 1906, for a period of two years from December 18, 1908. (Application 3675. Case 411.)

Application refused.

1168. Application of the Grand Trunk Railway Company, under section 29 of the Railway Act, for an Order varying Order of the Board No. 2757, dated March 27, 1907, by extending the time for the construction of the branch line until December 31, 1910, from a point on the Grand Trunk Railway between Orillia and Midland, near Tiffin, and running in a southerly direction through the townships of Tiny and Tay to the road allowance between lots 91 and 92, 2nd concession, township of Tiny, and across public highways. (Application 3686. Case 419.)

Application refused.

1169. Application of the Grand Trunk Railway Company under section 29 of the Railway Act, for Order varying Order of the Board No. 2757, dated March 27, 1907, which authorized the construction of a branch line from a point on its line of railway between Colwell and Penetanguishene, near Wyevale, in the township of Tiny, county of Simcoe, province of Ontario, running in a northerly direction to the road allowance between lots Nos. 91 and 92, concession 2, township of Tiny, by extending the time for the construction of the branch line until December 31, 1910. (Application 3686. Case 421.)

Application refused.

1170. Application of the Grand Trunk Railway Company, under section 288 of the Railway Act, for Order allowing that company to leave out the filling and packing mentioned in section 288 of the Railway Act, from the month of December to the month of April in each year, both months inclusive. (Application 505.)

Application refused; Order made rescinding Order No. 836, dated 22nd December,

1905.

1171. Application of the city of Toronto for an Order, under sections 29 and 32 of the Railway Act, varying order of the Railway Committee of the Privy Council dated 11th March, 1902, respecting the protection of Dowling and Dunn avenues, Toronto, by the Grand Trunk Railway, by directing that the railway company bear the whole or part of the costs of the protection directed by said Order. (Application 14. Case 4254.)

Application refused.

1172. Complaint of W. D. Woodruff, of St. Catharines, Ontario, of failure of the Grand Trunk Railway Company to provide sufficient station and siding facilities near Vineland, between Beamsville and Jordan, for the handling of traffic for the Ontario Experiment Fruit Farm. (Application 8644. Case 4045.)

Complaint withdrawn.

1173. Application of the council of the town of Listowel, Ont., for an Order compelling the Grand Trunk Railway Company and the Canadian Pacific Railway Company to make interswitching arrangements with each other so that the manufacturers will get the benefit of the service of both roads in Listowel, Ontario. (Application 8453. Case 3927.)

Application refused.

1174. Complaint of Hiram Walker & Sons, Limited, of Walkerville, Ontario, with respect to rates charged on joint traffic originating at Canadian Pacific Railway and Pere Marquette Railway points and destined to Walkerville, Ontario. (Application 4459. Case 4219.)

This case involves consideration of interswitching.

Order made fixing rates on grain shipped to Walkerville, Ontario, in carloads from the following places in Ontario: Elmstead, 3½c per 100 lbs.; Bell River, 3½c per 100 lbs.; St. Joachim, 4c per 100 lbs.; Haycroft, 4¾c per 100 lbs.; Tilbury, 4¾c per 100 lbs. Minimum weight 40,000 lbs. per car. Switching charges apportioned.

1175. Application of the Quebec, Montreal & Southern Railway Company for an Order directing the Rutland Railroad Company to change its existing derails at or near the junction point of its line with that of the Quebec, Montreal & Southern Railway and the Grand Trunk Railway at Noyan Junction. (Application 5482. Case 2104.)

(This application is set down for the purpose of settling the disposition of the cost of change of derails.)

Application granted; Order made directing applicants to pay expense of making the change.

1176. Application of Moise Franceur, parish of St. Jerome, county of Terrebonne, province of Quebec, for an Order directing the Canadian Northern Quebec Railway Company to provide a suitable farm crossing where the right of way of the company affects his property. (File 5932.)

Application granted; order made for crossing on southerly lot.

1176. Application of the town of Lachine, province of Quebec, for an Order directing the Grand Trunk Railway and Montreal Park and Island Railway to open Second avenue, in the town of Lachine, across the tracks of the railway companies. (File 8448. Case 3921.)

Application to stand. Town Lachine to have permission to widen the posts to get snow plough through. Grand Trunk Railway Company not to close the gates.

1178. Application of the Montreal Terminal Railway Company for an order authorizing the applicant to cross the Canadian Northern Quebec Railway opposite the Vulcan Cement Company's works in the parish of Longue Pointe, province of Quebec. (File 8915. Case 4225.)

Application granted. Order made for construction of spur as shown on plan. 1179. Petition of the trustees of Prince Albert school ward, Montreal, and others, for an Order requiring the Grand Trunk Railway to provide proper protection where its railway crosses Rose de Lima street, between St. James and Notre Dame streets, adjacent to the St. Henri depot. (File 7843.)

Order made directing the railway company to provide gates by April 15, 1909, and maintain the same. The city of Montreal to pay one-half the cost of protection,

maintenance and operation.

1180. Complaint of Madame Plouffe, of failure of the Canadian Northern Quebec Railway to provide and construct a proper farm crossing between bents 2 and 3 of the trestle on her farm, mile 15, St. Jerome, St. Sauveur branch. (File 5718.)

Settled on report from the Board's engineer.

1181. Application of the Canadian Pacific Railway, for authority to construct, maintain and operate a branch line or spur in Montreal, across De Levis street to the premises of the Montreal Gas Company, now leased to the Montreal Light, Heat

and Power Company, situate on cadastral, lot 159, Hochelaga ward, Montreal, a distance of about 1,780 feet, together with another siding about 550 feet in length. (File 8152. Case 3708.)

Application granted. Order issued.

1182. Application of McDiarmid & Gall, Montreal, province of Quebec, for an Order directing the railways to make an allowance of 72 hours for the unloading of charcoal in carloads instead of 48 hours allowed by the rules of the Canadian Car Service Bureau. (Application 7905.)

Order made refusing the application.

1183. Complaint of Rev. J. B. Grenier, St. Tite, province of Quebec, respecting alleged inefficiency of the train service of the Canadian Northern Quebec Railway between Quebec and Montreal; also station accommodation at Heronville, Garneau and St. Tite, province of Quebec. (File 8304.)

Upon the railway company undertaking to comply with the recommendations made by the Board's engineeer in report, October 31, 1908, application adjourned

till July sittings of Board, 1909.

1184. Complaint of the residents of the town of Sorel, province of Quebec, of the unsatisfactory manner in which the passenger and freight services are performed by the Quebec, Montreal and Southern Railway, and of the condition of the railway and station accommodation at Sorel and Pierreville, province of Quebec. (File 7628.)

Order made fixing location for new stations at Sorel and Pierreville.

1185. Complaint of Hyde & Webster, Montreal, province of Quebec, against the Canadian Pacific Railway prohibition of joint use of their private siding at Outremont, province of Quebec, by themselves and private parties. (File 8850.)

Matter adjusted by parties at the hearing. No Order issued.

1186. Complaint of the Montreal Produce Merchants' Association, Montreal, province of Quebec,—

(1) Respecting the disadvantage under which Montreal shippers are placed as compared with through shippers in the west in the matter of rates on cheese.

(2) Respecting the placing of cheese on a parity with bacon in the matter of freight rates.

(3) The great advance in freight rates which has taken place in the last few years. (File 5698.)

Stands for judgment. Chief Traffic Officer of Board to report.

1187. Application of the transportation bureau of the Montreal Board of Trade for an Order directing the Canadian Pacific Railway to apply the same mileage rates on grain in carloads between points on the company's line east of and including Montreal, province of Quebec, as are applied by the company between its stations in Ontario, west of Montreal, province of Quebec. (File 8730.)

Stands for judgment.

1188. Application of the St. Lawrence and Adirondack Railway Company for approval of highway crossings in the counties of Huntingdon, Beauharnois, Chateauguay and La Prairie, in the province of Quebec. (Application 8359. Case 3850.)

Application granted and Order issued subject to usual conditions of Board re-

specting highway crossings by railways.

1189. Approval of tariffs of tolls of express companies pursuant to the provisions of section 348 of the Railway Act. (File 4214. Case 1503.)

Infinished. Further evidence to be taken.

1190. Complaint of the Sanataris Limited of Arnprior, Ontario, that under the new express classification for Canada effective January 1, 1909, return of empties, which have hitherto been carried free of charge are to be charged one-half the merchandise rate. (Application 9192.)

Judgment reserved. To be occasioned with general express matters.

1192. Application of the township of the front of Escott, in the county of Leeds, province of Ontario, under sections 235 to 242, inclusive, of the Railway Act, for an

Order directing the Grand Trunk Railway Company of Canada, to provide and construct, immediately, to the east of the present crossing, a suitable overhead crossing, where the company's railway intersects at different level crossings, two and a half miles west of Mallorytown station the main travelled highway running from the village of Rockfield, in the township of Front of Escott, in a southerly direction to the village of Escott, P.Q. (Adjourned hearing.) (Application 4452. Case 1118.)

Application dismissed, leave to revive if applicant desire.

1193. Application of the Grand Trunk Railway Company of Canada, under sections 222 and 237 of the Railway Act for leave to construct, maintain and operate two branch lines of railway or spurs, from a point on the applicant company's railway on Bethune street in the city of Peterborough:—

One crossing Bethune street to lot No. 9, north of Dalhousie street and No. 2 crossing Bethune street to lot No. 9, north of Wolfe street, in the said city of Peter-

borough, Ontario.

To consider revision of order No. 5132. (Application 6492. Case 2737.)

Application dismissed.

1194. Application of the Grand Trunk Railway Company of Canada, under section 176 of the Railway Act, for an Order to fix the compensation to be paid to the Grand Trunk Railway of Canada, by the Guelph and Goderich Railway Company for the use made of the lands and property of the Grand Trunk Railway at the town of Goderich, as provided in Order No. 4002, dated October 30, 1907, and which said Order authorized the Guelph and Goderich Railway Company to use and occupy the lands and premises of the Grand Trunk Railway for the construction of a bridge or grain carrier over the tracks of the Grand Trunk Railway Company of Canada in the said town of Goderich, Ontario. (Adjourned hearing.) Application 4733. Case 4067.)

Settled betewen parties.

1195. Application for approval of location of the Udney and Orillia branch from Mile 'O' at Udney, township of Mara to Mile '5.25' in same township, and for authority to cross several existing highways. (Application 8487. Case 3913.)

Settled by parties.

1196. Application of the municipality of Maxville, county of Glengarry, Ontario, under section 237 of the Railway Act, for an Order to compel the Grand Trunk Railway Company of Canada to open for traffic a highway across their railway at a point shown on plan filed with the Board marked 'A.' (Application 8316. Case 3824.)

Application granted. Order issued.

1197. Application of the corporation of the town of Oshawa, Ontario, under section 237, for an Order sanctioning the construction of a highway across the line of the Oshawa Railway Company at First avenue, Oshawa, Ontario. (Application 3820. Case 4159.)

Application granted. Order issued on consent.

1198. Application of the corporation of the town of Oshawa, under section 237, for an Order sanctioning a highway crossing across the right of way of the Oshawa Railway Company at Barry avenue, Ontario. (Application 8821. Case 4160.)

Application granted. Order issued on consent.

1199. Application of the Commissioners of the Transcontinental Railway, under section 227 of the Railway Act, for an Order granting leave to the applicants to cross the railway line and tracks of the Temiscouata Railway Company by a level crossing at a point about 19.2 miles on the Transcontinental Railway line, measured westerly from the town of Edmundston, in the county of Madawaska, N.B., or 46.62 miles from a point 2½ miles west of the town of Grand Falls. (Application 8830. Case 4168.)

Application granted. Order issued on consent.

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1200. Application of the Canadian Pacific Railway Company as lessee and exercising the franchise of the Toronto, Grey and Bruce Railway Company for an Order, under section 237 of the Railway Act, granting it authority to divert the present highway where it crosses its railway at Kleinburg in the township of Vaughan, county of York, Ontario. (Application 9054. Case 4322.)

Application dismissed.

1201. Petition of the trustees of Prince Albert school ward, Montreal, and others, for an Order requiring the Grand Trunk Railway Company to provide proper protection where its railway crosses Rose de Lima street, between St. James and Notre Dame streets, adjacent to the St. Henri depot. (Application 7843.)

Order issued directing railway company to erect and maintain gates on or before April 15, 1909, city to pay one-half cost of erection and maintenance and not to

be liable for accidents at crossing.

1202. Application of the Toronto and Niagara Power Company, under section 159, for approval of location of its line from its transformer house in the county of Welland at Niagara Falls, through township of Stamford to the right of way of Niagara, St. Catharines and Toronto Railway near Wrights crossing in the vicinity of the town of Niagara Falls, Ontario. (Application 450. Case 3945.)

Application granted. Order issued.

1203. Application of the Commissioners of the Transcontinental Railway, under section 237 of the Railway Act, for an Order granting leave to the applicants to construct a level crossing for the railway line of the National Transcontinental Railway over the public highway running along the St. John river between Edmundston and Connors in the county of Madawaska and province of New Brunswick at a point on said railway about 46.52 miles measured westwardly from a point 2½ miles west of the town of Grand Falls, and also to permanently divert such highway and construct another highway in lieu thereof. (Application 8830. Case 4178.)

Application granted. Order issued.

1204. Application of the Toronto Electric Light Company, Limited, under section 246 of the Railway Act, for leave to install and maintain their line of twelve underground tile ducts under and across the tracks of the Grand Trunk and Canadian Pacific Railway Companies, where the same cross Bloor street in the northwest part of the city of Toronto, Ontario. (Application 8872. Case 4193.)

Application granted. Order issued.

! 1205. Complaint of the Brotherhood of Railroad Trainmen alleging dangerous position of switches, switch-stands, bridge supports and structures generally by being placed so near to the tracks on which the employees of the Canadian Pacific Railway have to work at Kenora and Keewatin yards, Ontario. (Application 8891. Case 4208.)

Stands for report of Board's engineer.

1206. Application of Christie, Henderson & Co., Ltd., of the city of Toronto, county of York, Ontario, under section 226 of the Railway Act, for an order directing the Grand Trunk Railway Company to construct, maintain and operate a spur or branch line from the quarries of the applicants to the branch line of the said railway company between Harrisburg and Guelph, and to connect therewith at a point about two and a half miles northeasterly from the town of Hespeler.

And for payment by the said railway company of the costs and expenses incurred by the applicants of and incidental to this application; the railway company having unreasonably refused to construct the said spur at the point necessary for the industry of the applicants, upon any terms whatever. (Application 9171. Case 4391.)

Application granted. Order issued.

1207. Complaint of R. Finer and B. Daniels, of Longueuil, province of Quebec, against the train service of the Quebec, Montreal and Southern Railway Company between St. Lambert and Longueuil, province of Quebec. (Application 9193.)

Stands pending carrying out of proposed agreement between Quebec, Maine and Southern Railway and Grand Trunk Railway.

1208. Consideration of draft Order of the Board in connection with equipment of non-platform cars with proper operating levers, dispensing with the operating wheel at present in use on the ends of such cars. (Application 9000. Case 4294.)

Application granted. Order issued.

1209. Consideration by the Board of the question of providing better protection of wooden trestles and bridges on lines of railway subject to the jurisdiction of the Board. (Application 4966. Case 1860.)

Stands adjourned to June sittings, 1909.

1210. Application of the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company, in pursuance of paragraph 6 of Order of the Board, dated 23rd of February, 1905, for an order fixing the compensation to be paid by the Canadian Northern Railway Company (formerly the James Bay Railway Company) for the use of the Union station property at Toronto, including the service and accommodation provided, and at present and for some time past used and enjoyed by the Canadian Northern Ontario (formerly James Bay Railway Company). (Adjourned hearing.) (Application 588. Case 3208.)

Order made directing Canadian Northern Railway to pay to this date on basis of present agreement, future payments to be agreed upon or settled by the Board.

1211. Re Toronto Viaduct and Union station; settlement of terms of draft Order herein. (Application 588. Case 3322.)

Stands, railway companies agreeing to file plans within three months. Details of Order to stand for settlement.

1212. Application of the Bay of Quinté Railway Company for an Order, under section 364 of the Railway Act, and under any other section applicable to the circumstances of the case ascertaining and settling the compensation payable by the applicant to the Kingston and Pembroke Railway Company, in respect to the running rights possessed by the applicant over the Kingston and Pembroke Railway Company's railway from Harrowsmith to Kingston, Ontario. (Application SSS6. Case 4201.)

Application dismissed. No jurisdicton.

1213. Application of Messrs. McDonald & O'Brien, Hervey Junction, province of Quebec, under the Railway Act, for an order providing for joint freight traffic from points on the Canadian Northern Quebec Railway to points on the Quebec and Lake

St. John Railway. (Application 8472.)

Order made fixing the minimum charge of \$5 per car in a through shipment of new empty cars over two or more lines of railway. The Canadian Northern Railway Company to submit at once a joint tariff for shipment of new empty cars over the Canadian Northern Quebec Railway lines and the Quebec and Lake St. John line. The Canadian Freight Association to submit at once an amendment to Canadian classification providing for lower minimum charge to apply to new empty cars by joint route of two or more lines of railway.

1213a. Complaint of Hyde & Webster, contractors, Montreal, P.Q., that the Grand Trunk Railway charges 6c. per 100 pounds on bricks C. L. Casselman to Montreal, Canadian Pacific Railway delivery via Jacques Cartier Junction. (Application 9116.)

Order made dismissing application.

1214. Complaint of S. G. Detchon, of Chicago, Ill., that the Grand Trunk Railway has refused to pay its proportion of alleged overcharge on shipment of frosted wheat from Girvin, Sask., on the Canadian Northern Railway, between Regina and Saskatoon, during December and January, 1907 and 1908, the other companies interested, namely, the Canadian Northern Railway and the Canadian Pacific Railway, being prepared to settle. (Application No. 7097.)

Settled; rayment made by Canadian Northern Railway.

20c-71

1215. Application of James Richardson & Sons, Kingston, Ontario, under the Railway Act, for an order directing the railway companies to file rates from Kingston to points in the maritime provinces on grain ex-upper lake ports, similar to those which the Grand Trunk and Canadian Pacific Railways have established from Georgian bay and Lake Huron ports. (Application 8315.)

Ordered that the rates charged from Kingston by the Grand Trunk Railway Company of Canada, the Canadian Pacific Railway Company and the Kingston and Pembroke Railway Company, on western grain arriving at Kingston by vessel and destined to points in Quebec and the maritime provinces, be made on the basis of 7 cents per 100 pounds from Kingston to Montreal; and that the proportional or 'arbitrary' rates from Montreal to the said points in Quebec and the maritime provinces, to be added to the said rate of 7 cents per 100 pounds from Kingston to Montreal, do not exceed the proportional or 'arbitrary' rates from Montreal in force concurrently on western grain transferred at Lake Huron ports.

Also that the above rate become effective not later than the 16th of February, 1909.

1216. Complaint of J. B. Stringer & Co., of Chatham, Ontario, alleging discrimination against Chatham in the freight rates of the Canadian Pacific Railway on corn as compared with rates from other points. (Application 9114.)

Order made dismissing complaint.

1217. Application of the Canadian Freight Association, under Order of the Board No. 3258, dated July 6, 1907, for an order cancelling or reviving the existing commodity rates on wire fencing and netting from Windsor, Stratford, Owen Sound, Hamilton and Welland, Ontario. (Application 7346. Case 3210.)

Application granted except that carload commodity rates from Hamilton, Windsor and Walkerville, Ontario, to points east of Toronto are scaled as set forth in the Order. These rates to take effect not later than the 26th April, 1909.

1218. Complaint of the Dominion Millers' Association, Toronto, Ontario, under section 317 of the Railway Act, alleging that the Canadian Pacific Railway Company has unjustly discriminated and does unjustly discriminate in its method of dealing with shipments of grain and flour from Fort William and Owen Sound, Ontario, against the millers of the east and in favour of shipments of grain and flour as aforesaid for export. (Application No. 4752. Case 1455.)

Application withdrawn.

1219. Approval of tariffs of tolls of express companies pursuant to the provisions of section 348 of the Railway Act. (Application 4214. Case 1503.)

Partially heard.

1220. Application of the Express Traffic Association for an order permitting them to file for approval, express freight classification, graduated rate tables, money classification, C.R.C. Nos. 1, 2, 3 for Canadian business; and to withdraw Canadian classification and money classification, C.R.C. Nos. 1 and 3, filed on March 1, 1907. (Application 4397. Case 3693.)

Partially heard.

1221. Application of the Canadian Pacific Railway Company, under section 59 of the Railway Act, for an Order directing re-apportionment of the cost of maintaining day and night watchmen at the point where the applicant company's railway crosses Main street in the village of Fairville, N.B.

Order made directing each of the parties to pay one-third of cost.

1222. Complaint of W. F. Hatheway Company, Ltd., Geo. E. Barbour Co., Ltd., Hall & Fairweather, Ltd., C. H. Peters & Sons and A. C. Smith & Co., re rates on exportation of our from city of St. John to different water points.

Application dismissed.

1223. Complaint of the St. John, N.B., Board of Trade, on behalf of its members, that the C. P. R. Co. is charging 50 cents per short ton shunting charges on goods from steamships at West St. John to his factory, a distance of 43 miles.

Application dismissed.

1224. Complaint of the St. John Board of Trade regarding increased rate over the Dominion Atlantic Railway steamship route between St. John and Digby.

Application dismissed.

1225. Complaint of Irwing R. Todd, St. Stephens, N.B., against the Canadian Pacific Railway Company regarding rates on pulpwood.

Application dismissed.

1226. Complaint of the Maritime Cornmeal Mills (C. W. Stewart) respecting export milling rates on meal).

Stands for judgment. Chief traffic officer to report.

1227. Complaint of Horace Haszard, Charlottetown, P.E.I., re express rates and service of Canadian Express Company (file 4621.)

Stands to be dealt with when general question of express rates is disposed of.

1228. Complaint of H. E. Baker Company, Limited, Sydney, C.B., re express rates on lobsters, charged by Canadian Express and other express companies. (File 3872.)

Stands to be dealt with when general question of express rates is disposed of.

1229. Complaint of Thomas Potts, St. John, N.B., re express rates on fruit from Niagara district, Ontario. (File 5028.)

Stands to be dealt with when general question of express rates is disposed of.

1230. Complaint of North Queens' Board of Trade, Caledonia, Nova Scotia, re express rates charged by the Maritime Express Company. (File 3924.)

Stands to be dealt with when general question of express rates is disposed of.

1231. Complaint of A. M. Fraser, Halifax, Nova Scotia, re express rates on type-writers from Woodstock, N.B., to Halifax, Nova Scotia, charged by Dominion Express Company; and re complaint of Soulis Newsome Typewriter Company, Halifax, Nova Scotia, as to express rates on unboxed typewriters. (File 3274.)

Stands to be dealt with when general question of express rates is disposed of.

1232. Complaint of John Hopkins in *re* express charges of the Dominion Express Company. (File 3280.)

Judgment reserved.

1233. Complaint of Sackville Board of Trade, N.B., in re express rates. (File 4566.)

Stands to be dealt with when general question of express rates is disposed of.

1234. Complaint of Messrs. Davis & Fraser, Halifax, N.S., re express rates from Charlottetown, P.E.I., to points in New Brunswick and Nova Scotia. (File 6360.)

Judgment reserved.

1235. Application of George Frederick Stiles under sections 252 and 253 of the Railway Act, for an order directing the Canadian Pacific Railway Company to provide and construct a suitable farm crossing where the railway company's right of way affects the property of the applicant on lot No. 19, concession No. 2, in the township of London. (Application 5481. Case 4056.)

Application refused.

1236. Application of the Canadian Pacific Railway Company, under section 186 of the Railway Act, 1903, for leave to cross with its Sudbury-Kleinburg branch, certain highways in the town of Vespra, in the county of Simcoe, Ontario. (Application 3911. Case 605.)

Application granted. Order issued in terms of agreement filed.

1237. Application of the Canadian Pacific Railway Company, as lessee and exercising the franchise of the Toronto, Grey and Bruce Railway Company, for an Order, under section 237 of the Railway Act, granting it authority to divert the present high-

way where it crosses its railway at Kleinburg, in the township of Vaughan, county of York, Ontario. (Application 9054. Case 4322. Adjourned hearing.)

Application dismissed.

1238. Application of the Crawshaw Bros., of Scotch Block, Ontario, for an Order under the Railway Act, directing the Grand Trunk Railway Company to provide a siding for the handling of traffic to and from their quarry, or to restore the old 'Lawson siding' for this purpose. (Application 8963. Case 4259.)

Application refused.

1239. Application of the corporation of the city of Hamilton for an Order, under the Railway Act, directing the Toronto, Hamilton and Buffalo Railway Company and the Canadian Pacific Railway Company to provide and construct a suitable highway bridge over the tracks of the company at the intersection of the line of the company at Garth street in the ctiy of Hamilton. (Adjourned hearing.) (Application 1592. Case 2739.)

Application granted. Order for wooden bridge, cost to be borne 1 by city and 1

by railway company. Plans to be submitted for approval of Board.

1240. Application of the Canadian Pacific Railway Company, under section 175 of the Railway Act, 1903, for leave to construct branch lines in the town of Parry Sound, as shown on the plan filed with the Board.

Note.—The above application to be considered in connection with an application of the company under date of the 6th of January, 1909, withdrawing from the above application all the portion thereof relating to lines south of Seguin river and east of Seguin street, so that only one branch is to be built north of the Seguin river terminating at or near the west side of Seguin street.

In conjunction with the above application will be considered the application of the Canadian Northern Railway Company, under section 175 of the Railway Act, 1903, for authority to construct, maintain and operate a branch line from its main line in the town of Parry Sound to the outer harbour, as shown on the plan, profile and book of reference on file with the Board under file 3939, case 625a.

Covered by Order issued in application 3939 of Canadian Northern Railway.

1241. Complaint of F. B. Stevens & Co., of Chatham, Ont., alleging discrimination against Chatham in the freight rates of railways on corn as compared with rates to other points. (Application 9195.)

Application dismissed.

1242. Application of the Canadian Pacific Railway Company for an Order, under section 29 of the Railway Act, rescinding order of the Board dated July 25, 1905, fixing the rate to be charged for the interchange of traffic and interswitching of cars over the branch line of the Grand Trunk Railway Company connecting with the Canadian Pacific Railway Company at London, Ontario. (Adjourned hearing.) (Application 689. Case 4055.)

Stands for judgment.

1243. Application of the Wallaceburg Sugar Company, Ltd., of Wallaceburg, Ontario, for an Order establishing what is generally known as an 'average' demurrage plan. (Adjourned hearing.) (Application 8913. Case 4223.)

Application dismissed.

1244. Complaint of Alfred Swanson, Brookdale, Man., that the Canadian Pacific Railway have not paid him for land taken by the railway for the construction of its McGregor-Varco branch, being part of the north half of 32-12-16, and the southeast quarter of 6-13-16 W. (Application 8852.)

Referred to Board's engineer to inspect and report in spring as to the accumulation of water upon the lands of the applicant caused by the construction of the rail-

way.

1245. Petition of the residents of Sinclair, Manitoba, that the Canadian Pacific Railway Company be directed to provide a side track halfway between Reston and

Sinclair, Manitoba, for the accommodation of traffic of the district. (Application 8853.)

Application refused.

1246. Complaint of Mrs. J. E. Collins of failure of the Canadian Northern Railway Company to settle her claim against the railway company for right of way over S.W. 32-27-29. (Application 9151.)

Application dismissed.

1247. Application of Theo. A. Burrows, of Grandview, Manitoba, for Order directing the Canadian Northern and Grand Trunk Pacific Railway to provide transfer facilities for the joint handling of traffic between the railway companies at Petrel, Manitoba. (Application 5898.)

Order made directing Canadian Northern Railway Company to construct trans-

fer tracks before June 1, 1909, each company to pay half the cost.

1248. Complaint of Graingrowers' Association, of Ashville, Manitoba, of failure of the Canadian Northern Railway Company to fence its right of way between Dauphin and Gilbert Plains, Manitoba. (Application 9202.)

Order made upon undertaking of counsel for right of way to be fenced on or

before September 1, 1909, between Gilbert Plains and Dauphin.

1249. Resolution of Order of Railway Conductors, the Brotherhood of Locomotive Firemen and Engineers, Brotherhood of Railway Trainmen and Order of Railway Telegraphers, relative to reduction of section gangs, the 'cross' snow plough, and re terminal clearance (as at present used), being embodied in the proposed new rules. (Application 6613.)

Application dismissed.

1250. Application of the Canadian Pacific Railway Company, under section 222 of the Railway Act, for an Order granting authority to construct, maintain and operate a branch line of railway or spur at Beausejour, from a point in the centre line of the most southerly siding of said railway, distant about 200 feet westerly from the westerly limit of station produced, thence in a southwesterly direction across portion of northwestern quarter of section 36, township 12, range 7, east across road allowance to and into the premises of J. L. Turner. (\*\*\*Elication 6376.)

Application granted. Order issued.

1251. Application of the Canadian Pacific Railway Company, under section 175 of the Railway Act, for an Order authorizing the construction, maintenance and operation of the branch line of railway or spur from a point on the centre line of the town siding of the applicant company, distant about 55 feet westerly from the head block of the said town siding, thence in a southtwesterly, southerly, and again southwesterly direction across part of the north meridian, across and along the road allowance to and into the northwest quarter of section 36, township 12, range 7, east principal meridian, in the province of Manitoba, a total distance of about 2,280 feet. (Application 1155.)

No Order made, as the Order in previous application covers this also.

1252. Complaint of Winnipeg Elevator Company, Limited, respecting certain charges made by the Canadian Pacific Railway for drawing plans, preparation of leases of elevator sites, &c. (Application 8530.)

Application refused. Board has no jurisdiction.

1253. Application of the city of Winnipeg, Manitoba, for an Order authorizing them to construct a bridge between Brown and Brant streets, in the city of Winnipeg. over the yards of the Canadian Pacific Railway, and directing the railway company to contribute towards the cost of construction of said bridge such sums as to the Board seems just. (Application 5729.)

Application dismissed.

1254. Application of the Canadian Pacific Railway, under section No. 237 of the Railway Act, for authority to lay tracks across the read allowance on its Molson branch between mile 99 and mile 124. (Application 7653.)

Application granted. Order issued.

1255. Application of the corporation of the city of Winnipeg, Manitoba, under the Railway Act, for authority to connect the tramway of the city of Winnipeg, running from Lac du Bonnet to Point du Bois, with the branch of the Canadian Pacific Railway Company running from Molson to Lac du Bonnet (Application 6845. Case 2927.

Application dismissed.

1256. Application of the city of Winnipeg, Manitoba, under section 237, for an Order directing the Canadian Pacific Railway Company to provide and construct a suitable highway crossing over its line of railway between Talbot avenue and Carter avenue, or in the alternative to allow the city to construct such crossing or for such order as to the Board seems just. (Application 8223. Case 3769.)

Order made granting applicant leave to construct crossings over Louise bridge spurs at Talbot, Chalmers, Poplar and Gordon streets and over Selkirk branch at Talbot, Chalmers and Nairn streets, expenses to be borne by the city of Winnipeg.

1257. Application of the city of Winnipeg, Man., for Order directing the Canadian Pacific Railway to remove its tracks from McPhillips street, Winnipeg, Manitoba. (Application 2050.)

Stands at request of applicant to arrange a settlement.

1258. Complaint of the Hanbury Manufacturing Company of Brandon, Man., alleging discrimination in favour of Winnipeg on shipments to points on Regina branch of Canadian Northern Railway via Regina, from Brandon and Winnipeg, Man. (Application 7308.)

Application dismissed. Complaint settled.

1259. Petition of the secretary of the Board of Trade and residents of Welwyn, Sask., that the Canadian Pacific Railway Company appoint and maintain a permanent agent at that point. (Application 9274.)

Withdrawn by applicant.

1260. Complaint of the Manitoba Grain Growers' Association, of Kelloe, Manitoba, against the Canadian Pacific Railway Company removing its agent from that point. (Application 9115.)

Application dismissed.

1261. Petition of residents of Basswood and surrounding district that the Canadian Pacific Railway Company be required to keep the station at that point open permanently and provide an agent therefor. (Application 9126.)

Counsel stated the company is appointing agent at Basswood.

1262. Complaint of George Steel, Glenboro, Manitoba, of failure of the Canadian Pacific Railway to furnish an efficient and proper supply of cars for the movement of grain traffic from that point. (Application 8808.)

Application dismissed.

1263. Complaint of the Swan River Board of Trade, of Swan River, Man., alleging failure of the Canadian Northern Railway to furnish cars for prompt and efficient movement from that point. (Application 4824.)

Application dismissed.

1264. Complaint of M. McGregor, of Tilston, Man., on behalf of the farmers and citizens of that town against the poor service of the Canadian Pacific Railway between Lauder and Tilston, Man. (Application 9125.)

Application dismissed.

1265. Application of the Williams Quarry Co., Ltd., of Winnipeg, Man., for an Order directing the Canadian Pacific Railway Company to remove illegal and unjust

discrimination in freight rates on shipments of the products from their quarry at Airedale, Man., to Winnipeg, Man. (Application 8494. Cace No. 3956.)

Application dismissed.

1266. Complaint of the Manitoba Grain Growers' Association, alleging that the Canadian Pacific Railway Company and Canadian Northern Railway Company charge excessive freight rates on bulkheaded cars of grain going to Fort William and Port Arthur, Ont. (Application 8688.)

Application dismissed.

1267. Application of the Kemp Manufacturing Company and Winnipeg Ceiling and Roofing Company, for an order directing the railway companies to equalize their freight rates on metallic shingles and sidings from eastern points to points in Manitoba, Saskatchewan and Alberta, as against the freight rates charged on the manufactured product. (Application 4756. Case No. 1460.)

Application dismissed.

Note.—Since dismissal applicants have applied to have case reinstated and the request was granted and the matter heard in Winnipeg, March 10, 1909, and stands for judgment.

1268. Complaint of Grain Growers' Association, Winnipeg, alleging long delay on the part of the railways in repayment to shippers of grain for lumber supplied for

car doors. (Application 8483.)

Order made that where shippers upon railways subject to the jurisdiction of the Board in the provinces of Manitoba, Saskatchewan and Alberta are compelled to furnish car doors to enable cars to be used for traffic, allowance is to be made therefor upon the following basis: (1) Lower car door, one dollar; (2) upper car door, fifty cents; and adjustment upon the above basis shall be made by the agent at or nearest to the point of shipment by (a) at the time of shipment, payment to the shipper of the account out of funds of the railway company, of which he is agent, in his hands; or (b) the shipper may deduct from the freight charges, if any, payable by him upon the shipment in such car for which the said door or doors were so supplied, the amount of such bill upon the foregoing basis, receipting the same and turning the account into the agent as so much cash.

1269. Application of the Winnipeg Jobbers' and Shippers' Association, of Winnipeg, Man., for an order requiring railway companies to provide car-load rating from castern Canada points to Winnipeg, Man., on blankets. (Application 4603. Case 1313.)

Application refused.

1270. Application of the Western Live Stock Shippers' Association, under sections 284 and 317 of the Railway Act, for an Order directing the Canadian Pacific Railway Company and the Canadian Northern Railway Company to furnish certain facilities for the receiving, unloading, accommodation and transportation of live stock. (Application 8234.)

Note.—This case is specially set down for February 3, 1909.

Referred to Board's operating assistant to inspect and investigate in May or June. 1271. Application of the Western Live Stock Shippers' Association, under section 323 of the Railway Act, for an Order directing the railway companies to reduce: (a) The existing freight tariff for cattle and live stock from points in the provinces of Alberta, Saskatchewan and Manitoba to Winnipeg. (b) The minimum car weight of hogs from 20,000 pounds to 16,000 pounds. (Application \$233. Case 3773.)

Stands for judgment and for report of Chief Traffic Officer of Board.

1272. Application on behalf of Joseph Lemon and others for an Order providing that liability for loss or damage to shipment of horses shall not be limited to \$100 for each animal, but that fair value shall be recovered. (Application 8214. Case 3761.)

By agreement complaint dropped and matter to go to the Canadian Freight Association,

1273. Complaint of R. S. Robinson, of Winnipeg, Manitoba, against the restriction imposed by the Dominion Express Company in the carriage of furs to Great Britain by charging excessive rates for insurance on goods. (Application 8859.)

Reserved until general question of express rates dealt with.

1274. Application of the Canadian Northern Express Company with respect to division of earnings on what is referred to by the Canadian Northern and Dominion Express Companies as special traffic matter, embracing packages not over seven pounds, and certain printed matter carried in competition with the post office, shipped from points east of Sudbury or North Bay to northern points west of Winnipeg; subsection 5, section 'C,' page 18 of the Express' Freight Classification for Canada, No. 1 revised to August 1, 1905. (Application 4397.)

Reserved until general question of express rates dealt with.

1275. Complaint of Denmark & Burton, of Langenburg, Saskatchewan, alleging excessive rates charged by the Dominion Expresss Company on cream shipments. (Application 8539.)

Application dismissed.

1276. Complaint of Manitoba 'Free Press,' Telegram Printing Company, and Tribune Publishing Company, of Winnipeg, Manitoba, respecting rates charged by express companies for the carriage of newspapers. (Application 8555.)

Reserved until general question of express rates dealt with.

1277. Complaint of the Winnipeg Jobbers and Shippers' Association of Winnipeg, Manitoba, alleging excessive express rates and unfair classification of express companies doing business in western provinces. (Application 4798.)

Reserved until general question of express rates dealt with.

1278. Application of the Express Traffic Association for an Order permitting them to file for approval express freight classification, graduated rate tables, money classification, C.R.C. Nos. 1, 2 and 3, for Canadian business; and to withdraw Canadian classification and money classification, C.R.C. Nos. 1 and 3 filed on March 1, 1907 (Application 4397. Case 3693.)

Stands for judgment.

1279. Approval of tariffs of tolls of express companies pursuant to the provisions of section 348 of the Railway Act. (Application 4214. Case 1503.)

Stands to be dealt with when general question of express rates is disposed of.

1280. Application of W. R. Ritchie, of Winnipeg, Manitoba, for an Order compelling the Canadian Northern Railway to either proceed to arbitration or withdraw the registration of their location where the same affects his property on lots 33 and 34. block 8, D.G.S. 30, St. Boniface, Man.

Application granted. Order issued.

1281. Complaint of the Winnipeg Board of Trade, respecting alleged demand of the Canadian Pacific Railway, that shippers in Winnipeg sign a release form for freight shipped to regular or flag stations. (Application 2338.)

Order made, that from February 8, 1909, the form of release of responsibility for freight shipped to flag stations, upon the lines of all railways in Canada, subject to

the jurisdiction of the parliament of Canada, be in the following form:-

'In consideration of the Railway Company having received the above described property for transportation from

station to station

do hereby release said company from all loss or damage that may occur to any of the above mentioned property after it has been unloaded from the ears at station, the said station being a flag station without agent.'

It is also Ordered that no other form of release shall be required to be signed by any shipper of any property to any flag station upon any line of railway in Canada until further Order (if any) regarding facilities and conveniences to be established by railway companies at flag stations.

1282. Complaint of Jefferson Cowerly, of Bowsman, Manitoba, respecting train service and condition of the Melfort branch of the Canadian Northern Railway. (Application 2145 and 2192.)

Application dismissed.

1283. Petition of the legislative assembly of Manitoba, asking that railways operating in the province of Manitoba be required to pay demurrage in all cases where such companies are not able or fail to furnish cars within one week after being ordered, said demurrage to be at the same rate per day as charged by railway companies when a car is not loaded in a given time after being placed at a loading platform or elevator, and to be deducted from the freight rate. (Application 4235.)

Stands at request of Attorney General for province of Manitoba until next sit-

tings of Board in Winnipeg.

1284. Complaint of the Nepigon Bay Fish Company and other shippers at fish shipping points along the north shore of Lake Superior, of refusal to the Canadian Pacific Railway and Dominion Express Company to carry fish on passenger trains. (Application 4910.)

Application dismissed.

1285. Application of D. A. Keizer, C.E., engineer of the municipality of St. Pauls, for authority to lay a culvert under the tracks of the Canadian Pacific Railway at Rossmore avenue, lot No. 3, St. Paul's parish. (Application 2433.)

Application dismissed.

1286. Complaint of the Manitoba branch of the Canadian Manufacturers' Association, respecting rates of express companies doing business in western Canada.

Reserved until after general question of express rates dealt with.

1287. Complaint of Geo. W. Jones Company respecting delivery limits of express companies doing business in Winnipeg, Manitoba, and extra charges for delivery of shipments beyond such delivery limits.

Reserved until after general question of express rates dealt with.

1288. Complaint of the municipal council of the town of Dauphin, Manitoba, alleging neglect of the Canadian Northern Railway Company to build suitable crossings, fences and cattle-guards on its Winnipegosis and Swan River sections. (Application 9289.)

Stands to be treated as an application to compel Canadian Northern Railway Company to fence their line and to be dealt with by general order of Board at May

sittings, Ottawa.

1289. Application of Thomas Littlejohn, of Crandall, Manitoba, under section No. 253 of the Railway Act, for an order directing the Grand Trunk Pacific Railway to provide and construct a suitable farm crossing where the company intersects his farm in section 29, township 13, range 25, Manitoba. (Application 9275. Case 4456.)

Application granted.

1290. Application of the Grand Trunk Pacific Railway Company to compel the municipalities of Miniota and Hamiota to remove wires which have been placed across the tracks of the company without the authority of the Board. (Application 9221.)

Upon consent of applicant company, matter stands, Board granting permission to municipality to file application under section 246, Railway Act, to carry wires

over Grand Trunk Pacific Railway tracks.

1291. Complaint of Manitoba Wind Mill and Pump Company, Brandon, Manitoba, re the express rates and service of the express companies doing business in the west.

Reserved until after the general question of express rates is dealt with.

1292. Petition of people from Rosenfeld that Canadian Pacific Railway bridge over Buffalo lake causes damage to lands from flooding.

Reference to Board's engineer; the applicants to notify him when to go and inspect.

1293. Complaint of John Bearns, Limited, Winnipeg, Manitoba, respecting express rates and service.

Reserved until after the general question of express rates dealt with.

1294. Complaint of the Winnipeg Wholesale Implement Association, respecting rates charged by express companies operating in western Canada.

Reserved until after the general question of express rates is dealt with.

1295. Application of the city of Winnipeg for an Order directing the Canadian Northern Railway Company to provide proper protection where its railway crosses Pembina street, Winnipeg. (File 1124. Case 406.)

Application dismissed.

1296. Application of the city of Winnipeg, Manitoba, for an Order approving of the plans of the Salter street bridge across the tracks of the Canadian Pacific Railway at Winnipeg. (File 3084.)

Standing for settlement between the parties.

1297. Application of the city of Winnipeg for an Order directing the Canadian Pacific Railway, Canadian Northern Railway, and the Grand Trunk Pacific Railway companies and other companies operating trains to prevent the unnecessary and unreasonable emission of smoke from engines, and for an Order prohibiting whistling by locomotives within the city. (File 9346. Case 4489.)

Order made and issued dealing with emission of smoke and prohibiting unreason-

able and unnecessary whistling.

1298. Complaint of D. L. Stewart on behalf of the village of Rosenfeld, Man., regarding the stopping or obstructing of a water course by the Canadian Pacific Railway Company. (Application 9515.)

Stands for report of Board's engineer. Applicants to notify engineer when he is

to go to make inspection.

1299. Complaint of the city of St. Boniface under section 26 of the Railway Act, that the Canadian Northern Railway Company has failed to comply with the Order of the Board, dated October 16, 1905. (File 1413.)

Application dismissed as arrangement made between the parties.

1300. Complaint of the Anchor Elevator and Warehousing Company regarding the interpretation given by the Canadian Northern Railway Company of tariff C. N. No. 462 dealing with switching charges between the Canadian Northern Railway and sidings on the Canadian Pacific Railway in Winnipeg. (Application 9816.)

Judgment of Board that \$5 charge is reasonable and tariff should be filed accordingly. That tolls in excess of \$5 already paid cannot be refunded. Canadian Pacific

Railway Company added as a party respondent.

1301. Complaint of the Northern Elevator Company regarding switching charges on grain consigned from Canadian Northern points to complainant's terminal elevator on Canadian Pacific Railway tracks in Winnipeg.

See judgment in application No. 9816 immediately preceding.

1302. Petition of residents of the districts of Silver Plains, Manitoba, regarding train service to Winnipeg on the Great Northern Railway.

Order made directing trains to stop at St. Agathe.

1303. Application of A. E. Hill, of Griswold, Man., for an Order directing the Canadian Pacific Railway Company to issue 1,000 mile ticket at \$25 to travel over the western division and branch lines in Manitoba, Saskatchewan and Alberta.

Application dismissed.

1304. Complaint of H. H. Shields, of Melton, Man., against excessive rates charged by the Canadian Northern Railway Company for warehousing carload of wheat consigned to their warehouse at Port Arthur, Ont. (File 9022.)

Application refused.

1305. Application of M. McGregor, of Eagleton P.O., Tilston, Man., for a semi-weekly mail service by train instead of by stage or mail carrier system; for an Order

that an agent be placed at the station in question; and for an order directing the Canadian Pacific Railway Company to re-name the town 'Eagleton.'

Application dismissed.

1306. Application of city of Winnipeg to conduct sewer under Brown & Rutherford's spur, Canadian Pacific Railway, where same crosses Sutherland avenue, Winnipeg. (Application 9363. Case 4494.)

Application granted; order issued.

1307. Application of city of Winnipeg to construct sewer under West Selkirk branch of Canadian Pacific Railway where same crosses Aberdeen avenue, Winnipeg. (Application 9539. Case 4609.)

Application granted. Order issued.

1308. Application of city of Winnipeg to construct sewer under Winnipeg Transfer Railway (Canadian Northern Railway) where same crosses Lombard street, Winnipeg. (Application 9596. Case 4659.)

Application granted. Order issued.

1309. Application of the Canadian Northern Quebec Railway Company, under section 167, for approval of deviation of its railway in parish of Cap Sante, county of Portneuf, P.Q., between stations 1417—49 to 1473—39.7 west of Quebec bridge. (Application 668. Case 3725.)

Application granted. Order issued.

1310. Application of the Canadian Northern Ontario Railway, under section 159, for an Order approving of the location of its line of railway through the town of Trenton, county of Hastings, mile 144 to mile 146, west from Ottawa. (Application 3878. Case 1554.)

Application withdrawn.

1311. Application of the Canadian Pacific Railway, under section 26, for an Order directing the Ingersoll Electric Light and Power Company to remove forthwith twelve wires erected by the said electric company across the railway company's tracks in the town of Ingersoll, on the east side of Thames street, or for an order directing the said electric company to re-erect said wires forthwith and to maintain the same in accordance with the standard conditions and specifications respecting wire crossings sanctioned by the Board. (Application 1516. Case 4356.)

Order issued directing the electric company to re-elect their wires in accordance with conditions named by Board's electrical engineer. Work to be completed by 2nd April, 1909. Penalty of \$25 for every day default is made in complying with

terms of Order.

1312. Complaint of Owen Davidson, Almonte, Ontario, re alleged excessive whistling of engines of the Canadian Pacific Railway within the town of Almonte, Ontario. (Application 8426.)

Application dismissed.

1313. Application of the Canadian Pacific Railway, under sections 222 and 237, for an Order authorizing the construction, maintenance and operation of a branch line of railway or spur in the city of Montreal, commencing from a point on the centre line of the most westerly track leading to the freight car repair shop of the said company, distant about 250 feet northerly from the northerly end of freight car shop, thence in a southwesterly and northwesterly direction across De Levis street to and into the premises of the Montreal Gas Company, now leased to the Montreal Light, Heat and Power Company, situated on Cadastral lot 159 in the Hochelaga ward of the city of Montreal, a distance about 1,780 feet, together with another siding about 550 feet in length. (Adjourned hearing.) (Application 8152. Case 3708.)

Application granted, Order issued.

1314. Application of the Canadian Pacific Railway, under section 178, for authority to take lands adjoining its railway in the city of Montreal, P.Q., as shown on plan filed with the Board.

Lands adjoining Place Viger station. Application 9332. Withdrawn by Cana-

dian Pacific Railway Company.

1315. Application of the Canadian Pacific Railway, under section 29, for an Order of the Board No. 3242, in reference to the crossing of the National Transcontinental Railway and the Canadian Pacific Railway at St. Basile, P.Q. (Application 2642. Case 4455.)

Application dismissed.

1316. Application of the Export Lumber Company, Ottawa, Ontario, under sections 227 and 284, for an Order directing the Grand Trunk Railway and the Canadian Pacific Railway to provide a connection by a branch line between the sidings of these two companies at present constructed across Preston street and York street, Ottawa, Ontario, for the purpose of affording more adequate facilities for the applicant company. (Adjourned hearing.) Application 8791. Case 4139.)

Application refused.

1317. Application of the Export Lumber Company, Ottawa, Ontario, under sections 226 and 227, for and Order directing the Grand Trunk Railway to permit its siding, as constructed across Preston street, Ottawa, to be joined with proposed siding of the applicant company, in its lumber yard at Preston street, Ottawa, Ontario. (Adjourned hearing.) (Application 8790. Case 4138.)

Application granted. Grand Trunk Railway Company directed to permit siding

to be joined with proposed siding of the applicant as shown on plan filed.

1318. Application of the People's Telephone Company, Sherbrooke, province of Quelec, for an Order directing the Grand Trunk Railway to permit them to install telephones in ticket and freight offices of its railway at Richmond, Danville, Windsor Mills, Bromptonville, Sherbrooke, Lennoxville, Waterville, Compton, Coaticook, Dixville and Norton's Mills. (Application 8883. Case 4375.)

Judgment reserved. Subsequently general form of Order for this and like appli-

cations settled upon and order in this case granted.

1319. Complaint of McLennan & Company, Lindsay, Ontario, respecting freight rates charged by the Grand Trunk Railway on hard coal from Black Rock and Suspension Bridge, New York, to Lindsay, Ontario, as compared with the company's rates to Combray, Coboconk, Peterborough, Lakefield, Port Hope and Belleville, Ontario. (Application 7533.)

Order made directing the Grand Trunk Railway Company to reduce its rate on coal in carloads from Suspension Bridge, Bridge Rock and Buffalo, to Lindsay, Ontario, to \$1.15 per ton, 2,000 pounds, subject to a compliance with the provisions of

subsection 5 of section 315, Railway Act.

1320. Complaint of the Dominion Concrete Company, Limited, Kemptville, Ontario, respecting alleged failure of the Canadian Pacific Railway to refund money paid to the railway on account of private siding built to the applicant's industry. (Application 8758.)

Application dismissed.

1321. Complaint re Brockville train connection on Canadian Pacific and Grand Trunk Railway companies' lines.

Note.—This complaint is set down for the purpose of considering the terms of

proposed Order. (Application 5320. Case 2863.)

Stands pending the settlement of terms of proposed Order of Board.

1322. Complaint of J. L. Sundabe, of Hitchcook, Sask., that the Canadian Pacific Railway Company has refused to put in a crossing over the road allowance in section 22, township 3, range 9, west of the 2nd meridian. (Application 9127.)

No action taken as complainant states company have put in the crossing.

1323. Petition of settlers along the Pheasant Hills Branch of the Canadian Pacific Railway for a siding on or near N. E. 4 section 22, tp. 17, range 32, west of the 1st meridian, between Rocanville and Tantallon, Sask. (Application 7047.)

Application dismissed.

1324. Petition of the farmers and grain growers in Saskatoon county, Saskatchewan, for loading platform at a siding on section 8-36-6, W. 3rd, of the Goose Lake Branch, about nine miles southeast of Saskatoon. (Application 8404.)

Application dismissed.

1325. Application of the Board of Trade, of Heward, Sask., under section 237 of the Railway Act, for leave to construct a highway crossing over the Canadian Pacific Railway in the village of Heward, Sask. (Application 8092.)

Application granted, order made.

1326. Application of the Saskatchewan Local Improvement Association, of Grenfell, Sask., that the railway companies in the province of Saskatchewan be compelled to either fence their tracks or pay compensation in full for all damage done to stock by trains, and shall pay for all damage done to cultivated crops, hay, barns, &c., caused by their engines setting out fires. (Application 7434.)

Stands for judgment.

1327. Complaint of W. R. Jamieson, of Lumsden, Sask., of failure of the Canadian Northern Railway Company to fence its right of way. (Application 8765.)

Order made directing railway company to properly fence its right of way through

complainant's lands by 15th May, 1909.

1328. Complaint of W. O. Miller, et al, of Tessier, Sask., that they are unable to secure settlement from the Canadian Northern Railway Company for property taken for railway purposes situated in township 33, range 10, section 16, west of the 3rd meridian. (Application 9083.)

Application dismissed.

1329. Petition of W. H. Lawrence and other merchants and farmers of Aberdeen, Sask., for an Order directing that a crossing be built over the Canadian Northern Railway in the townsite of Aberdeen at Fifth avenue. (Application 8463.)

Order made for crossing in a line with Eight avenue extending south to south side of right of way of railway company to grade and construct a roadway along the

side of right of way to point opposite railway depot.

1330. Complaint of Charles Mann, of Lumsden, Sask., of failure of the Canadian Northern Railway Company to properly fence its right of way where it affects the northeast quarter section 21, township 19, range 21, west of the second meridian. (Application 8809.)

Order made for railway company to fence both sides of right of way on or be-

fore May 15, 1909.

1331. Application of Charles Mann, of Lumsden, Sask., under section 252 of the Railway Act, for an order directing the Canadian Norther. Railway Company to provide and construct a suitable farm crossing where the company's railway intersects his farm on lot southeast quarter section 31, township 19, range 21, Lumsden, Sask. (Application 8809. Case 4213.)

Order made for farm crossing work to be finished before July 1, 1909.

1332. Petition of the residents of Maryfield, Sask., requesting that the Canadian Pacific Railway Company and the Canadian Northern Railway Company erect and provide a union station at Mayfield, Sask. (Application 7813.)

Order made on consent for union station and joint facilities at Maryfield. Terms to be agreed upon by companies before May 1, 1909, and if not Board will settle on

application of any interested party.

1333. Application of the citizens and residents of the district of Zelma, Saskatchewan, for an order directing that the Grand Trunk Pacific Railway continue the operation of its line of railway in that district for the transportation of freight and passenger service; that the railway at once build and put in shape a crossing over its tracks opposite the main street in the new townsite known as Zelma, and erect and maintain a station house with necessary freight room accommodation. (Application 9294.)

Order made directing railway company to construct suitable and temporary crossing by 28th February, 1909, at Zelma near west side of Main street. Balance of petition dismissed.

1334. Application of the city of Saskatoon, Sask., for an Order directing the Canadian Northern Railway to creet, operate and maintain gates at the Spadina Crescent and Twenty-third streets, Saskatoon, Sask. (Application 8993. Case 4285.)

Order made for the gates at Twenty-third street to be erected by company, one-half of cost of maintenance borne by each, guard rail at Spadina Crescent to be put in by May 1, 1909.

1335. Application of the Board of Trade of Duadurn, Sask., under the Railway Act, for an Order directing the Canadian Northern Railway Company to provide crossings over their tracks through the yard at Dundurn, Sask. (Application 8965. Case 4261.)

Order made in accordance with agreement at hearing.

1336. Application of the Canadian Northern Railway Company, under section 45, for an Order setting aside order of the Board dated 29th day of November, 1907, authorizing the village of Dundurn to construct a highway over the track of the Canadian Northern Railway Company. (Application 5272. Case 1882.)

Order made in accordance with agreement at hearing.

1337. Petition of Dundurn Board of Trade, and of residents of Dundurn, Saskatchewan, that the Canadian Northern Railway be required to provide additional siding accommodation for the handling of freight traffic at that point. (Application 6919.)

Order made in accordance with agreement reached at hearing.

1338. Application of the Canadian Northern Railway Company, under section 227 of the Railway Act, for authority to connect the tracks of its Brandon-Regina branch with the tracks of the Canadian Pacific Railway Company (Arcola branch) at a point on northwest quarter section 20, township 17, range 10, west of the 2nd meridian. (Application 6003. Case 2542.)

Order made on consent. Engineer to inspect the plans.

1339. Application of the Canadian Pacific Railway Company, under section 222 of the Railway Act, for authority to construct, maintain and operate a branch line of railway in the city of Regina, from a point on the northerly boundary of the station grounds of the railway company between Broad and Rose streets, thence in a northerly direction across Dewdney street and Eighth avenue, along lane running parallel to and between Board street and Rose street to the southerly limit of Seventh avenue, a distance of about 1,500 feet, together with five other branch lines of railway or spurs commencing from the first mentioned spur. (Application 6648. Case 2809.)

Application dismissed.

1340. Application of the Canadian Pacific Railway Company, under section 237 of the Railway Act, for authority to lay its tracks across highways on Hudson's Bay Mining Company's spur at Bienfait, Sask. (Application 4545. Case 2799.)

No order made.

1341. Application of the city of Regina, Sask., under sections 237 and 238 of the Railway Act, for an order directing the Canadian Pacific Railway Company to provide and maintain a suitable subway where the company's railway intersects Broad street in the city of Regina, Sask. (Application 8747. Case 4112.)

Application dismissed.

1342. Application of the city of Regina, Sask., for an Order authorizing a change in the location of Hamilton street, where it crosses the tracks of the Canadian Pacific Railway Company to the station grounds, Regina, Sask. (Application 999.)

Application dismissed.

1343. Application of the city of Regina, for an Order under sections 237 and 238, directing construction of subway at Albert street, Regina, by the Canadian Pacific Railway. (Application 8748. Case 4113.)

Application granted. Order issued.

1344. Application of the Board of Trade of Regina, Sask., that the Canadian Pacific Railway Company and the Canadian Northern Railway Company provide and construct a union station in the city of Regina, Sask. (Application 5166.)

Application refused.

1345. Application of the Canadian Pacific Railway Company for an Order, under section 29, varying order of the Board dated 4th July, 1907 (No. 3245), so as to provide that the fireguards to be constructed in the provinces of Alberta and Saskatehewan under clauses No. 8 and No. 9 of the said Order, be constructed as follows:—

That two strips of land not less than eight feet in width be ploughed on each side of the railway at a distance of not less than 300 feet from the centre line of the railway, and that a clear space of 20 feet be maintained between the said strips, which space shall be burned over and afterwards kept free of flammable material.

The company further applies, pursuant to the provisions of paragraph 11 of the said Order, for a direction that it shall not be required to establish and maintain such fireguards on such portions of its lines of railway in the provinces of Alberta and Saskatchewan where the nature of the country renders it impossible or impracticable to do so, or where the doing so would involve serious loss and damage to property. All such space and portions of land being shown on the plans submitted. (Application 4741. Case 1859.)

Note.—This application has also been set down for hearing at Edmonton, Al-

berta, on 19th February, 1909.

Stands for further consideration and evidence.

1346. Complaint of J. R. Standen and other residents of Osage, Saskatchewan, alleging that the Canadian Pacific Railway propose closing its station at that point, and asking that the railway company be required to continue to maintain its station at that point. (Application 9204.)

Complaint withdrawn.

1347. Complaint of Rosaleigh school district, No. 820, of Frobisher, Saskatchewan, of failure of Canadian Pacific Railway to provide station agent or operator at Hirsch, Saskatchewan. (Application 9268.)

Application dismissed.

1348. Complaint of the Elstow Board of Trade, Elstow, Saskatchewan, alleging delay on the part of the railway companies in the transportation and delivery of coal shipments at Elstow, Saskatchewan. (Application 8637.)

Application dismissed.

1349. Complaint of Ben Yake, of Moosejaw, Saskatchewan, alleging overcharge on shipment of settlers' effects from Mount Forest to Moosejaw, Saskatchewan. (Application 9137.)

Order made permitting Canadian Pacific Railway Company to make refund of overcharge admitted.

1350. Complaint of the Board of Trade of Strasburg, Saskatchewan, respecting freight rates charged by the Canadian Pacific Railway Company on lumber shipments to Strasburg, Saskatchewan. (Application 2671.)

Complaint withdrawn.

1351. Application of the Board of Trade of Guernsey, Saskatchewan, for an Order directing the Canadian Pacific Railway Company to give to Guernsey a lower rate on grain to the terminal elevators at Fort William than at present furnished. (Application 8525.)

Application dismissed.

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1352. Application of the Board of Trade of Alameda, Saskatchewan, alleging excessive freight rates charged by the Canadian Pacific Railway Company on coal to that point. (Λpplication 9209. Case 4408.)

Order made that railway company substitute for its present rates on coal, in carloads, from Bienfait, Saskatchewan, to the points named, the rates per ton of 2,000 lbs. as follows:—

From Bienfait to	R	ates.
Hirsch, Sask	\$	0 50
Frobisher, Sask	(	0 50
Alameda, Sask		0 70
Oxbow, Sask	(	0 75
Glen Ewen, Sask	(	0 80
Carnduff, Sask		0 85
Carievale, Sask	1	0 85
Gainsborough, Sask	(	0 90
Pierson, Man	(	0 90
Elva, Man	(	0 95
Melita, Man	1	0 95
Napinka, Man		1 00
Lauder, Man		1 05

Also Ordered that rates from other stations or colleries contigous to Bienfait, and to all other stations where dislocation of customary basess may ensue from the changes ordered, be graduated proportionately to those from Bienfait and to the points of consumption herein designated. Also Ordered that application for reduction in the minimum weight of twenty tons per car be dismissed.

1353. Complaint of W. B. Bashford, of Rosthern, Saskatchewan, alleging excessive freight rates of the Canadian Northern Railway on coal from Taber, Alberta, to Dalmeny, Saskatchewan. (Application 7740.)

Order made requiring Canadian Northern Railway and Canadian Pacific Railway to file a joint tariff on coal from Taber to Dalmeny at the same rate as from Taber to Rosthern.

1354. Complaint of the Saskatchewan Grain Growers' Association of Indian Head, Saskatchewan, alleging excessive freight rates on lumber and coal shipments. (Application 4463.)

Application dismissed.

. 1355. Complaint of the Eureka Coal and Brick Company of Estevan, Saskatchewan against discrimination by the Canadian Pacific Railway Company, in freight rates and switching charges on their products in favour of Pinto, Roche Percee and Bienfait, Saskatchewan. (Application 7037.)

Stands for judgment.

1356. Complaint of Stockton & Mallinson, wholesale fruit and produce merchants of Regina, Saskatchewan, alleging that the rate charged by the Canadian Pacific Railway Company on shipments of oranges from points in the State of California, in the United States of America, to Regina, is unreasonable, as compared with the rate charged from the said points in California to points in the provinces of Manitoba and Ontario. (Application 6622.)

Order made directing the Canadian Pacific Railway Company to arrange with its connections for publication of new tariff from California shipping points to Regina via King's Gate or Emerson on basis of \$1.60 per 100 pounds from Los Angeles points, on oranges in straight carloads; or on mixed carloads of oranges and lemons \$1.45 per 100 pounds upon lemons in straight carloads.

1357. Complaint of Rosthern Board of Trade, of Regina, Saskatchewan, respecting alleged excessive rates on the Canadian Northern Express Company and Dominion Express Company's lines. (Application 4703.)

Judgment reserved pending disposition of general question of express rates.

1358. Complaint of the Board of Trade of Saskatoon, Saskatchewan, alleging excessive express charges on the express companies' lines from Winnipeg to Saskatoon. (Application 4796.)

Judgment reserved, as above.

1359. Complaint of J. M. Grover, Rosthern, Saskatchewan, respecting alleged express charges made by Dominion Express Company on box shipped from Birnie, Manitoba. (Application 7756.)

Settled by Canadian Northern Express Company undertaking to remit \$3.70 ex-

cess charges.

1360. Application of the town of Indian Head, under section 250 of the Railway Act, for authority to construct and maintain a ten inch water pipe across the property and under the tracks of the Canadian Pacific Railway Company in the town of Indian Head, Saskatchewan. (Application 2510.)

Application granted. Order issued.

1361. Petition of Wm. Hoskin, Jas. Butler and others that the Canadian Pacific Railway Company be required to provide a crossing near the company's yard at Twentieth street, Saskatoon, Saskatchewan. (Application 2632.)

Application dismissed. Settled between the parties.

1362. Complaint of L. F. Dosse of Denholm, Saskatchewan, that the Canadian Northern Railway have failed to provide proper station accommodation at that point in accordance with Order of the Board No. 5021, dated July 7, 1908. (Application 6686.)

Order made directing railway company to maintain station at Denholm on location to be approved by Board, to be constructed and equipped by November 1, 1907.

1363. Complaint of Chester L. Mintminick of Churchbridge, Saskatchewan, that the Grand Trunk Pacific Railway has taken seventeen and a third acres of his property at Churchbridge, Saskatchewan, but have failed to pay for the same. (Application 3398.)

Application dismissed. Settled between parties.

1364. Complaint of Local Improvement District 21-J-3, through David Mitchell of Maymont, Saskatchewan, that the Canadian Northern Railway has not put in all crossings in that municipality. (Application 3230.)

Order made directing railway company to provide crossings at points set out in Order and to widen certain other crossings. Work to be done by June 23, 1909. Crossings to be in accordance with Board's general regulations.

1365. Complaint of the Board of Trade of Prince Albert, Saskatchewan, alleging excessive express rates on parcels to and from Prince Albert, Saskatchewan. (Application 5795.)

Application withdrawn.

1366. Petition of the residents of Rush Lake, Saskatchewan, that the Canadian Pacific Railway Company be required to construct a highway across its tracks at Rush Lake Yard. (Application 6997. Case 3028.)

Order made for road allowance to be opened and crossing put in by company.

1367. Complaint of Macdonald & Co., of Fort Qu'Appelle, Saskatchewan, regarding express rates, delays in delivery, &c.

Application dismissed.

1368. Complaints of the Board of Trade of Saskatoon and others commercially associated with Saskatoon, regarding express companies.

Judgment reserved pending disposition of general question of express rates.

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1369. Complaint of the Nelson Ford Lumber Company, Limited, and the International Elevator Company, Limited, of Estevan, Saskatchewan, regarding the service furnished to them by the Canadian Pacific Railway Company over a spur commercial track built across blocks 7 and 11 in the townsite of Estevan. (Application 9348.)

Order made that, upon payment by the parties liable of all arrears of rental for the spur and upon signing of siding agreement, the railway company to remove west-

erly connection and establish easterly connection.

1370. Complaint of Local Improvement District 18 B-3, Saskatchewan, that the railway companies have not left the road crossings in proper state for safe crossing for vehicles, &c. (Application 9144.)

Order made directing the railway company to make the crossing in question conform to the requirements of the general regulations of the Board affecting highway

crossings dated January 26, 1909.

1371. Complaint of Local Improvement District 17-M-2, Saskatchewan, regarding the failure of the Canadian Northern Railway Company to plank two crossings referred to in the complaint. (Application 8016.)

Order made directing Canadian Northern Railway Company to plank crossings

by June 15, 1909, and to build fence. Question of further protection reserved.

1372. Complaint of the Golden Lion Brewing Company, Limited, Prince Albert, Saskatchewan, against the Canadian Northern Railway Company, as to the unsatisfactory state of affairs in connection with the shipping of perishable goods from that city during the winter months. (Application 9354.)

Stands for judgment. General Manager Canadian Northern Railway states that

heated cars will be restored in another week.

1373. Application of Hugh Miller for an Order, requiring the Canadian Northern Railway Company to fence its right of way through the N.W. 4, 26-19-22, W. 2nd meridian.

Order made requiring company to fence both sides of right of way on or before May 15, 1909.

1374. Petition of residents of the district of Condie, Saskatchewan, for an Order that the Canadian Northern Railway Company erect a station and freight shed at Condie, Saskatchewan. (Application 9606. Case 4663.)

Order made that the Canadian Northern Railway Company on or before June 1, 1909, erect and maintain a suitable and proper station of the third class at Condie and

place an agent in charge.

1375. Application of the city of Medicine Hat, Alberta, for an Order, under section 187 of the Railway Act, that the portion of the land opposite the intersection of Main street with the right of way of the Canadian Pacific Railway Company in the city of Medicine Hat is a public highway and a portion of Main street (so-called) and for other purposes. (Application 3321. Case 10.)

Order made declaring present crossing a highway and authorizing railway com-

pany to open, and dedicate.

1376. Application of the city of Medicine Hat, Alberta, under section 237 of the Railway Act, for an Order authorizing the construction of a highway crossing over the Canadian Pacific Railway Company's Railway at River street, in the said city of Medicine Hat, or for the construction of a subway at the said crossing of River street aforesaid. (Application 5917. Case 2490.)

Order made for highway to be constructed at River street.

1377. Application of the city of Medicine Hat, Alberta, under section 237 of the Bailway Act, for an Order authorizing the construction of a pedestrian subway from the intersection of Toronto street with North Railway street under the right of way of the Canadian Pacific Railway Company to the intersection of Toronto street with South Railway street, Medicine Hat, Alberta. (Application 5915. Case 2488.)

Order made granting leave to city to construct subway at Toronto street at its

own expense. Plans to be prepared by city and submitted to railway company.

1378. Application of the city of Medicine Hat, Alberta, for an Order, under section 237 of the Railway Act, authorizing the construction of an overhead bridge from Ottawa street on the south side of the right of way of the Canadian Pacific Railway Company to Ottawa street on the north side of the said right of way. (Application 5916. Case 2489.)

Application dismissed.

1379. Consideration by the Board of the question of better prot ; ion at the crossing of the Grand Trunk Railway Company's railway over Depot street in the village

of Grimsby, Ontario. (Application 9374.)

Order made that Depot street crossing be protected by gates to be provided and watched by and at the expense of Grand Trunk Railway Company on or before 1st May, 1909, gates to be in charge of a day and night watchman. Wages of watchmen and maintenance of gates to be borne, 80 per cent by Grand Trunk Railway Company, 10 per cent by village of Grimsby, 10 per cent by township of North Grimsby. Pending the installation of gates, Grand Trunk Railway Company to keep a day and a night watchmen at crossing at its own expense.

1380. Application of the Canadian Pacific Railway Company under section 178, for authority to take additional lands adjoining its Place Viger yards, in the city of Montreal, province of Quebec, as shown on plan filed with the Board. (Application

9350. Case 4491.)

Order made granting application.

1381. Application of the Canadian Pacific Railway Company under section 178 of the Railway Act, for authority to take additional lands at Windsor street yard, Montreal, province of Quebec. (Application 9332. Case 4467.)

Order made granting application.

1382. Application of the municipality of Didsbury, under section 237 of the Railway Act, for leave to construct and maintain a highway crossing across tracks and right of way of the Calgary and Edmonton Railway Company, within the town of Didsbury, as a continuation of Hespeler street, within the same town, eastwardly, where such continuation would cross the right of way of the railway. (Application 8933. Case 4235.)

Order made granting leave to Didsbury to open up at its own expense a highway crossing in the line of Hespeler street, extended existing crossing at Waterloo street to remain.

1383. Application of Robert Lake, under section 250, for authority to cross tracks of the Canadian Pacific Railway with water pipe at road allowance N.E. 4 section 34, township 7, range 4, west 5th meridian, township of Blairmore. (Application 8131. Case 3697.)

Application granted. Order issued.

1384. Application of the city of Calgary, under section 250, for authority to lay an 8-inch water main under tracks and station grounds crossing at 13th street east, Calgary, Alta. (Application 5542.)

Application granted. Order issued.

1385. Application of the city of Calgary, under section 250, for authority to lay a 12-inch water main under tracks of the Canadian Pacific Railway, at First street west, Calgary, Alta. (Application 5435. Case 2046.)

Application granted. Order issued.

1386. Application of the city of Calgary, under section 250, for authority to lay a 12-inch water main under the tracks of the Canadian Pacific Railway at 4th street west, Calgary, Alta. (Application 5436. Case 2047.)

Application granted. Order issued.

1387. Application of the city of Calgary, under section 250, for authority to lay a 10-inch water main under tracks at 11th street west (Canadian Pacific Railway), Calgary, Alta. (Application 5438.)

Application granted. Order issued.

1388. Application of the city of Calgary, under section 250, for authority to lay sewer pipes under tracks of the Canadian Pacific Railway at 5th street west, Calgary, Alta. (Application 5439.)

Application granted. Order issued.

1389. Application of the city of Calgary, under section 250, for authority to lay a 16-inch water main under tracks of the Canadian Pacific Railway at 8th street west, city of Calgary, Alta. (Application 5437.)

Application granted. Order issued.

1390. Application of the city of Calgary for an order, under section 237 of the Railway Act, for an agreement between the city of Calgary and the Canadian Pacific Railway, dated 13th December, 1906, and an order of the Board bearing same date, with respect to subway at Osler street and First street east, Calgary, under the tracks of the Canadian Pacific Railway. (Application 4659. Case 1366.)

Application dismissed.

1391. Complaint of Thomas Fitzgerald, of Crossfield, Alberta, that the train employees of the Canadian Pacific Railway Company in that district are employed an excessive length of time on continuous duty. (Application 9272.)

Application dismissed.

1392. Complaint of J. McLoughlin, High River, Alta., alleging excessive freight rates charged on Canadian Pacific Railway from Pincher Creek to Spokane, Washington. (Application 9194.)

Stands for further consideration.

1393. Complaint of Charles Knight, Calgary, Alberta, against the Canadian Pacific Railway, as follows:—

(1) Alleged discrimination in live stock rates from Strathmore to Hochelaga; also from

(2) Calgary, Gleichen, Cowley, Lacombe, Okotoks, Lethbridge, Cardson, Carstairs, Airdrie and other points in Alberta to Hochelaga, Toronto and Winnipeg.

(3) Alleged discrimination between the complainant and P. Burns & Company from various other stations in Alberta to various other stations on the company's lines, shipped under substantially similar circumstances and conditions. (Application 3730.)

Application dismissed.

1394. Complaint of Linton & Hall, Calgary, alleging excessive express charges by Dominion Express Company from Worcester, Massachusetts, to Calgary. (Λpplication 6523.)

Reserved pending disposition of general question of express rates.

1395. Complaint of Brice H. Bunny, of Crawling Valley, Gleichen, Alberta, respecting rates and freight charges of the Canadian Pacific Railway on a registered Percheron stallion from Minnesota Transfer to Gleichen, Alberta, shipped in May, 1907.

Stands for consideration.

1396. Application of the city of Calgary, Alberta, under section 237 of the Railway Act, for authority to cross the spur of the Canadian Pacific Railway on Second street, east, with the tracks of the Calgary Street Railway, Calgary, Alberta. (Application 9306. Case 4463.)

Application granted. Order issued.

1397. Application of the city of Calgary, under section 228 of the Railway Act, for an order authorizing the making and construction of a crossing of the Canadian Pacific Railway Companys' spur track on Second street east, Calgary, by the street railway about to be constructed in that city. (File 9349. Case 4490.)

Application granted. Order issued.

1398. Application of the Western Canada Pressed Brick and Tile Company, Limited, and the Pugh & Livingstone Lumber Company, Limited, for an order, under

section 226 of the Railway Act, directing the Canadian Pacific Railway Company to grant and construct a siding on the north side of its main line immediately west of Okotoks, Alta., and for the grant and construction of a spur from the said siding of the kilns of the Western Canada Pressed Brick and Tile Company, Limited.

Application granted. Order issued.

1399. Application of the Okotoks Milling Company, Limited, for an order under section 226 of the Railway Act directing the Canadian Pacific Railway Company to grant and construct a spur from the main line of the Canadian Pacific Railway on the north side thereof from a point on the said main line in the yards of the said railway company at Okotoks, east of the mill building of the applicant company, to a point immediately in front of and south of the mill belonging to the applicant company at Okotoks.

Application granted. Order issued.

1400. Complaints of the Calgary Board of Trade regarding telegraph rates.

Withdrawn.

1401. Complaints of the Calgary Board of Trade regarding discrimination against Calgary in the present local express tariff; also a complaint regarding local freight shipments.

Reserved pending disposition of general question of express rates.

1402. Complaint of C. R. Dixon, president C. R. Dixon & Company, Limited, regarding slow freight service on perishable produce to British Columbia points.

Withdrawn.

1403. Application of the town of Vegreville, Alberta, under section 237 of the Railway Act, for Order granting leave to the municipality to construct and maintain a suitable highway crossing over the tracks of the Canadian Northern Railway at Main street in the town of Vegreville, Alberta. (Application 7748. Case 3482.)

Application withdrawn.

1404. Complaint of William Robinson, of Hurry, Alberta, that the Grand Trunk Pacific Railway has constructed its right of way across his homestead, severing six to ten acres, and made deep cut through his property, and have thrown waste material over his land, beyond its right of way. (Application 8667.)

Settled. Railway company agreeing to pay \$75 damages.

1405. Complaint of the Alberta Farmers' Association respecting the condition of the bridge of the Edmonton, Yukon and Pacific Railway (Canadian Northern Railway), approved by Order of the Board No. 5691, dated November 24, 1908. (Application 8522. Case 3982.)

Application refused. No jurisdiction.

1406. Complaint of A. Landals, of Strathcona, Alberta, that the Canadian Pacific Railway has constructed a wagon road across his property, cutting his place in three parts and shutting him off from the water. (Application 8680.)

Application dismissed.

1407. Application of Sidney Ottewell, Clover Bar, Alta., for permission to allow his cattle to run under the bridge of the Grand Trunk Pacific Railway at S.W. 13-53-23, west of 4th meridian, as an under farm crossing. (Application 5722.)

Application withdrawn.

1408. Complaint of the Chairman of the Local Improvement District 27 S 4, Alberta, against the plan of the proposed subway of the Grand Trunk Pacific Railway at high crossing on the northeast quarter of section 15, township 53, range 24, west of the 4th meridian. (Application 9023.)

Order made directing subway to be constructed.

1409. Complaint of the Parkdale Coal Company, of Edmonton, Alberta, against the Grand Trunk Pacific Railway being permitted to continue their right of way through portion of river lot No. 22, Edmonton settlement survey, belonging to the Parkdale Coal Company. (Application 2236. Case 3857.)

Application dismissed.

1410. Application of the city of Edmonton, Alberta, respecting street crossings of the Edmonton, Yukon and Pacific Railway (Canadian Northern Railway) in the city of Edmonton, Alberta. (Application 352.)

Application granted. Order issued.

1411. Application of the Canadian Northern Railway Company, under section 175 of the Railway Act, for authority to construct a spur from its main line to Cushing's mill and lumber yard, Edmonton, Alta. (Application 4061. Case 729.)

Application withdrawn.

1412. Application of McDougal & Secord, Edmonton, Allerta, under sections 26, 30 and 158 of the Railway Act, for an Order declaring plan, profile and book of reference of Canadian Pacific Railway, deposited in land office, North Alberta, not to be in accordance with provision of the Railway Act so far as same affects property of the Hudson Bay Company reserve in the city of Edmonton, Alberta. (Application 1418. Case 4449.)

Order made varying former Order by cancelling location through three lots covered by second branch of the application. See reasons for judgment in Appen-

dix D.

1413. Application of the Canadian Pacific Railway Company, under section 29 of the Railway Act, for an Order amending the Order of the Board No. 5608, made by the Board on the application of the city of Edmonton and the Strathcona Radial Tramway Company, Limited, and dated the 3rd day of November, 1908, by altering the terms upon which the said Order was made, and providing that the said city of Edmonton and the Strathcona Radial Tramway Company, Limited, shall install a half-interlocking plant at the crossing at White avenue in the city of Strathcona, with necessary derail switches on the tracks of the said Electric Railway Company, and semaphores upon the line of the Applicant company. (Application 8464. Case 4371.)

Application refused. Canadian Pacific Railway Company directed to discontinue

the practice of backing its southbound train No. 224 over the said crossing.

1414. Application of the Canadian Pacific Railway Company, under sections 158 and 159 of the Railway Act, for approval and sanction of location of portion of branch line of railway from Peace avenue to Sixteenth street, Edmonton, Alberta. (Application 1418. Case 911.)

Application granted. Order issued.

1415. Application of the Grand Trunk Pacific Railway Company, under section 159, for location, east line, section 17, township 53, range 23, west 4th meridian, through Edmonton to a line between ranges 24, 25, west 4th meridian. This matter is set down for the purpose of considering the complaint of Edwards & Madore, barristers, Edmonton, Alta., respecting filing and registration by the railway company of the plans in connection with order of the Board No. 3463, dated August 15, 1907. (Application 2236. Case 1180.)

Order made refusing to rescind Order for leave to construct but limiting right of

way to 100 feet where it affects the applicant's lands.

1416. Complaint of Henry Harvey, Strathcona, Alta., alleging loss sustained on certain goods shipped from Edmonton to a flag station on the line of the Canadian Northern Railway, near Bruderheim, Alta., and makes application that station agent be appointed. (Application 9098.)

Application dismissed.

1417. Complaint of J. J. Denman and other coal dealers of Edmonton, Alberta, of unjust treatment accorded by the Canadian Northern and Canadian Pacific Railway companies in compelling them to furnish doors or boards for the interior of the doorway of ears supplied to them for coal shipment.

Order made that where shippers upon all or any railways subject to the jurisdiction of the parliament of Canada, are compelled to furnish car doors to enable cars to

be used for traffic, allowance be made upon the following basis: (1) Lower car door, one dollar; (2) upper car door, fifty cents; and adjustment upon the above basis shall be made by the agent at or nearest to the point of shipment by (a) at the time of shipment, payment to the shipper of the account out of funds of the railway company of which he is agent in his hands; or (b) the shipper may deduct from the freight charges, if any, payable by him upon the shipment in such car, for which the said door or doors were so supplied, the amount of such bill upon the foregoing basis, receipting the same, and turning the account in to the agent as so much cash.

1418. Complaint of the Central Alberta Stock Growers' Association, alleging unreasonable delay on the part of the Canadian Pacific Railway Company in regard to transportation of live stock, and discrimination in the matter of personal transportation. (Application 7297.)

Adjourned at request of Mr. Stevens to next sittings at Edmonton.

1419. Complaint of the Live Stock Commissioner of Edmonton, and shippers of live stock, that where they are unable to secure stock cars for the movement of stock, box cars are supplied and planking has to be placed across the doorways, which the companies' agents refuse to supply and which entails an expense to the shippers of \$2 per car for planking. (Application 9270.)

Order made that where shippers have Ordered stock cars for the shipment of live stock and are supplied with box cars and are obliged to furnish lumber for temporary doors thereof, the shipper may deduct and retain one dollar and twenty-five cents from the freight charges, if any, payable by him upon the shipment in each such ear, for which the said lumber is so furnished, receipting the same and turning the account in to the agent as so much cash; or he may render to the agent of the company at or nearest to the point of shipment, an account for the actual outlay for the said lumber, which account the said agent shall pay at the time of shipment, out of the funds of the company in his hands.

1420. Resolution of members of East Clover Bar Branch of the Alberta Farmers' Association, that railways should be compelled to provide moveable partitions in their cars in order to enable individual farmers to make small shipments of cattle or hogs, thus preserving the identity of the individual consignment. (Application 9288.)

Application refused.

1421. Complaint of J. Gainer & Co., of Strathcona, Alberta, alleging excessive freight rates charged by the Canadian Pacific Railway on live stock from Wetaskiwin, Alberta, to Winnipeg, Manitoba. (Application 7824.)

Application refused.

1422. Complaint of H. A. Glaspell, alleging delay in delivery of express parcels by the Dominion Express Company at Vegreville, Alberta. (Application 4273. Case 931.)

Application dismissed.

1423. Complaint of Dr. C. N. Corbett, Edmonton, Alberta, alleging excessive express charges by express companies in the west. (Application 8973.)

Application dismissed.

1424. Complaint of Cyril Hind, of Mannville, Alberta, alleging excessive freight rates charged by the Canadian Pacific Railway Company on a horse shipped from St. John to Strathcona, Alberta.

(Note.) Complainant alleges that refund promised by the Railway Company has not been made. (Application 5114.)

Application dismissed, applicant having settled.

1425. Application of the city of Edmonton for an Order declaring that the plan profile and book of reference of the Canadian Pacific Railway Company location through Edmonton is not in accordance with the Railway Act, and that the same be cancelled and annulled. (File 1418. Case 4501.)

Application dismissed.

1426. Application of the city of Edmonton for an Order under section 237 of the Railway Act for leave to construct highways across the railways of the Canadian Northern Railway Company within the limits of the said city for the purpose of extending Ninth and Sixteenth streets south of the railway and connecting with Ninth and Sixteenth streets north of the said railway.

Order made granting leave to city to open up Sixteenth street acrosss the railway lands at its own expense. Railway not to receive consideration for the lands taken. 1427. Complaint of J. C. Haddock that the Grand Trunk Pacific Railway Com-

pany took possession of his lands on the E. 1 of section 8, township 53, range 4, west of 5th meridian, without full settlement. (File 792.)

Application dismissed, on statement of company's solicitor that matter is settled. 1428. Complaint of Peter Reid that the Canadian Pacific Railway Company has removed gates and cut the posts and wires where the railway affects his property, causing loss through cattle getting on the right of way and being killed. (File 3215.)

Application dismissed.

1429. Complaint of United Farmers of Alberta that railway companies have not fenced their right of ways; that grain cars are not provided with proper grain doors; that freight rates are excessive; that serious losses are sustained by reason of stock cars not being promptly spotted for unloading and by reason of unreasonable delay in transferring stock cars from one company's line to another; and that, in districts where new railway lines are being built, the farmers are compelled to sustain heavy losses because the companies do not fence or protect their right of ways while the work is being done thereon. (File 9414.)

Application dismissed.

1430. Application of owners of subdivision in the northern part of Edmonton, known as Beachmont, to have the remainder of Beachmont freed from the filing of the plan of the Grand Trunk Pacific Railway location through Edmonton, and that the railway company, at its own expense, withdraw the plan so far as concerns the Beachmont subdivision. (Application 5401. Case 2011.)

Order made cancelling registration in excess of 100 feet as located.

Order issued.

1431. Application of Mary Charlotte Sinclair for an Order cancelling the plans of the Canadian Pacific Railway Company, so far as they relate to lots 71 to 76, block 9, H.B.R., plan ',' Edmonton. (Application 1418.)

Judgment reserved. Matter subsequently settled between the parties.

1432. Application of J. C. Dumont for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicant in respect of the damages sustained by him by the construction of the company's line upon Twenty-first street, Edmonton, or for an Order that the company's plan be cancelled and annulled as to the Twenty-first street location.

Referred to the Board's engineer to report if the property is damaged by reason

of the exercising of the powers of the railway company.

1433. Application of J. G. Campbell for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicant in respect of the damages sustained by him by the construction of the company's line from Twenty-first street, Edmonton, or for an Order that the company's plan be cancelled and annulled as to said Twenty-first street location.

Referred to the Board's engineer to report if the property is damaged by reason

of the exercising of the powers of the railway company.

1434. Application of S. F. Mayer and Isaac Picard for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicants in respect of the damages sustained by them by the construction of the companys' line upon Twenty-first street, Edmonton, or for an Order that the company's plan be cancelled and annulled as to the Twenty-first street location.

Referred to the Board's engineer to report if the property is damaged by reason

of the exercising of the powers of the railway company.

1435. Application of Wm. Johnston for an Order directing the Grand Trunk Pacific Railway Company to treat with the applicant in respect of the damages sustained by him by the construction of the company's line on the street adjoining the applicant's land on the east, or for an Order that the plan, so far as it affects the said street be cancelled.

Referred to the Board's engineer to report if the property is damaged by reason

of the exercising of the powers of the railway company.

1436. Application of J. Gainer & Co., of Strathcona, Alta., for lower minimum weight on live stock in double-decked cars; also for an Order authorizing the Canadian Pacific Railway Company to rebate to the applicants excessive freight on two cars of live hogs shipped from Wetaskiwin and Strathcona respectively to Victoria, British Columbia.

Application dismissed.

1437. Application of the city of Edmonton, under section 227 of the Railway Act, for authority to cross the level with the lines of its electric street railway with the necessary poles and wires to transmit power, the lines of the Grand Trunk Pacific Railway Company and the lines of the Canadian Northern Railway Company at the intersection of the lines of said companies without the limits of the said city at what is known as Norton road.

Application withdrawn.

1438. Application of the city of Edmonton, under section 227 of the Railway Act, to cross at level with the lines of its electric street railway, with the necessary poles and wires to transmit power, the lines of the Grand Trunk Pacific Railway Company and the lines of the Canadian Northern Railway Company at the intersection of the lines of said companies at Syndicate avenue, at or near its intersection with Griesbach street. (Application 9419. Case 4525.)

Application granted. Order issued. Crossing to be protected by a half inter-

locker.

1439. Application of the city of Edmonton, under section 227 of the Railway Act, for authority to cross at level with the lines of its electric street railway, with the necessary poles and wires to transmit power, the lines of the Grand Trunk Pacific Railway Company and the lines of the Canadian Northern Railway Company, at the intersection of the lines of said company at Alberta avenue between Charles and Phillips streets.

Referred to the Board's engineer for report.

1440. Application of farmers of Clover Bar settlement, Alberta, for construction of subway under the tracks of the Grand Trunk Pacific Railway road allowance between sections 12 and 13, township 53-23 west of 4th M., between mileage 77.619 and 112.942.

NOTE.—The Board will hear the complaint of W. F. Stevens that the subway be constructed as provided by Order of the Board, No. 4179, is only twelve feet wide.

Order made for construction by company of temporary level crossing for farm implements. Company to have leave to remove under temporary crossing when permanent subway constructed with width of at least 20 feet.

1441. Complaint of Fullerton Lumber and Shingle Co., Ltd., Vancouver, British Columbia, alleging discrimination against forest products entering Edmonton, Alberta.

(Application 9868.)

Order made directing Canadian Pacific Railway Company and Canadian Northern Railway Company to publish and file joint rates on classes 6 to 10 of the Canadian classification between Edmonton and all Canadian Pacific points except Strathcona via Strathcona Junction on the basis of one cent per 100 pounds over and above the rates of the Canadian Pacific Railway Company to or from Strathcona. The Canadian Pacific Railway Company to or from Strathcona.

dian Northern Railway Company allowed an arbitrary proportional of \$10 per carload, regard ess of weight, between Strathcona Junction and sidings in the city of Edmonton, including those owned by the Canadian Pacific Railway Company, but excepting the Ğriffin packing house, to or from which the Canadian Northern Railway Company does not exceed rates charged for local traffic between Strathcona and Edmonton.

1442. Application of the municipal corporation of the township of Sandwich East, under section 186 of the Railway Act of 1903, for Order directing the Grand Trunk Railway to provide, construct and maintain a suitable highway crossing where the railway company intersects the Lesperance road, in the village of Tecunseh.

Note.—This application is set down for the purpose of considering question of expense of automatic electric bell and cut-out called for in Order No. 5989, dated December 31, 1908. (Application 7086.)

Order made that cost of installing electric bell be borne by the township of

Sandwich East, bell to be maintained at expense of railway company.

1443. Accident on the Canadian Pacific Railway at Adelaide street crossing, London, Ont., on March 31, 1908; this matter is set down for the consideration of the question of protection at crossing. (Application 7395.)

Board decided, after viewing the crossing, that no protection was needed at

present.

• 1444. Accident on the Grand Trunk Railway at East London, Ontario, April 24, 1908, at Edgerton street crossing; this matter is set down for the purpose of considering the question of protection at this crossing. (Application 7758.)

Adjourned sine die at request of mayor of London.

1445. Complaint of C. T. W. Piper, Vancouver, B.C., respecting filling in by Grand Trunk Pacific Railway, between Watson Island and Townsite, where the applicant is constructing a saw-mill, shingle mill, pulp and paper factory, being part of the Grand Trunk Pacific Railway location, Prince Rupert easterly, mile 50 to 100, Copper river, approved by the Board's Order, dated April 9, 1908. (Application 3452. Case 3118.)

Order made that company leave an opening or undertake to compensate if solid

embankment is constructed. Company to elect within one month.

1446. Application of the Brunette Saw-mill Company, New Westminster, B.C., for order changing plan location Vancouver, Westminster and Yukon Railway, across lots 1 and 2, suburban block 1, and lots 4, 5 and 7, suburban block 8, New Westminster, B.C. (Application 5745. Case 2353.)

Stands for parties to endeavour to arrange a settlement. Subsequently reports came to the Board that the matter was being arranged.

1447. Application of the municipality of Delta, B.C., under sections 26 and 235 of the Railway Act for an Order restraining Victoria, Vancouver and Eastern Railway from crossing or interfering with River road, so-called, on the south bank of the Fraser river, within the municipality of Delta, and for a mandatory Order directing the Victoria, Vancouver and Eastern Railway to restore the said portion of the River road to the condition it was in prior to June 30, 1908. (Application 6000. Case 4431.)

Order made that the various applications made to the Board in this matter be treated as an application by the railway company for leave to divert the highway in question, and to acquire the necessary lands for the relocation of the same, as shown on the plan filed. That authority be given to the railway company to divert the highway known as the Ladner highway, and to acquire the necessary lands for the relocation of the same along the route and through the lots as shown on the plan, upon the following conditions: (1) That the whole matter be referred to J. H. Senkler, K.C., as sole arbitrator to fix and determine the amount to be paid each and all land-owners. The arbitrator to have full power and authority to dispose of all ques-

tions of costs. Also that the railway company, by June 3, 1909, do all work and furnish all material necessary to put the present Ladner highway as diverted in such condition as H. J. Cambie, C.E., shall by his report direct. Also that after the completion of the highway as provided for the company shall maintain the same for a period of three years from the date of completion. Such maintenance to be to the satisfaction of the said H. J. Cambie. If the municipality of Delta deem the highway to be out of repair they may call upon the said Mr. Cambie and the railway company to do forthwith the necessary work to carry out the Board's order. Also that all costs payable to the said II. J. Cambie shall be disposed of by the said J. H. Senkler, K.C.

1448. Complaint of J. A. Maddaugh, of Vancouver, B.C., that the Victoria, Westminster and Yukon Railway and the Canadian Pacific Railway have not connected their lines at Vancouver pursuant to order No. 3500, of the 7th of August, 1907. (Application 5734. Case 2342.)

Order made adding Victoria, Vancouver and Eastern Railway as parties and

directing the connection to be made on or before 1st June, 1909.

1449. Complaint of J. A. Maddaugh, of Vancouver, B.C., respecting rates of the Victoria, Westminster and Yukon Railway Company, on lumber from British Colum-

bia points to points in the province of Manitoba. (Application 9296.)

Order made that the Great Northern Railway Company forthwith file and publish rates on lumber, shingles and articles taking same rates via New Westminster or Vancouver in connection with Canadian Pacific Railway as follows:—From points on the Victoria, Vancouver and Eastern Railway and Navigation Co.'s line between Vancouver and New Westminster, not inclusive, to points on the Canadian Pacific Railway west of Winnipeg, except such points as may be rated direct by the Great Northern Railway Company and its connections, rates based upon one cent per 100 pounds higher than rates maintained from Vancouver by the Canadian Pacific Railway Company, the Victoria, Vancouver and Eastern-Railway and Navigation Company to be allowed  $2\frac{1}{2}$  cents per 100 pounds.

1450. Complaint of R. Robson, Mayook, B.C., alleging poor train service on the Canadian Pacific Railway on its Crowsnest branch from Mayook to Cranbrook, B.C. (Application 9026.)

Application dismissed.

1451. Complaint of British Columbia Mills, Timber and Trading Company, of Burnaby, B.C., alleging excessive freight rates charged on the Vancouver, Westminster and Yukon Railway from Vancouver to Burnaby, B.C. (Application 7883.)

Order made that the Great Northern Railway Company operating the Vancouver, Westminster and Yukon Railway, shall forthwith file and publish rates on lumber, shingles and articles taking the same rates via New Westminster or Vancouver in connection with the Canadian Pacific Railway Company, as follows:—From points on Vancouver, Victoria and Eastern Railway and Navigation Co.'s line between Vancouver and New Westminster, not inclusive, to points on the Canadian Pacific Railway, west of Winnipeg, except such points as may be routed directly by the Great Northern Railway Company and its connections; rates based upon one cent per hundred pounds higher than rates maintained from Vancouver by the Canadian Pacific Railway Company, the Vancouver, Victoria and Eastern Railway and Navigation Company to be allowed two and one-half cents per hundred pounds.

1452. Application of the Vancouver Board of Trade for refund under Order of the Board, dated August 11, 1906, in what is known as the Transcontinental Rate Case,

31st July, 1907. (Application 542.)

Application dismissed.

1453. Complaint of A. Thompson, Dewdney, B.C., respecting express charges of the Dominion Express Company on milk shipments from Dewdney, B.C. (Application 4457.)

Stands pending the final consideration of the question of express rates generally.

1454. Application of C. T. W. Piper, Vancouver, B.C., for an order directing the Great Northern Railway Company to construct a spur to the premises of the Britannia Trading and Lumber Company, Burnaby Lake (near Vancouver, B.C.) (Application 4295.)

Application dismissed.

1455. Application of the Victoria, Westminster and Yukon Railway for an Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of their branch line No. 2 from False Creek to Burrard Inlet over the lane between Parker and Napier streets in the city of Vancouver, B.C. (Application 4325. Case 986.)

Application dismissed.

1456. Application of the Victoria, Westminster and Yukon Railway for an Order authorizing that company to construct a branch line within the city of Vancouver from a point on its main line north of False Creek, B.C. (Application 3698. Case 432.)

Application dismissed.

1457. Application of the Victoria, Westminster and Yukon Railway for an Order under section 177 of the Railway Act of 1903, approving of the plan and mode of crossing by their branch line from False Creek to Burrard Inlet in the city of Vancouver across the tracks of the Canadian Pacific Railway. (Application 4145. Case 807.)

Application dismissed.

1458. Application of the V. W. & Y. Ry., for an Order under section 177 of the Railway Act of 1903, approving of the place and mode of crossing by the V. W. & Y. from False Creek to Burrard Inlet of the Canadian Pacific Railway near Burrard Inlet at Victoria, B.C. (Application 3550. Case 268.)

Application dismissed.

1459. Application of the V. W. & Y. Ry. Co., under sections 184 and 186 of the Railway Act of 1903, for Order approving of the place and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet over Powell street in the city of Vancouver, B.C. (Application 4319. Case 980.)

Application dismissed.

1460. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the plans and mode of crossing of their branch line No. 2 from False Creek to Burrard Inlet over the lane between Hastings and Princess streets, in the city of Vancouver, B.C. (Application 4320. Case 981.)

Application dismissed.

1461. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet over the lane between Harris and Keefer streets in the city of Vancouver, B.C. (Application 4321. Case 982.)

Application dismissed.

1462. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet, over Barnard street, Vancouver, B.C. (Application 4322. Case 983.)

Application dismissed.

1463. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its branch line No. 2, from False Creek to Burrard Inlet, over Napier street in the city of Vancouver, B.C. (Application 4335. Case 991.)

Application dismissed.

1464. Application of the V. W. & Y. Ry. Co., for Order under sections 184 and 186 of the Railway Act of 1903, approving of the place and mode of crossing of its

branch line No. 2, from False Creek to Burrard Inlet, over Harris street in the city of Vancouver, B.C. (Application 4339. Case 1001.)

Application dismissed.

1465. Application of the Vancouver, Westminster, and Yukon Ry. Co., for Order under sections 184 and 186 of the Railway Act, 1903, approving of the place and mode of crossing of their branch line No. 2 from False Creek to Burrard Inlet over Boundary avenue, in the city of Vancouver, B.C. (Application 4318. Case 979.)

Application dismissed.

1466. Application of the V. W. & Y. Ry., for Order under section 177 of the Railway Act, 1903, approving of plans and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet over the tracks of the B. C. Electric Ry. Co.. Limited, at Harris street in the city of Vancouver, B.C. (Application 4336. Case 998.)

Application dismissed.

1467. Application of the V. W. & Y. Ry., for an Order under section 177 of the Railway Act for 1903, approving of the place and mode of crossing over the tracks of the B. C. Electrice Ry. Co., Limited, New Westminster line, at Venables street in the city of Vancouver, B.C. (Application 3595. Case 312.)

Application dismissed.

1468. Application of the V. W. & Y. Ry., for an Order under section 177 of the Railway Act of 1903, approving of plans and mode of crossing by its branch line No. 2, from False Creek to Burrard Inlet, over the tracks of the Canadian Pacific Railway in the city of Vancouver, B.C. (Application 4315. Case 976.)

Application dismissed.

1469. Application of the V. W. & Y. Ry. Co., under section 177 of the Railway Act, 1903, for an Order approving of the place and mode of crossing over the track of the British Columbia Electric Railway Company, Limited, at Harris street, in the city of Vancouver, B.C. (Application 3596. Case 313.)

Application dismissed.

1470. Application of the Vancouver, Westminster and Yukon Railway Company, under section 227 of the Railway Act, for approval of the plant and mode of crossing of its branch line No. 2 from False Creek to Burrard Inlet, over the tracks of the British Columbia Electric Railway Company, at Powell street in the city of Vancouver, B.C. (Application 4329. Case 990.)

Application dismissed.

1471. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237 of the Railway Act, for an order approving of the place and mode of crossing of its branch line No. 2, from False Creek to Burrard Inlet, over the lane between William and Napier streets in the city of Vancouver, B.C. (Application 4328. Case 989.)

Application dismissed.

1472. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237 of the Railway Act, for an Order approving of the place and mode of crossing of its branch line No. 2, from False Creek to Burrard Inlet, over Raymur avenue, in the city of Vancouver, B.C. (Application 4317. Case 978.)

Application dismissed.

1473. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237, for authority to cross Cordova street, with branch line, which commences at point 'A' on another proposed branch line, across south shore of False Creek east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4334. Case 995.)

Application dismissed.

1474. Application of the Vancouver, Westminster and Yukon Railway Company, under section 237, for authority to cross the lane between Harris and Bernard streets with branch line, which commences at point 'A' on another proposed branch line,

across south shore False creek east of Westminster avenue, running to point 'B' on Burrard avenue, city of Vancouver, B.C. (Application 4338. Case 1000.)

Application dismissed.

1475. Application of the Vancouver, Westminster and Yukon Railway Company under section 237, for authority to eross over Parker street, with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to a point 'B' on Burrard Inlet. city of Vancouver, B.C. (Application 4333. Case 994.)

Application dismissed.

1476. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for crossing Westminster avenue by branch line from point 'A' on main line to point 'B' on company's property near Clark drive, in city of Vancouver, P.C. (Application 4316. Case 977.)

Application dismissed.

1477. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Princess street, with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard inlet, city of Vancouver, B.C. (Application 4323. Case 984.)

Application dismissed.

1478. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Hastings street, with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, East Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4330, Case 991.)

Application dismissed.

1479. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Keefer street, with branch which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4324. Case 985.)

Application dismissed.

1480. Application of the Vancouver, Westminster and Yukon Railway, under section 227, for authority to cross tracks of British Columbia Electric Railway at Venables street, with branch line which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4331. Case 992.)

Application dismissed.

1481. Application of the Vancouver, Westminster and Yukon Railway, under section 237, for authority to cross Venables street with branch line, which commences at point 'A' on another proposed branch line across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver. (Application 4332. Case 993.)

Application dismissed.

1482. Application of the Vancouver, Westminster and Yukon Railway, under section No. 237, for authority to cross lane between Keefer and Princess streets, with branch line which commences at point 'Λ' on another proposed branch across south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, city of Vancouver, B.C. (Application 4337. Case 999.)

Application dismissed.

1483. Application of the Vancouver, Westminster and Yukon Railway Company, under section 177 of the Railway Act, 1903, for an Order approving the place and

mode of crossing over the track of the British Columbia Electric Railway Company, Limited, on Powell street, in the city of Vancouver. (Application 3559. Case 275.)

Application dismissed.

1484. Application of the Vancouver, Westminster and Yukon Railway Company for approval of crossing by its branch line, which commences at point 'A' on another proposed branch line, across the south shore of False creek, east of Westminster avenue, and running to point 'B' on Burrard Inlet, over the lane between Hastings and Cordova streets, in the city of Vancouver, B.C. (Application 4327. Case 988.)

Application dismissed.

1485. Complaint of R. Robertson & Co., Vancouver, B.C.. respecting freight rates of the Canadian Pacific Railway Company to Ladysmith, British Columbia, as covered by supplement 7 to C.R.C., No. W. 542, effective April 10, 1908. (Application 9308.)

Application dismissed.

1486. Complaint of the Trades and Labour Council, Vancouver, British Columbia, that the Canadian Pacific Railway Company is running its trains from Vancouver without proper inspection. (Application S371.)

Application dismissed.

14SS. Application of the Vancouver and Lulu Island Railway Company, for an Order authorizing a proposed deviation from plan of branch line on the south side of False Creek. (File 344.)

Dismissed.

1489. Complaint of the municipality of Burnaby and Coquitlam, B.C., regarding defective cattle guards on the line of the Vancouver, Westminster and Yukon Railway or the Vancouver, Victoria and Eastern Railway and Navigation Company. (File 1875).

Order that the Vancouver, Victoria and Eastern Company within four months replace all cattle guards upon their line with guards in accordance with the blue print upon the file.

1490. Complaint of the municipality of Burnaby regarding fares charged on certain portions of the British Columbia Electric Railway Company's Inter-urban line between Vancouver and New Westminster.

Withdrawn.

1491. Application of the Alaska Pacific Express Company for approval of its contract forms. (Application 4537. Case 1202.)

Judgment reserved.

1492. Application of the Vancouver Power Company, Limited, for an Order sanctioning the erection and maintenance of a line of wires for the conveyance of electric power across the tracks of the Canadian Pacific Railway Company at the Second Narrows, Burrard Inlet, Vancouver, B.C. (File 1746.)

Order to issue in terms of draft attached to file.

1493. Complaint of W. R. Austin alleging insufficient protection in the matter of cattle guards on the Canadian Pacific Railway in that district. (File 9436.)

Judgment reserved, to be considered with the general question.

1494. Complaint of Alister Thompson, Dewdney, B.C., regarding the unprotected track of the Canadian Pacific Railway Company at Dewdney, B.C. (Application 9883).

Stands to be dealt with after the disposition of question of a general Order of Board re cattle guards set down for hearing in Ottawa on 4th May, 1909.

1495. Complaint of Fred Allen, et all, regarding the extension of the railway siding now terminating at the western Boundary of the Pacific Coast Mill Company on Coal Harbour.

Application refused.

20c-9

1496. Complaint of Mission District Board of Trade. Mission City, British Columbia, that railway company has not built new station promised last year. (Application 9259.)

Stands on statement of counsel that railway intends to go on with work as soon as weather is favourable.

1497. Complaints of Albert Milton against the Vancouver, Victoria and Eastern Railway and Navigation Company (18 in all). (File 9861. Case 4806.)

Order made directing Great Northern Railway Company to creet fences, construct swing gates and farm crossings. Work to be completed by 3rd May, 1909.

1498. Complaint of Mr. Kenworthy against the Canadian Pacific Railway Company regarding repairs to a dike at Dewdney, B.C. (Application 9862. Case 4807.)

Plans to be filed by applicant for approval; pending this being done, matter stands. Consent of the railway company to be obtained.

1499. Complaint of R. Hay, of Barnet, B.C., regarding damages for cattle killed on right of way of Canadian Pacific Railway Company. (File 9506.)

Dismissed, Board holding it has no jurisdiction.

1500. Complaints of Messrs. Murphy, McKenzie, Milton, Armstrong and Shannon regarding farm crossings, gates, fences and cattle guards on the Vancouver, Victoria and Eastern and Great Northern Railway at and near Cloverdale, B.C. (Application 9858. Case 4804.)

Order made directing Great Northern Railway Company to erect fences, construct swing gates and farm crossings—work to be completed by 3rd May, 1909.

1501. Complaint of Messrs. Shannon, Milton and Murphy against the New Westminister Southern and Great Northern Railway Companies regarding flood gates on the north side of Nicomekle river and on the east side of the railway track. (Application 9859. Case 4805.)

Order made as in previous file No. 9858, Case 4808.

1502. Complaint of Alexander F. Latts, of Port Moody, B.C., regarding damages for cow killed on the line of the Canadian Pacific Railway Company.

Application dismissed, no jurisdiction.

1503. Application of the Vancouver, Victoria and Eastern Railway and Navigation Company, for an order, under section 252 of the Railway Act, sanctioning the placing and maintaining of crossings over lot 23, Group 2, New Westminster District, B.C.

Application refused.

1504. Application of the city of Vancouver, under sections 256 and 257 of the Railway Act, for leave for the construction of a bridge for highway purposes over the tracks of the Canadian Pacific Railway Company at the intersection of the northerly shore of False Creek and Fourth avenue, Vancouver, British Columbia. (Application 9865. Case 4809.)

Application granted. Order issued.

1505. Complaint of H. T. Thrift of lack of accommodation for either passengers or freight at Hazelmere Station, B.C. (Application 9841.)

Judgment directing railway company to provide reasonable and proper facilities for public at Hazelmere. Formal Order not to issue for thirty days to allow time for Great Northern Railway Company to appeal on question of jurisdiction.

1506. Application on behalf of Mrs. H. M. Milsted for an Order that the Vancouver, Victoria and Eastern Railway and Navigation Company proceed immediately to construct fences along its right-of-way, on both sides, passing through lot 8, Abbottsford Townsite, New Westminster District, B.C., and the northeast quarter of section 15, township 16, New Westminster District, B.C., and along the highway adjoining said right-of-way on the southerly side thereof. (Application 9866. Case 4810.)

Order made directing railway company to construct proper fences with gates at farm crossings by 3rd April, 1909.

1507. Application of the Grand Trunk Railway, under sections 256 and 257. for Order approving of overhead farm crossing to be constructed at mile post 125.12 (between London and Windsor, lot 27, con. 3, township of London, on Anthony Dickie

lands. (Application 1707. Case 1673.)

Order made granting application to construct bridge and approaches thereto for vehicular traffic at both ends and a separate one for cattle at north end and for purposes of a farm crossing over tracks of applicant company on farm of A. M. Dickie, Grand Trunk Railway, at its own expense to remove present crossing over Canadian Pacific Railway, and place at the point shown on plan. When the work is completed as set forth in the order, the applicant company to compensate Dickie for damage, if any, done to him by the raising of the bridge and the diversion of the main approach. Amount to be determined by agreement or arbitration under the provisions of the Railway Act. Bridge to be completed by October 7, 1909.

1508. Consideration of the question of protection of road crossing in the village of Dutton, Ontario, by the tracks of the Michigan Central and Père Marquette Rail-

road companies. (Application 9437. Case 4576.)

Order made that the crossing be protected by folding gates, to be installed by the Michigan Central Railroad Company by May 1, 1909. Gates to be operated between 7 a.m. and 7 p.m. daily, except on Saturdays, when to be operated until midnight. Cost of installing gates and erecting tower to be borne equally between the Michigan Central Railroad Company and the Père Marquette. The cost of maintenance and operation to be borne: 55 per cent by the Michigan Central Railroad Company, 25 per cent by the Père Marquette, 10 per cent by the village of Dutton, 10 per cent by the township of Dunwicke.

1509. Consideration of the protection of level crossing in the village of Rodney, Ontario, by the Michigan Central and Père Marquette Railroad Companies. (Appli-

cation 9437. Case 4575.)

Order made that the crossing be protected by folding gates. to be installed by the Michigan Central Railroad Company by May 1, 1909. Gates to be operated between 7 a.m. and 7 p.m. daily except on Saturdays, when to be operated until midnight. Cost of installing gates and erecting tower to be borne equally between the Michigan Central Railroad Company and the Père Marquette Company. Cost of maintenance and operation to be borne: 55 per cent by the Michigan Central Railway, 25 per cent by the Père Marquette, 10 per cent by the village of Rodney, and 10 per cent by the township of Aldsborough.

1510. Accident on Michigan Central Railway at West Lorne, Ont., January 9,

1909.

Note.—This matter is set down for the purpose of considering the matter of protection at level crossing in the village of West Lorne, just east of the station.

(Application 9415.)

Order made that the crossing be protected by folding gates, to be installed by the Michigan Central Railroad Company by May 1, 1909. Gates to be operated between 7 a.m. and 7 p.m. daily. except on Saturdays, when to be operated until midnight. Cost of installing gates and erecting tower to be borne equally between the Michigan Central Railroad Company and the Père Marquette Company. Cost of maintenance and operation to be borne: 55 per cent by the Michigan Central Railroad Company, 25 per cent by the Père Marquette, 10 per cent by the village of West Lorne, and 10 per cent by the township of Aldsborough.

1511. Complaint of the municipality of North Cowichan, B.C., per James Norcross, alleging dangerous condition of crossing at Duncan. British Columbia, and

requesting that an automatic signal be provided. (Application 8142.)

Order made directing railway company to remove section foreman's house at crossing to a point at least 75 feet from its right of way by May 15, 1909.

20c-9½

1512. Application of the Pacific Coast Coal Company, Limited, and South Wellington Coal Mines, Limited, under section 250, for authority to lay a wooden box containing an air and steam pipe under tracks of the Esquimalt and Nanaimo Railway Company near South Wellington, on section 14, range 6, Cranberry District.

Application granted.

1513. Application of the Chief Commissioner of Lands and Works, province of British Columbia, under section 237, for an Order directing the Nicola, Kamloops and Similkameen Coal and Railway Company to improve all diversions and highway crossings between Spence's bridge and Nicola, B.C., particularly at point 28½ and

30½ miles from Spence's Bridge. (Application 7055. Case' 3060.)

Order made that the Nicola, Kamloops and Similkameen Coal and Railway Company forthwith improve for the protection, safety and convenience of the public all diversions and encroachments upon the highway by the said company along its line of railway, between Spence's Bridge and the townsite of Nicola, and more particularly with reference to the diversions and encroachments upon the public highway at the points on its line of railway between the bridge of the company over the Nicola river, situated about 28½ miles from Spence's Bridge, and the eastern boundary of the railway belt, as directed and required by the Chief Engineer of the Department of Lands and Works of the province of British Columbia. Also that in the event of any dispute arising as to the compliance with the terms of the order or otherwise, the same shall be settled by the Board.

1514. Application of the Government of British Columbia, per John J. Fulton, Chief Commissioner of Land and Works, for an Order directing the railway company to construct suitable highway crossings, cattle guards, planking, cross fences, at Rupert street, Renfrew street, Angus road, and Nanaimo street, townsite of Hastings,

British Columbia. (Application 8716.)

Order made that railway company at its own expense construct suitable highway crossings at Rupert street as soon as street is opened up and an overhead bridge not

less than 20 feet wide at Nanaimo street as soon as street is opened up.

1515. Application of the Chief Commissioner of Lands and Works, province of British Columbia, under clause No. 237, for an Order directing the Esquimalt and Nanaimo Railway Company and the Wellington Colliery Company to provide suitable overhead crossing 14 miles from Ladysmith station, British Columbia. (Application 6682. Case 2827.)

Order made granting leave to applicant to construct highway bridge over the two railways near Ladysmith station, British Columbia. Cost to be divided as follows:

one-half by Colliery Company, 1 by Railway company, and 1 by Government.

115a. Complaint of R. Carter, Courtney, B.C., respecting the freight and passenger rates on the Canadian Pacific Railway to Comox and Cumberland. (Application 4607. Case 1312.)

Application dismissed.

1516. Application by the solicitor for His Majesty's Attorney General for British Columbia in connection with the resolution of the Legislative Assembly of British Columbia for an Order placing British Columbia in the same and as favourable condition in respect to tolls for freight and passenger traffic over the Canadian Pacific Railway through British Columbia as are other portions of the Dominion of Canada over the main line of said railway. (Application 4747.)

Application fails. If applicant desires to give evidence for purpose of establishing that the rates now charged in British Columbia are unreasonably high or that

discrimination exists, leave will be granted.

1517. Complaint of F. W. Logan, Provincial Dairy Commissioner, province of British Columbia, against express rates charged by Dominion Express Company and Canadian Pacific Railway on milk shipments in that province, also conditions imposed by Canadian Pacific Railway. (Application 5097.)

Stands to be considered after the general question of express rates is dealt with.

1518. Complaint of the Central Farmers' Institute of British Columbia, alleging inadequate protection afforded stock along the line of railways in British Columbia, with respect to cattle guards and the proper fencing of railway rights of way. (Application 9307.)

Stands to be disposed of after general question re cattle guards is dealt with at

May, 1909, sittings of Board in Ottawa.

1519. Application of the Grand Trunk Pacific Railway Company, under section 178 of the Railway Act, for leave to take a right of way 200 feet in width across government lands between the east line of township 12, range 13, west 1st meridian, and the eastern boundary of the province of British Columbia. (Application 9085. Case 4343.)

Refused.

1520. Application of the Pacific Coast Coal Mines, Limited, under sections 222 and 227 of the Railway Act for authority to construct a spur, making connection between the tipple at South Wellington mine, situated in Cranberry district, Vancouver Island, and tracks of the Esquimalt and Nanaimo Railway Company. (Application 8902. Case 4212.)

After Bill No. 62 receives Royal assent the coal company to file plans for an under crossing of the Esquimalt and Nanaimo Railway when, if same approved by Board's

engineer, order to go for crossing at the expense of the applicant.

1521. Application of the city of Victoria, for an Order to renew, rescind, or vary order No. 3731, and for an order under section 238 of the Railway Act that the Esquimalt and Nanaimo Railway Company submit to the Board a plan and profile of the railway at the place or point where the said line crosses the land known as the old Esquimalt road in Victoria west; and for an Order under section 237 of the Railway Act to construct a level crossing for vehicular traffic; and to remove the existing fences across the said highway. (File 5663. Case 2292.)

Leave granted to open the street in question across the railway. The railway company to do the necessary grading and planking for the crossing; city to maintain crossing when constructed. Formal order to issue when city furnishes evidence by affidavit that trees in question have been removed and that binding arrangements have been made that buildings will not be erected on the vacant lot referred to in evidence.

1522. Application of the Quamichan Mill Company for authority to construct a crossing over the tracks of the Esquimalt and Nanaimo Railway at a point 1½ miles north of Duncan, British Columbia. (File 9433. Case 4541.)

Application granted. In the terms of agreement between the parties.

1523. Complaint of Steve Huntley of Nokomis, Sask., that the Grand Trunk Pacific Railway Company has fenced the road allowance in such a way as to prevent him from obtaining easy access to a portion of his farm.

Stands to be heard at Ottawa.

1524. Application of the Honourable the Minister of Public Works of British Columbia for an Order directing the Canadian Pacific Railway Company to provide, construct, and maintain a suitable highway crossing at or near a point west of the Columbia river where the railway intersects the Eagle Pass, or at such other point as the Board may direct.

Order to go in terms of agreement.

1525. Application by G. E. & N. to construct spur in Victoria to Wilson & Company, Limited.

Granted. Engineer to report.

1526. Complaint by the Deputy Attorney General as to fires being caused by the Esquimalt and Nanaimo Railway Company during the summer months.

Reserved.

1527. Application of the St. Mary's and Western Railway, under sections 222 and 227, for authority to construct a spur across the tracks of the Grand Trunk Railway

to the premises of the J. D. Moore & Company, and D. Maxwell & Sons, St. Marys, Ontario. (Application 8814. Case 4154.)

Application granted. Order issued.

1528. Application of the Canadian Pacific Railway Company, under sections 222 and 237 of the Railway Act, for an Order authorizing the construction, maintenance and operation of a branch line of railway, or spur, in the city of Montreal, commencing from a point on the centre line of the most westerly track leading to the freight car repair shop of the said company, distant about 250 feet northerly from the northerly end of freight car shop, thence in a southwesterly and northwesterly direction across De Levis street to and into the premises of the Montreal Gas Company, now leased to the Montreal Light, Heat and Power Company, situate on Cadastral lot 159 in the Hochelaga ward of the city of Montreal, a distance of about 1,780 feet, together with another siding about 550 feet in length. (Adjourned hearing.) (Application 8152. Case 3708.)

Application granted. Order issued.

1529. Application of the Niagara, St. Catharines and Toronto Railway Company, under section 227 of the Railway Act, for an order granting the company authority to connect its tracks with the tracks of the Toronto, Hamilton and Buffalo Railway Company in lot 27, con. 6, township of Crowland, county of Welland, Ont. (Application 8838. Case 4176.)

Application granted. Order issued.

1530. Application of the Grand Trunk Railway Company, under section 29, for under section 227 of the Railway Act, for an Order granting the company authority to derails on each side of the crossing of the Grand Trunk tracks on Charlotte street, Peterborough, Ont. (Application 650. Case 3464.)

Application granted. Order issued.

1531. Application of the Canadian Northern Ontario Railway Company under section 237 of the Railway Act, for authority to construct its line of railway acrosss certain highways in the township of Gloucester, county of Carleton, between mileage 48.27 and 54.6 west from Hawkesbury, Ontario. (Application 8770. Case 4122.)

Application granted. Order issued.

1532. Application of the National Board of Trade, under sections 269 and 284 for the adoption by the Board of regulations (a) prohibiting the practice of spitting in railway cars, railway stations and waiting rooms except in proper receptacles prepared for the purpose, and (b) requiring the railway companies to properly clean and disinfect railway cars, station and waiting rooms in order to prohibit the dissemination of tuberculosis or other infectious diseases. (Application 1708. Case 4502.)

(Next case numbered 1534, as one case was stricken out.)

1534. Complaint of the Royal Northwest Mounted Police, re alleged 'dangerous highway crossing of the Calgary and Edmonton Railway (Canadian Pacific Railway) range 27, mile 25.5, town of Claresholm, Alberta. (Application 8696.)

Order made that railway company put the crossing between townships 11 and 12 in proper condition, also widen the partial diversion on the northeast quarter of section 36, township 11, range 27 and leave granted company to expropriate lands for

such purpose.

1535. Application of the town of Claresholm, Alberta, under section 186 of the Railway Act, 1893, for an Order directing the Canadian Pacific Railway to provide and construct a suitable highway crossing where the company's railway intersects Third avenue, in the centre of the said town of Claresholm, Alberta. (Application 3783. Case 499.)

Order made that applicant at its own expense secure lots 15, 16 and 17 or parts thereof and do necessary grading for said street through block 'B' up to west side of Canadian Pacific yards.

1536. Application of the Canadian Pacific Railway, under section No. 167 of the Railway Act, for an Order authorizing diversions in its Crowsnest branch between Peigan and Crowsnest, Alberta. (Application 6902. Case 2951.)

NOTE.—This application is set down for consideration of the complaint of the towns of Cowley, Pincher Creek, Burmiss and Blairmore, Alberta, with respect of

this diversion.

Order made amending order No. 6251 as follows:-

New townsite of Cowley to be located on northeast corner of section 17, west side of track, applicant company granted leave to expropriate lands necessary for a new townsite.

Applicant company to adjust with owners of present lots in Cowley location of their holds in the new townsite, and if that cannot be worked out to the satisfaction of owners and applicant company within six months from date, all, if any, of such owners and the company to have leave to apply to the Board to adjust differences.

All matters between village council, owners and company, that cannot be decided amically reserved for disposition by the Board.

That the proposed site of the new station at Blairmore, be submitted to the Vil-

lage Council of Blairmore before being approved of by Board.

Leave granted to the company to expropriate all lands required for new locations

of stations of Pritchard Creek and Blairmore.

1537. Application of the Canadian Pacific Railway, under section 29 of the Railway Act, to amend the Order of the Board dated February 3, 1908, made upon the application of the Northwest Jobbing and Commission Company, for an Order under section 226 of the Railway Act, directing the Canadian Pacific Railway, the Alberta Railroad and Irrigation Company, or both of the said companies, to construct and provide a suitable branch or spur from the line of one of the said companies, or from the lines used jointly by them in their yards in the city of Lethbridge, province of Alberta, to the warehouse of the applicant company, in the said city, according to the plan on file with the board under case No. 460, file No. 3955, so as to vary the location of the said spur line and define the method of construction thereof, and directing the said Northwest Jobbing and Commission Company to pay into court an amount sufficient to cover the cost of the said spur if constructed in accordance with this application. (Application 3955. Case 3583.)

Order made amending order 4353, by striking out the operative part of said order

and placing thereafter the following clause:-

That the Pacific Company be, and is hereby directed to construct, maintain and operate a branch line of railway or spur from a point marked 'R' on the present freight spur; thence curving across Baroness road to the east side of Smith street; thence along Smith street to the north side of Dufferin street; in the city of Lethbridge, province of Alberta, a distance of fourteen hundred and forty-five feet, as shown in yellow, to the north side of Redpath street, and in red from the north side of Redpath street to the north side of Dufferin street, on the plan on file with the Board under case No. 3583, File 3955, which is hereby approved.

1538. Peition of the local union of the United Mineworkers Board of Trade and storekeepers, of Taber, Alberta, complaining against the freight rates of the Canadian

Pacific Railway on coal shipments.

Also alleged failure of the Canadian Pacific Railway to supply an adequate number of cars for the movement of coal traffic. (Application 8626. Case 4036.)

Application dismissed.

1539. Complaint of the Alberta Farmers' Association and the Carston Board of Trade respecting freight, passenger and express rates charge on the Alberta Railway and Irrigation Company to and from Cardston, Alberta. Also alleged non-billing and posting of tariffs at station in accordance with Railway Act. (Application 3744.)

Stands for judgment, referred to chief traffic officer for a report.

1540. Complaint of F. W. Godsall, of Cowley, Alberta, respecting passenger rates on the Canadian Pacific steamers between ports of call on the Kootenay and Arrow lakes, B.C. (Application 5889.)

Application dismissed.

1541. Complaint of J. G. Swinney, Cowley, Alberta, alleging excessive express rates charged by Dominion Express Company on milk from Cowley, Alberta, to lichel, British Columbia. (Application 4370.)

Application dismissed.

1542. Complaint of F. W. Godsall, Cowley, Alberta, alleging excessive express rates between Winnipeg and Cowley. (Application 4896.)

Application dismissed.

1543. Application Edmonton Board of Trade re use of lignite coal on locomotives. Reserved.

1544. Petition of the residents of Westbank, British Columbia, requesting that the Canadian Pacific Railway Company's steamers deliver mail and passengers at least three times a week at their wharf, Hall's Landing. (Application 7307.)

Application dismissed.

1545. Application of the city of Revelstoke, British Columbia, that the Canadian Pacific Railway be asked to make arrangements towards the construction of a bridge for traffic in connection with proposed new railway bridge across the Columbia River at Revelstoke, British Columbia. (Application 3885.)

Application dismissed.

1546. Complaint of R. G. Sidley, of Sidley, British Columbia, that the Vancouver, Victoria and Eastern Railway is discriminating in favour of the United States towns in regard to railway facilities in British Columbia. (Application 5039.)

Application dismissed.

1547. Complaint of the Columbia Flouring Mills Company, Ltd., Enderby, British Columbia, against the Canadian Pacific Railway, alleging they are not complying with section 236 of the Railway Act, with respect to company's rails where they cross Mill street, town of Enderby, British Columbia. (Application 9172.)

Judgment reserved, to look into the question as to whether Mill street is a high-

way or not. Application subsequently granted.

1548. Application of the Vancouver, Victoria and Eastern Railway, under section No. 222, for authority to construct a branch line to connect main line with the international boundary near Myncaster, district of Yale. (Application 5369. Case 1981.)

Application dismissed.

1549. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to the K. V. R. Ry. to cross Main street, city of Grand Forks. (Application 5736. Case 2343.)

Application granted.

1550. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to the K. V. R. Ry. to cross Bridge street, city of Grand Forks, British Columbia. (Application 5743. Case 2334.)

Application granted. Order issuer.

1551. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to the K. V. R. Ry. to cross Winnipeg avenue, city of Grand Forks, British Columbia. (Application 5741. Case 2345.)

Application granted. Order issuer.

1552. Application of the city of Grand Forks, under section 29, for Order varying Order of the Board, dated 23rd October, 1907, granting leave to K. R. V. Ry. to cross

Victoria avenue, city of Grand Forks, British Columbia. (Application 5737. Case 2346.)

Application granted. Order issued.

1553. Application of the city of Grand Forks, British Columbia, under section 29, for an Order varying Order of the Board, dated 23rd October, 1907, granting leave to Kettle River Valley Railway to cross Fifth street in the city of Grand Forks, B.C. (Application 5739. Case 2348.)

Application granted. Order issued.

1554. Application of the city of Grand Forks, British Columbia, under section 29, for Order varying Order of Board, dated October 23, 1907, granting leave to the Kettle River Valley Railway to cross Alexandra avenue, city of Grand Forks, British Columbia. (Application 5740. Case 2349.)

Application granted. Order issued.

1555. Application on behalf of the city of Grand Forks. British Columbia, under section 29, for Order varying Order of the Board, dated October 23, 1907, granting leave to Kettle River Valley Railway to crosss Sixth street, city of Grand Forks, British Columbia. (Application 5742. Case 2350.)

Application granted. Order issued.

1556. Application of the city of Grand Forks, British Columbia, under sections 229, 274 and 275 of the Railway Act for Order directing Columbia and Western Railway Company to adopt a signal service at its crossing of Riverside avenue, city of Grand Forks, British Columbia. (Application 9141. Case 4435.)

Order made for installation of electric bell by company at its expense, one half

cost of maintenance to be borne by the city; speed limit of ten miles an hour.

1557. Complaint of the Board of Trade of Greenwood, British Columbia, alleging irregularity in freight and passenger rates on the Victoria, Vancouver and Eastern Railway, involving unjust discrimination against British Columbia points on the V. V. & E. Ry., in favour of points in State of Washington. (Application 9264.)

Application refused.

1558. Complaint of the Vernon Fruit Company of Vernon, British Columbia, alleging excessive freight rates charged by the Canadian Pacific Railway on fruit shipments from Peachland to Victoria, British Columbia, also against the minimum carload weight on such shipments. (Application 8911.)

Application withdrawn.

1559. Complaint of the Fruitvale Fruit Growers Association, against condition of fences, station accommodation for handling of freight and express on the Great Northern Railway at Fruitvale, British Columbia, also request that the railway company appoint an agent at that point. (Application 8868.)

Order made for erection of station and freight shed within one month. Local parties to furnish wire and put same on telegraph posts after railway company; the

latter to put an in the station. Connection at Salmo.

1560. Consideration of the terms of Order No. 2115, November 16, 1906, respecting interwitching charges at Rossland, British Columbia, as between the Red Mountain Railway and the Columbia and Western Railway Companies. (Application 5.)

Judgment reserved.

1561. Application of the Board of Trade of Nelson, British Columbia, respecting freight rates on the Canadian Pacific Railway to and from that point. (Application 5664.)

Application dismissed.

1562. Complaint of F. W. Godsall, Cowley, Alberta, against alleged delay by the Canadian Pacific Railway Company in running of trains between Cowley and Nelson. (Application 4896.)

Application dismissed.

1563. Application of Frank Miller, Columbia, British Columbia, for an Order directing the Kettle River Valley Railway Company to provide a crossing or bridge in front of his residence, Columbia, British Columbia. (Application 2283.)

Application withdrawn upon railway company undertaking to put in crossing.

1564. Application of the Canada Zine Company, Limited, for authority to cross the Canadian Pacific Railway Company's (Proctor branch) tracks with transmission wires near Station, B.C., 76, one mile from Nelson, British Columbia. (Application 7556. Case 3297.)

Upon affidavit being filed within thirty days by applicant that poles have been protected to satisfaction of the railway company order to go, otherwise application refused.

1565. Application of the Hasting Exploration Syndicate, Limited, for a station agent at Erie, British Columbia, on the line of the Nelson and Fort Sheppard Railway. Application withdrawn.

1566. Complaints of the Okanagan Board of Trade regarding freight rates on fruit.

Application withdrawn.

1567. Complaint of Robert Robson of Mayook, British Columbia, alleging poor train service on the Canadian Pacific Railway on the Crown West branch from Mayook to Cranbrook, British Columbia.

Application withdrawn.

1568. Complaint of A. E. Watts that railway companies do not comply with Provincial or Dominion Acts of Parliament in the matter of keeping their right of ways clear of inflammable material.

Application withdrawn.

1569. Complaint of A. E. Watts that no station accommodation of any kind is provided by the Canadian Pacific Railway Company for passengers or freight at Wattsburg, and that the Dominion Express Company has refused to deliver goods at Wattsburg.

Order made that railway company file plans within two months, and upon approval to erect station at Wattsburg within four months from date of Order.

1570. Complaint of the Cranbrook Fernie Farmers' Institute that cattle guards on the line of the Canadian Pacific Railway Company are totally inadequate for the protection of cattle and other stock. (Application 9848, Case 4879).

Stands pending consideration of a general Order regarding cattle guards, &c.

1571. Application of the Cranbrook-Fernie Farmers' Institute for an order to compel the Canadian Pacific and other railway companies to re-open and restore certain public roads they have destroyed, obstructed and obliterated wherever such roads are required for use by the public in British Columbia. (File 9848. Case 4878).

Stands for judgment, the company undertaking to investigate as to the obstruc-

tions (if any), and report as to the same.

1572. Petition of the Legislative Assembly of Manitoba, asking that railways operating in the province of Manitoba be required to pay demmurrage in all cases where such companies are not able or fail to furnish cars within one week after being ordered, said demurrage to be at the same rate per day as charged by railway companies when a car is not loaded in a given time after being placed at a loading platform or elevator, and to be deducted from the freight rate. (Application 4235.)

Stands until next sittings of Board in Winnipeg at the request of Attorney

General for province of Manitoba.

1573. Application of the city of Winnipeg, Manitoba, for an order directing the Canadian Pacific Railway Company to remove its tracks from McPhillips street, Winnipeg, Manitoba. (Application 2050).

Stands at request of all parties pending the making of a formal agreement between the city of Winnipeg and the Canadian Pacific Railway Company. Copy to be filed with Board.

1574. Application of the city of Winnipeg for an Order approving of the plans of the Salter street bridge across the tracks of the Canadian Pacific Railway Company at Winnipeg, Manitoba. (File 3084.)

Stands at request of all parties pending the making of a formal agreement between the city of Winnipeg and Canadian Pacific Railway Company Copy to be filed with Board.

1575. Application of M. McGregor of Eagleton, P.O. (Tilston, Manitoba), for a semi-weekly mail service by train instead of by stage or mail carrier system; for an Order that an agent be placed at the station in question, and for an Order directing the Canadian Pacific Railway Company to rename the town of 'Eagleton.'

Application dismissed.

1576. Complaint of M. McGregor, of Tilston, Manitoba, on behalf of the farmers and citizens of that town against the poor service of the Canadian Pacific Railway between Lauder and Tilston, Manitoba. (Application 9125.)

Application dismissed.

1577. Application of the Kemp Manufacturing Company and Winnipeg Ceiling and Roofing Company for an Order directing the railway companies to equalize their freight rates on metallic shingles and sidings from eastern points to Manitoba, Saskatchewan and Alberta, as against the freight rates on the manufactured products. (Application 4756. Case 1460.)

Judgment reserved.

1578. Complaint of John Kerr of Franklin, Manitoba, regarding freight rates on vegetables shipped from Franklin to Winnipeg. (Application 9796.)

Stands for judgment.

1579. Petition of residents of Broderick, Sask., for an appointment of an agent by the Canadian Pacific Railway Company at that point. (File 9479.)

Stands for judgment. Company to file statement of earnings at station in question.

1580. Complaint of London Fence Company regarding the crossing of Broadway street. Portage la Prairie, Manitoba, by the tracks of the Canadian Northern Railway Company. (Application 6255.)

Judgment of Board that agreement between the complainant and railway company should be carried out. Railway consents to pay expense of hydrant if city extends water main.

1581. Complaint of Union of Manitoba Municipalities requiring cattle guards on the various railroads in Manitoba. (Application 9818.)

Stands for consideration of general question.

1582. Petition of settlers in the vicinity of the Thunder Hill branch of the Canadian Northern Railway for an Order compelling the Canadian Northern Railway to operate its line and siding about 18 miles west of Benito.

Application dismissed.

1583. Complaint of J. F. Wilson, of Dana, Sask., for damages for cattle killed on the Canadian Northern Railway right of way through section 23, township 38, range 26, west second meridian, also through S. E. quarter section 22, township 38, range 26, west second meridian.

Application dismissed, no jurisdiction.

15S4. Application of the town of Dauphin, Manitoba, to have Vermilion street opened across the right of way of the Canadian Northern Railway Company. (Application 9798. Case 47S3.)

Order made that railway company permit public to use the crossing at Vermilion street on condition that no objection be raised to westbound trains reasonably obstructing Dartmoor street and eastbound trains Vermilion street.

1585. Application of the Rat Portage Lumber Company, Ltd., for an Order, under sections 314, 318, 321 and 323 of the Railway Act, for an Order directing the Canadian Northern Railway Company to reduce its toll for carrying saw logs from the Rainy River and points adjacent thereto to the mills of the applicant company.

Application disposed of except as to the rate (if any) to be charged for shunting on railway company's spur to Rat Portage Lumber Company's mill.

1586. Application of D. A. Ross for an order compelling the Canadian Northern Railway Company to accept freight for shipment on its Bird's Hill branch.

Application withdrawn.

1587. Complaint of J. J. Powell regarding the dangerous crossing between mile post 244 and 245 on the main line of the Canadian Northern Railway, Winnipeg to Edmonton. (Application 9437. Case 4628.)

Referred to the Board's engineer to report.

1588. Application of Local Improvement District 26-B-4 for an Order directing the Canadian Northern Railway Company to make level crossings on road allowances in township 50, range 3, west of the 4th meridian. (Application 9513. Case 4634.)

Order to go for railway company to put in crossings in accordance with the regu-

lations.

1589. Complaint of the Prince Albert Board of Trade that the new joint commodity tariff of the Canadian Northern Railway Company and the Canadian Pacific Railway Company to British Columbia points is unsatisfactory and for a repayment to shippers of all amounts paid in excess of the rates applied to Prince Albert prior to the transfer of the Qu'Appelle. Long Lake and Saskatchewan Railroad and Steamboat Company. (Application 6945.)
Application dismissed.

1590. Application of the Board of Trade of Redvers, Sask., for a station and facilities at point on the line of Canadian Pacific Railway Company. (Application 9872.)

Order made directing railway company to provide and maintain a station at Redvers, known as its No. 5 standard plan, to be completed by 1st September, 1909.

1591. Application of the Canada West Coal Company, Ltd., for authority to construct tunnel under the tracks of the Canadian Pacific Railway where the same cross the Crowsnest branch on the south half of section 31, township 9, range 16, west 4th meridian, at Taber, Alberta.

Application dismissed.

1592. Application of Edward D. Coffey et al, for an Order directing the Canadian Northern Railway Company to put into immediate and continous operation its line of railway from Etoimami to The Pas.

Application dismissed.

1593. Complaint of the Rev. William Stocker, of Elkhorn, Manitoba, re condition of Canadian Pacific Railway station at Elkhorn. (Application 9681.)

Reported upon by Board's inspector. Company has undertaken to see that the

grounds for the complaint are removed.

1594. Application of the Bell Telephone Company, under section 248 of the Railway Act, for leave to exercise its power in the construction, maintenance and operation of its line of telephone under a part of Forticfiation Land and Victoria square within the limits of the city of Montreal, province of Quebec. (Application 9648. Case 4682.)

Application granted. Order issued.

1595. Consideration of the question of protection of highway crossing at King street, Sherbrooke, province of Quebec, by the Canadian Pacific Railway. (Application 9437. Case 4708.)

No Order made as railway company assured Board that it had decided to remove its passenger station to another point which will do away with necessity of any regular train crossing the highway in question.

1596. Application of the corporation of the city of Sherbrooke, province of Quebec, for an Order requiring the Grand Trunk Railway Company to remove additional track laid across King street and discontinue shunting their cars across the said King street.

The question of protection will also be considered by the Board in this connection.

(Application 2267. Case 1436.)

Stands until after June 1, 1909, to give railway company an opportunity to relieve the inconvenience complained of by such steps as it deems necessary.

1597. Consideration of the question of protection of the level crossing by the Canadian Pacific Railway Company and the Grand Trunk Railway at College street,

Lennoxville, province of Quebec. (Application 419. Case 842.)

Board ordered folding gates to be installed by the Canadian Pacific and Grand Trunk Railway companies for protection of the Canadian Pacific Railway crossing and Boston and Maine, and Grand Trunk Railway crossings. Gates to be operated from a tower on Canadian Pacific Railway property and to be operated day and night. Cost of construction to be borne equally by the three railway companies. Cost of maintenance to be borne 5-12 by Grand Trunk Railway Company, 3-12 by Boston and Maine, 3-12 by Canadian Pacific Railway Company, 1-12 by the village of Lennoxville. Gates to be installed by 19th July, 1909.

## APPENDIX D.

SUMMARY OF THE PRINCIPAL JUDGMENTS DELIVERED BY THE BOARD FROM FEBRUARY 1, 1904, TO MARCH 31, 1908.

The towns of Port Arthur and Fort William v. The Bell Telephone Company and the Canadian Pacific Railway Company.

The municipalities of these towns owned and operated a joint telephone system within the limits of the two towns, and applied to the Board under section 193 of the Railway Act, 1903, for an order directing the Canadian Pacific Railway Company to allow the installation of telephone instruments on the premises and in the railway stations of the company to connect with the municipalities' exchange.

In May, 1902, and prior to the enactment of section 193, an agreement was made between the railway company and the Bell Telephone Company, under which the telephone company, for valuable consideration, was granted, for a period of ten years, the exclusive privilege of placing telephone instruments, apparatus and wires in the several stations, offices and premises of the Railway Company in Canada, where the telephone company had established, or might, during the continuance of the agreement, establish telephone exchanges.

Hearing at Ottawa, February 16 and 29, 1904.

Judgment of Board, March 15, 1904.

Held, per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 205): That the said agreement was valid and not void or voidable as being in restraint of trade or against public policy, and that an order under section 193 should provide for payment of compensation upon just terms for all lawful rights and interests injuriously affected thereby.

Per Bernier, Deputy Chief Commissioner: While the agreement is valid and compensation should therefore be allowed, the question of compensation should be reserved for future consideration and determined after hearing any case that might be presented by the Canadian Pacific or any other railway company in support of damages.

Per Mills, Commissioner: That the agreement is in restraint of trade and against public policy, and that compensation should be awarded only for the use of the premises occupied by the municipalities' telephones. and the expense of operating them.

Order suspended pending further argument as to the question of compensation.

Upon questions of law the opinion of the Chief Commissioner prevails.—Section 10 of Railway Act, 1903.

A further hearing of this application on the question of compensation was had at Ottawa, October 12, 1904.

Judgment July 14, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 279): Held, adopting the former judgment of a majority of the Board.

Compensation should be made to the railway company for the use of its stations and the interference with its property consequent upon such installation.

Compensation should also be made to the telephone company for the loss of the exclusive privilege of telephone connection with such stations.

The effect on the exclusive agreement between the telephone company and the railway company of installing such a municipal telephone system must be determined by the law of the province of Quebec where the contract was made.

The installation of such a municipal system would not of itself rescind the exclusive contract letween the telephone company and the railway company. At most its only effect would be to give the injured party a right to have the contract rescinded. Quebec Civil Code, Art. 1065, Dupuis v. Dupuis, R. 72 R. 19 S.C. 500.

The evidence does not furnish a satisfactory basis of determining the compensation to be paid by the municipalities, and suggestions are made as to its ascertainment hereafter by the board or by arbitration.

Payment of such compensation, or the giving of proper security therefor, to both companies, should be a condition precedent to the installation of the system in each town.

Leave was given to state a case for the opinion of the Supreme Court whether the installation of the municipal system entitles the telephone company to a rescission of its contract with the railway company.

## In the matter of the Shore Line Railway.

Complaint was made to the Board that the Shore Line Railway, running between the city of St. John and the town of St. Stephen, in New Brunswick, was unsafe for traffic. The board caused its inspecting engineer to make an examination of the said line of railway, and upon his report, made an order forbidding the running of trains, cars or engines over the railway between certain points named. Against this decision and order a protest was made on behalf of the New Brunswick Southern Railway Company, the company now operating what was and is still known as the 'Shore Line Railway,' upon the ground that the Board had no jurisdiction or authority to direct or enforce the stoppage of trains or the operations of said railway.

The undertaking of the Shore Line Railway Company was, by Act of the Parliament of Camada, chapter 63 of 58-59 Victoria, declared to be a work for the general advantage of Canada, and that Act provided that the Railway Act of Canada should apply to the company and its undertaking instead of the laws of the province of New

Brunswick and the Railway Act of that province.

Later, the Shore Line Company defaulted in the payment of its bonds. Proceedings were taken in the courts of New Brunswick, as a result of which the railway was subsequently sold, and the sale was followed by an Act of the New Brunswick Legislature, chapter 74, 1 Edward VII., incorporating the New Brunswick Southern Railway Company for the purpose of acquiring, holding and operating all or any part of the Shore Line Railway; and also all the capital stock, bonds, rights, franchises, powers and privileges, and properties of the said Shore Line Railway; and by chapter 102 of 3 Edward VII., an Act of the said legislature was passed confirming the deed of conveyance of the property and franchises of the Shore Line Company to the New Brunswick Southern Railway Company.

Judgment June 7, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 277).

A railway company incorporated under the laws of a provincial legislature, whose undertaking is afterwards declared to be a work for the general advantage of Canada, is subject to the exclusive control of the Parliament of Canada and the Railway Act applies. No provincial legislature can restore control, legislatively speaking, to the provincial legislature.

## Duthie v. The Grand Trunk Railway Company.

This was an application by J. H. Duthie of Toronto, against the Grand Trunk Railway Company for relief on account of its action in detaining three cars loaded with coal at Belleville to enforce payment of charges for demurrage on car service.

and, in default of payment, disposing of the coal by private sale and applying the proceeds in payment of the freight and storage charges.

Hearing at Ottawa, June 27, 1905.

Judgment, August 24, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., 305):

The Board of Railway Commissioners is a judicial, as well as an executive body, created to enforce the railway legislation of the Dominion Parliament, but not to supplant or supplement the provincial courts in the exercise of their ordinary jurisdiction. In making orders and regulations under sections 23 and 25 of the Act the board is not to adjudicate in respect to rights arising out of past transactions, but to lay down rules for future conduct. The board is not empowered to award damages or any other relief for any injury caused by an infraction of the Act, e.g., section 214.

Held, that any claim for damages for premature or improvident sale should be

prosecuted by action in the provincial courts.

By the tariff of tolls approved by the Governor in Council under the Railway Act of 1888, railway companies were authorized to charge higher tolls than by a special tariff filed under the Act of 1903, which specifically provided for car service or demurrage charges. The latter were also recognized by the classification rules authorized by the Board and in force at the time in question.

Held, that the company not having sought to charge the maximum tolls approved by the Governor in Council (of the nature of a standard tariff) must be understood as having accepted the goods for carriage at lowest rates conditional upon its right

to make a charge for demurrage.

Held, that the rate charged was prima facie reasonable and that no order should be made against the railway company.

## Re Car Service Rules.

Numerous complaints and objections were presented to the Board respecting charges made by railway companies for demurrage or delay in the loading or unleading of car by shippers or consignees, and the rules governing such charges.

The practice of railway companies, before the constitution of the Board, was to charge lower tolls on goods in carload lots than for less quantities. This practice was sanctioned by the freight classification and has been followed in the tariffs authorized by the Railway Act, 1903.

It appears to the Board to be reasonable that railway companies which delivered cars to, or placed them at the disposal of, shippers or consignees, for loading or unloading, should have some means of limiting the time to be occupied in such loading and unloading, and should be authorized to impose a reasonable additional toll on traffic carried at carload rates for any detention or use of the cars or continued occupation of their tracks, beyond such time as would be reasonably required for loading or unloading. It was felt, too, to be important in the public interest as securing the fullest possible use of railway cars, tracks and equipment, that such delays should be discouraged.

With this object in view, and after giving every opportunity which was reasonably possible to the various interests affected to be heard upon the subject, the Board. by order dated January 25, 1906, abolished and disallowed all tolls or charges theretofore charged or imposed by any railway company subject to its jurisdiction, for delay in, or additional time used in, the loading or unloading of cars, whether under the name of demurrage car rental, or car service, or otherwise, and all rules regulating the same, substituting therefor the tolls and rules set out at length in the order. (See Appendix H.)

Said order, and the rules therein set forth, came into force and took effect the

first day of March, 1906.

The Sydenham Glass Company v. the Grand Trunk Railway Company, Canadian Pacific Railway Company, Lake Erie and Detroit River Railroad Company, Wabash Railway Company, Michigan Central Railroad Company, and the Hamilton, Toronto and Buffalo Railway Company.

This was an application by the Sydenham Glass Company for lower special rates than the special rates agreed to by the railways interested, and which applied on shipments of glassware, bottles, and lamp chimneys from Wallaceburg, Ontario, on the line of the Père Marquette Railway Company to Toronto, Hamilton, Berlin, Londou, Ontario, and to Montreal, Quebec.

The original application covered the commodities named both in carload and less than carload lots, but on the hearing it was announced on behalf of the applicants

that the application would be restricted to bottles in carloads.

Hearing at Toronto, June 20, 1904. Judgment of Board, July 30, 1904.

Per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 409):

Bottles in carloads were formerly carried from Wallaceburg to Toronto, Hamilton, Berlin and Montreal at special rates less than the regular basis of fifth class Upon the Railway Act coming into force on February 1, 1904, these special rates were increased.

It appeared that at the present rates the Glass Company cannot maintain its position in the home market against foreign competition:—

Held, that the rates should be reduced to the following scale, viz.: to London, 8 cents; to Toronto, Hamilton and Berlin, 13 cents; to Montreal, 23½ cents.

## Scobell v. Kingston and Pembroke Railway Company.

Complaint alleged (1) that discriminative rates were imposed on the transportation of cedar lumber, railway ties and poles of all kinds made from cedar, and used for raliway purposes; (2) that unreasonable and excessive rates were imposed on the transportation of the telegraph, telephone and trolley poles as compared with rates on lumber, &c.

Hearing at Ottawa, April 23, 1904.

Judgment of Board, July 36, 1904.

Per Blair, Chief Commissioner (2 Can. Ry. Cas., p. 412).

It appeared that an increase had been made in the rates on cedar products without any material change in the rate on common lumber and similar products. This increase was made by the railway company to retard the shipment of cedar products required for its own use.

Held, a discrimination within the meaning of s. 253, s.s. 2,—the railway company ordered to cease from levying rates on cedar products in excess of the rates on other descriptions of lumber and their products. 'Common carriers in making rates cannot arrange them from an exclusive regard to their own interests, but must have respect to the interest of those who may have occasion to employ their services, and must subordinate their own interests to the rules of relative equality and justice.' (Reynolds v. Western N. Y. R. W. Co., 1 I.C. Rep. 685.)

The Sutherland-Innes Company and the Wallaceburg Cooperage Company v. the Père Marquette, Michigan Central, Wabash, Grand Trunk, and Canadian Pacific Railway companies.

This was a complaint against the increase of rates by the railways named on cooperage stock between points in eastern Canada, and more especially to the increase from Wallaceburg and other western Ontario points to Montreal for local delivery and for exports.

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Hearing at Toronto, June 20 and 23, 1904.

Judgment of Board, July 30, 1904.

Per Blair, Chief Commissioner (2 Can. Ry. Cas., p. 412):

Held, that rates on cooperage stock should not exceed rates on common lumber according to the mileage lumber tariffs of the railways, but such rates when specially reduced on account of water competition, &c., need not necessarily apply to cooperage stock. From points in western Ontario to Montreal, the maximum rate for local delivery was fixed upon the evidence at 16½ cents, and for export, including 'terminal,' at 18 cents per hundred pounds.

## Tower Oiled Clothing Company's case.

Application by the Tower Oiled Clothing Company, of Toronto, for a carload

rating on oiled clothing, shipped in carload lots.

It appeared that carload shipments had been made from Toronto to Halifax for fishermen's use, and it was alleged that shipments might also be made to the Canadian Northwest for ranchers' use if the application were granted.

Hearing at Toronto, June 28, 1904. Judgment of Board, July 30, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 417):

Held, that although the discrimination involved in the difference between C. L. and L. C. L. rating has received tacit assent, a shipper has not thereby the right to demand a lower rate on carloads, unless possibly he can show that the carload rate demanded would pay reasonably for the service and that a refusal would injure his business. Upon the evidence a third-class rate for carloads of not less than 20,000 pounds from Toronto to Halifax, Winnipeg and Calgary and other points reached by applicants was ordered.

# The United Factories (Limited) v. The Grand Trunk Railway Company.

Complaint alleged that a rate of 3 cents per 100 lbs. on logs from Penetanguishene to Newmarket, which the railway company had maintained for a number of years, from 1895 to November, 16, 1903, conditional that the product of the logs should be delivered for carriage to the Grand Trunk Company, was, on November, 16, 1903, increased to 4 cents per 100 lbs., but subject to the same condition.

Hearing at Ottawa, April 28 and May 6, 1904.

Judgment of Board, October 10, 1904.

Per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 424):

Held, that since the increased rate is neither unjust, unreasonable nor contrary to some provision of the Railway Act, the application must be refused.

## Re The Canadian Freight Association and Industrial Corporations.

This was an application by the Canadian Freight Association, on behalf of all the railways in Canada, under subsection 4 of section 275 of the Railway Act, 1903, for permission to make concessions from the current rates on material for construction and machinery for equipment of new industrial plants.

Certain of the railway companies, members of the Association, had been in the

habit of granting a reduction of 25 per cent on the rates on such material, &c.

Judgment, October 10, 1904, refusing application. Blair, Chief Commissioner (3 Can. Ry. Cas., p. 427):

That although the Board is prepared to give due effect to subsection 4 of section 275 of the Act, it must have a separate and distinct application in such case, so as to judge of the effect of its order upon other industries, shippers and dealers.

Ontario Fruit Growers' Association v. Canadian Pacific Railway Company et al.

Complaints alleged (1) unreasonable and excessive freight rates on fruits and (2) that the charge for icing in transit were too great.

Hearing at Toronto, June 21, 23 and 24, 1904.

By agreement between complainants and the railway companies, the following modifications were made in the classification:—

(a) Apples in boxes less than carloads, from 2nd to 3rd class.

(b) Pears in boxes and barrels, L.C.L., from 1st to 3rd class, and in carloads from 3rd to 5th class.

Also the following commodity rates:-

- (c) On fresh fruits (small), from the fruit districts to points in Eastern Ontario, Quebec, and the maritime provinces, fresh fruit shall be carried at 4th class rates in carloads of not less than 20,000 lbs. instead of 3rd class rates, and at 2nd class rates in L.C.L. of 10,000 lbs. and over instead of 1st class rates.
- (d) And from points in Ontario and Quebec to Winnipeg, Portage la Prairie and Brandon, a fourth-class rates in carloads of not less than 20,000 pounds, instead of third class.

Approved by Board.

Judgment October 10, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 430):

Held, that the present system of making fixed charges for icing cars, irrespective of the actual cost of such service, is not based on sound principle, and must be discontinued; that the actual cost of the ice and the placing thereof in the cars should not be exceeded. Pending a decision of the Board upon further consideration as to a reasonable charge, a charge of not more than \$2.50 per ton of 2,000 pounds on the actual weight of the ice supplied was, in this instance, authorized.

## The Pea Millers' Association v. Canadian Railway Companies.

The Pea Millers' Association complained that the railways charged higher rates from Ontario milling points to the sea-board on split peas for export than they charged on other grain products, such as flour and rolled oats for export.

Split peas for export were formerly carried upon the flour basis. The advance complained of commenced in October, 1902, and was made apparently under pressure. The McMorran Company, of Port Huron, complained to the Interstate Commerce Commission that Canadian railways were carrying split peas for export at the grain product rate, while it had to pay the higher rate of the Michigan roads.

The Michigan railroads opposed any reduction in their rates, and the result was that the rate advanced on the Grand Trunk and other railways in Canada.

Hearing at Ottawa.

Judgment of Board, October 10, 1904.

Per Blair, Chief Commissioner (3 Can. Ry. Cas., p. 433):

That the former basis of rates must be restored.

In re application of the Grand Trunk Railway Company for permission to make reduced rates on coal used for manufacturing purposes.

This was an application by the Grand Trunk Railway Company, under subsection 4, section 275, of the Railway Act, for authority to continue a difference in the rate of freight on bituminous coal of ten cents per ton between certain points on its line of railway, such reduced rates being in favour of the manufacturer as compared with that charged to the dealer or consumer.

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The applicant company had been in the habit of allowing a rate of 80 cents per net ton on bituminous coal used for manufacturing purposes at Cobourg, carried from the Niagara frontier to Cobourg while the usual and customary rate was 90 cents on coal carried between the same points for other shippers and used for domestic purposes.

The company justified the difference in the rate on the ground that certain manufacturers in Cobourg would be unable to pay the higher rate and carry on business

successfully.

Judgment, October 10, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 438):

That no evidence has been offered to sustain this claim; but even if proved, the reduction could not be allowed. The allowance of a reduction in the freight rate on any article of merchandise to one class of shippers, and the refusal of the same rate to another class, is unjust discrimination, and forbidden by section 252.

(Castle v. B. & O. R. W. Co., 8 I. C. Rep., 333, approved.)

# The Almonte Knitting Company v. the Canadian Pacific Railway Company and the Michigan Central Railroad Company.

The Almonte Knitting Company complained that the rates on coal to Almonte from the Niagara and Detroit frontiers were unreasonably high as compared with the rates to Carleton Junction, Ottawa, and adjacent stations. The rate to Carleton Junction, Ottawa, and adjacent stations is \$2 per ton from the Niagara frontier, and \$2.25 from Detroit, while the rate to Almonte is 40 cents higher, points on the lateral line from Carleton Junction being charged an arbitrary rate above the rate to Carleton Junction.

Hearing at Toronto, June 28, 1904.

Judgment of Board, October 10, 1904.

Blair, Chief Commissioner (3 Can. Ry. Cas., p. 441):

Under certain conditions rates to a point on a branch or lateral line may be higher than to points on the main line, though at a less distance from the junction point; but such rates must not be unreasonable or disproportionately higher than to nearer points on the main line.

Held, that the circumstances warrant a higher rate to Almonte than to Carleton Junction and Ottawa; but as the arbitrary rate to Almonte on 10th class traffic was only 1 cent per 100 pounds (20 cents per ton) it must not be exceeded on coal between

the same points.

## Re metallic shingles.

This was a complaint by the Canadian Manufacturers' Association objecting to the approval by the Board of the Canadian Freight Classification No. 12. which, among other changes and additions, advanced metallic shingles from 7th to 5th class in carloads.

This classification No. 12 was issued by the railway companies in 1903. and superseded all previous classifications. It had never been approved by order in council, but was provisionally sanctioned by order of the Board of July 16, 1904,

pending consideration of some of the objections raised.

From January 1, 1884, when the first Canadian joint freight classification was issued, until November 1, 1884, none of these commodities were specially classified; but, on a later date, a circular was issued by the railway companies making certain changes and additions by which, among other things, they placed metallic shingles in packages as L.C.L. 3, C.L. 5. This rating continued in force until March 1, 1888, when a reduction of one class was made, namely to L.C.L. 4 C.L. 6.

In May, 1890, a further reduction was made on carloads, and until March, 1901, the classification stood at L.C.L. 4, C.L. 7.

In March, 1901, the rating was placed at L.C.L. 4, C.L. 5.

The complainants set up that these goods were in the 7th class for over ten years; that the change was never sanctioned by order in council; that no substantial reason had been shown for the advance; and that the retention of the previous classification was necessary in order to enable the complainants to compete on fair terms with wooden shingles, siding, &c.

The railway companies claimed that the former classification was a mistake: that the proper class in which to place such commodities was the 5th class; that the plate, which is the raw material used in the manufacture of these articles, was in the 5th class; and that it was both unreasonable and unfair to the railway companies to place the manufactured article in a class for which the rates are lower than those upon the raw material from which the article is made; and, also, that articles of the 7th class were then carried at lower rates than those at which articles of that class were carried when these particular commodities were in the 7th class, and that they should not be obliged to lower their rates on these goods.

Hearings at Toronto, June 23, 24 and 28, 1904.

Judgment. June 29, 1905.

Killam, Chief Commissioner: Held. that the reasonable and fair course would be to establish for the articles commodity rates equal to those at which they were carried immediately before the change of classification in March, 1900.

## Re St. Pierre & Company and Temiscouata Railway Company.

This was a complaint by George St. Pierre & Co., of Fraserville, Que., alleging that the Temiscouata Railway Company was unjustly discriminating against the complainants in the matter of its freight rates, and applying for an order directing the railway company to revise and lower its freight rates.

Hearing at Rivière du Loup, April 19, 1905.

Judgment, July 5, 1905.

Killam, Chief Commissioner: The rates charged by the Temiscouata Railway Company were not unreasonable in view of the nature of the country which the railway traversed and of its traffic.

The standard freight tariff of the company was identical with the standard tariffs of the Grand Trunk Railway Company, the Canadian Pacific Railway Company, the Canada Atlantic Railway Company, and most of the other railways in the provinces of Ontario and Quebec, and the same, also, as that of the Intercolonial Railway between its stations west of Lévis.

The rates charged in the special tariff filed by the Temiscouata Railway Company on various commodities such as are authorized by section 260, subsection 2, of the Railway Act, compared favourably with the joint tariffs on the same commodities issued by the Grand Trunk Railway Company and the Canadian Pacific Railway Company, in the province of Quebec, except such rates as were rendered necessary by competitive conditions and which did not prevail on the Temiscouata Railway.

The Temiscouata Railway Company had no special commodity tariff for grain

and grain products in carloads.

Held, that in accordance with the common practice of other railway companies and in the interest of lumber camps upon or near its line, the Temiscouata Railway Company should prepare such a tariff on an equitable basis.

It appeared that the Temiscouata Railway Company had, previous to July, 1904, a proportional tariff on various classes of goods (according to the Canadian freight classification from Rivière du Loup and Edmundston, on through shipments from

points beyond, and it now charges on this through business its full standard rates as on strictly local business, except on some traffic to Edmundston.

Held, that the company should state its reasons for withdrawing this proportional tariff, and on what grounds, if any, it objected to restoring it.

## The Brant Milling Company v. the Grand Trunk Railway Company.

This was an application by the Brant Milling Company for an order 'allowing and instructing the Grand Trunk Railway Company to continue' an allowance heretofore made by the railway company for the cost of cartage on flour and feed shipped from the company's mill out of Portland and Montreal and other points in the eastern part of Canada.

The allowance was withdrawn after the Railway Act, 1903, came into force, and it was claimed that its continuance was necessary to the existence of the applicant's business.

Hearing at Brantford, April 26, 1904.

Judgment, July 13, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 259).

The Railway Act, 1903, requires equality in the tolls charged under substantially similar circumstances, and forbids discrimination between individuals, persons, companies and localities. Sec. 252.

No variation from the authorized tariffs of tolls can be made unless under circumstances or conditions specially provided for in such tariffs or by special tariffs of general application and not discriminating between different localities. Secs. 261, 262.

Held, that the application either for a continuance of the allowance previously made, or for a change in the authorized tariffs of tolls, in favour of the applicant alone, must fail.

Manufacturers' Coal Rate Case, 3 Can. Ry. Cas. 438 referred to; Stone v. Detroit. &c., 3 I. C. Rep. 613; Hazel Milling Company v. St. Louis, &c., 5 I. C. Rep. 57; re division of joint rates, 10 I. C. Rep. 681, followed.

## Coal Rates Midland to Orillia.

Complaint of F. W. Grant alleging that the rates on coal from Midland to Orillia, Ont., charged by the Grand Trunk Railway Company, are excessive as compared with the rates from Suspension Bridge, Ont., to the same point.

Hearing at Ottawa, June 8, 1905.

Judgment, September 4, 1905.

Killam, Chief Commissioner: The Board has found great want of uniformity in the rates charged by railway companies for the carriage of coal for short distances, and proposes to ascertain, if possible, whether this want of uniformity is unreasonable, or whether some attempt should be made to harmonize the rates for similar distances. In the meantime, as the rate charged by the Grand Trunk Company for the carriage of coal from Midland to Orillia is not, in itself, an unreasonable rate, the Board will not interfere.

## Rates on stone from Stonewall and neighbouring points to Winnipeg.

This was a complaint by E. Williams & Co., A. Patterson & Co., Irwin & Son, and the Winnipeg Supply Company, alleging that the Canadian Pacific Railway Company, by increasing the rate on rubble and crushed stone from the complainants' quarries at Stonewall to Winnipeg from 2<sup>3</sup>/<sub>4</sub> cents per hundred pounds to 3 cents per hundred pounds, while continuing the rate of 2<sup>3</sup>/<sub>4</sub> cents to the Stony Mountain

quarrymen, was unjustly discriminating against the complainants, and applying for an order (a) directing the railway company to restore the former rate of  $2\frac{3}{4}$  cents from the complainants' quarries, or (b) fixing some other rate as a uniform rate from all the quarries on the Teulon branch.

Hearing at Winnipeg, September 13, 1905.

Judgment, November 23, 1905.

Killam, Chief Commissioner: In view of the facts that the traffic from Stone-wall was carried for many years at the lower rate; that the railway company itself made its first rate from Gunton to Winnipeg the same, and that a promise had been made by the second vice-president of the company to some of the complainants that the 2\frac{3}{4} cents rate from Rockspur to Winnipeg would be protected, the Board was of opinion that that rate was a reasonable one. That opinion was strengthened by reference to the rate of 2\frac{1}{2} cents per 100 pounds charged by the same railway company for carriage of similar traffic from Milton, Campbellford, Credit Forks, Schaw and Orangeville to Toronto, at distances varying from 33 to 49 miles. (Stonewall is 20 miles, Rockspur 34 miles from Winnipeg.) The question of the propriety of the rates from Stony Mountain to Winnipeg should not now be considered.

Held, that a higher rate than  $2\frac{3}{4}$  cents from Gunton, Rockspur and Stonewall was unreasonable, and that an order would go directing the disallowance of the 3 cent rate and the restoration of the  $2\frac{3}{4}$  cent rate.

## The Niagara, St. Catharines and Toronto Railway Company v. the Grand Trunk Railway Company.

This was an application by the Niagara, St. Catharines and Toronto Railway Company, under section 177 of the Railway Act, 1903, which empowers the Board to order that a junction may be made of the tracks of one company with the tracks of another company, upon such terms, at such places, and in such manner as the Board may determine, to intersect with its line the railway of the Grand Trunk Railway Company, called the Allanburg branch line or cut-off, to form a junction with the Grand Trunk Allanburg branch line at Stamford.

The evidence disclosed the fact that an agreement had been entered into between the Grand Trunk Company and the Wabash Railroad Company—the application was, in fact, a joint one by the Niagara, St. Catharines and Toronto and the Wabash Company—under which the Grand Trunk Railway granted the Wabash Company the joint user in common with itself of the Allanburg branch for a term of twenty-five years, and that the Wabash Company was then in use and possession of the said Allanburg branch jointly with the Grand Trunk Company upon the terms and conditions contained in the memorandum of agreement.

Hearing at Ottawa, March 8, 1904.

Judgment, April 5, 1904, granting order applied for. Blair, Chief Commissioner (3 Can. Ry. Cas., p. 256):

The object of the Railway Act (sections 177, 253 and 271) is to insure that all reasonable and proper facilities for the handling, forwarding and interchange of traffic shall be afforded to the shipping public. For this purpose the Board may, without the sanction and against the will of a railway company, permit a junction to be made with its line by another railway where in the opinion of the Board such junction is reasonably necessary in the public interest and in the interest of traffic in the district through which the railway passes. The parties to a lease of a railway cannot by stipulation between themselves restrict the powers or discretion of the Board to authorize such a junction.

The Niagara, St. Catharines and Toronto Railway Company v. the Grand Trunk Railway Company.

Application by the Niagara, St. Catharines and Toronto Railway Company to rescind an order of the Railway Committee of the Privy Council, approving of the place of crossing by the branch line of the Grand Trunk Company's main line at Merritton to the paper and cotton mills in that village, of the main track of the Niagara, St. Catharines and Toronto Railway.

It was alleged in support of the application that the conditions imposed upon the Grand Trunk Railway Company, and upon which that company was allowed to make the crossing, had not been complied with—that the Grand Trunk Railway Company has not paid, but has refused to pay compensation for the lands of the applicant company which are occupied by the crossing and with its switches and sidings by the Grand Trunk Company under the said order of the Railway Committee.

Hearings at Ottawa, March 11 and 22, 1904. Judgment, April 5, 1904.—Application refused. Blair, Chief Commissioner (3 Can. Ry. Cas., p. 263):

Where two railway companies differ as to the nature and extent of the protection prescribed by an order of the Railway Committee to be furnished at a crossing of two railways and one company voluntarily provides the additional protection which it claims the other company should supply according to the terms of such order, the Board will not, by an ex post facto order, direct the payment by the other company of the expeniture thereby incurred, and in default of payment order that the crossing be discontinued. In such cases the proper course is to apply to the court for an interpretation of the order.

The order of the Railway Committee directed that an interlocking signal system and all the necessary works and appliances for properly operating the same be provided at such crossing.

Held, that derails do not form part of the appliances required by such order, and a permanent watchman is not necessarily required.

Compensation is not allowed (1) for the use of the land of the senior company occupied by the crossing tracks of the junior company where no substantial injury is done to the lands of the senior company; nor (2) for interference with the business of the senior company, or for any other delays in the use of its railways due to precautions taken in the use of the crossing required for public safety. (S. 177, Railway Act, 1903.)

# City of Toronto v. The Grand Trunk Railway Company and the Canadian Pacific Railway Company.

This was an application to the Railway Committee of the Privy Council made in June, 1900, by the city of Toronto for an order to authorize and ratify the construction and maintenance of the overhead bridge adjoining York street, in the city of Toronto, and crossing overhead the railway tracks on the Esplanade, and directing the terms as between the city and the two railway companies according to which the costs of the works were to be borne by the respective parties, pursuant to secs. 187 and 188 of the Railway Act, 1888.

The construction of this bridge, known as the York street bridge, was provided for by the 7th and 8th clauses of the Esplanade tripartite agreement, dated July 26, 1892, confirmed by Dominion statute 55 and 56 Vic., chap. 48.

The application not having been disposed of before the Railway Act, 1903, came into force, was heard by the Board on May 27, 1904.

By the said Esplanade agreement, the Canadian Pacific Railway Company agreed to build a highway over the tracks of the railway companies—the portion of

the cost to be borne by each to be settled by arbitration or paid equally by the C.P.R. and the city, in case the Grand Trunk Railway was found to be exempt from, or entitled to, indemnity against liability for any portion of the cost.

The rights of the Grand Trunk Railway as to such exemption or indemnity were, by the agreement, to be decided by the submission to the court of a special case

between the city and the Grand Trunk Railway.

After the bridge was built, and while an action brought by the city against the railway companies, in lieu of the special case, was pending, this application was made

Judgment, August 19, 1904.

Blair, Chief Commissioner (4 Can. Ry. Cas., p. 62):

Application refused, the question involved not being of a public nature, but the settlement of a dispute of a private nature, which the parties, by their agreement, had left to be settled by the courts.

(The Merritton Crossing Case, 3 Can. Ry. Cas., 263, followed.)

## James Bay Railway Company v. Grand Trunk Railway Company.

This was an application by the James Bay Railway Company, under section 177 of the Railway Act, 1903, for leave to place its tracks across the tracks of the Midland Division of the Grand Trunk Railway Company at a point near Beaverton. in the township of Mara, Ontario.

At the time the application was made and for several years previous thereto, the Grand Trunk Railway Company had a single track at the proposed point of crossing, and up to the time of the hearing that company had never suggested that

it intended to lay down any other than the one track.

The matter was heard at Ottawa on August 29, 1905, and an order issued as of that date authorizing an undercrossing at the point named. The order provided that for the purpose of the crossing the Grand Trunk Railway should, at the expense of the James Bay Company, raise its tracks for such distance on each side of the crossing as the chief engineer of the Board should consider necessary to provide a proper grade and to such height (not exceeding two feet) over the then level of the tracks as the chief engineer should require. The order also provided that the masonry work of the undercrossing should be sufficient to allow of the construction of an additional track by the Grand Trunk Railway Company.

From this order the James Bay Company appealed to the Supreme Court of Canada on the question whether, under section 177 of the Railway Act, 1903, or otherwise, the Board had jurisdiction to make the order, in so far as it directed the masonry work of the undercrossing to be sufficient to allow of the construction of an

additional track on the line of the Grand Trunk Railway Company.

Appeal dismissed: 37 S.C.R. 372.

Later, by petition, dated May 8, 1906. the James Bay Railway Company appealed to His Excellency the Governor General in Council. under subsection 2 of section 44 of the Railway Act, 1903, to vary the said order of August 29, 1905, by striking out the provisions requiring the James Bay Company to provide for a second track of the Grand Trunk Railway Company.

This petition was also dismissed by order of the Privy Council, dated May 31,

1906.

Preston and Berlin Street Railway Company v. the Grand Trunk Railway Company.

This was an application by the Preston and Berlin Street Railway Company, under section 177 of the Railway Act, 1903, for leave to cross the tracks of the Grand Trunk Railway Company at Caroline and Erb streets, in the town of Waterloo. Ontario.

In order to avoid the crossings applied for it was suggested at the hearing, on behalf of the town, that the Board should exercise the power it was alleged to possess under section 187 of the Act, and direct the Grand Trunk Railway Company to move its tracks so as to allow sufficient space for the running of the applicant company's line between Mr. Seagram's property and the line of the Grand Trunk Railway.

Hearing at Toronto, November 7, 1905.

Judgment, Killam, Chief Commissioner: The application to be dealt with at the present time is simply one to allow the two crossings at Caroline and Erb streets, and in the public interests the application must be refused. The Preston and Berlin Railway Company previously applied to the Board for leave to use a small portion of the Grand Trunk Railway Company's land in order to dispense with the crossing. The company was incorporated solely under the provincial laws, and the provision in the Railway Act giving the Board power to authorize the use by one company of the railway tracks or the land of another, applies only to a railway within the authority of the Board, authorized by Act of the Dominion Parliament, or a work declared to be for the general advantage of Canada.

The suggestion that the Board attempt to exercise a power to compel the railway company, which already had a crossing over the streets, to move that crossing, not for the protection of the public, but as a matter of convenience to another railway, might be worthy of some consideration, but does not arise on the present application.

The town might succeed in an application to have the tracks of the Grand Trunk Railway Company moved and have the highway extended so as to cover the land of the Grand Trunk between the corner of the Seagram building and the tracks and a portion of it that is not already a highway. I would not say what view the Board would take of it, nor how far it could be done with safety apart from the question of its being a proper exercise of the power under that section 187 that has been referred to. If the town wishes to do that they should make an application.

Later the application was renewed at the town of Waterloo, after the Board had

an opportunity of examining the locality.

Judgment, Chief Commissioner: The Board finds that the inspection recently made of the locality has only confirmed its previous view that the crossings ought not to be allowed to be made; that the only apparent reason for such crossings is to enable the electric railway company to use property on which it desires to have its terminal station and yard, and that the Board does not consider this a sufficient reason for adding these two additional crossings so close together, and upon such a curve, to the other sources of danger in Waterloo; that the fact that the railway company has chosen to so locate its terminal property, or that the council of the town of Waterloo is unwilling to allow the electric railway company to place its tracks on other streets does not seem sufficient to force the Board, in the exercise of the discretion conferred upon it by law, to a different conclusion than that which it deems proper in the public interest; that the Board regrets that the Grand Trunk Railway Company does not see fit to allow the electric railway company sufficient space for the running of its cars between Mr. Seagram's property and the line of the Grand Trunk Railway, but that the Board finds that it has no authority to compel the Grand Trunk Railway Company to allow the Preston and Berlin Company the use of any portion of the land of the Grand Trunk Railway Company.

This being so, any change in the line of the Grand Trunk Railway Company at the street crossings would be of no benefit to the Preston and Berlin Company.

Chatham, Wallaceburg and Lake Eric Railway Company v. Canadian Pacific Railway Company.

This was an application by the Chatham, Wallaceburg and Lake Eric Railway Company, under section 177 of the Railway Act, 1903, for leave to cross the tracks

of the Canadian Pacific Railway Company, lessee of the Ontario and Quebec Railway Company, at William and Raleigh streets, in the city of Chatham, Ontario.

By agreement made in 1888 between the town of Chatham and the Ontario and Quebec Railway Company, the company agreed to maintain on two streets gates and watchmen where the railway crosses the highway, and to permit crossings to be made over four streets by the Chatham Street Railway Company and such other companies or corporations as the town might from time to time authorize to construct and run street railways in Chatham.

By by-law of the city of Chatham passed in 1905, the Chatham, Wallaceburg and Lake Erie Railway Company (incorporated by Act of Parliament of Canada, 3 Edw. VII., ch. 105) was authorized to lay down and construct a street railway in Chatham and was given extensive privileges of running passenger and freight cars by electric power on certain streets, including those crossed by the Ontario and Quebec Railway Company.

Hearing at Chatham, December 7, 1905.

Judgment, Killam, Chief Commissioner (5 Can. Ry. Cas., p. 175):

Held, that the applicants, although possessing greater powers than an ordinary street railway company, came within the terms of the agreement of 1888 as being a company authorized to construct and run a street railway in Chatham.

Held, also, that the consent of the railway company in the agreement of 1888, to permit crossings for street railway purposes did not amount to a consent to permit crossings for all purposes, nor require it to bear the cost of any extra precaution necessary in consequence of a street railway or other railway being built across its line, and that the extra expense incurred ought to be borne by the applicants.

# City of Ottawa v. the Canada Atlantic Railway Company and Ottawa Electric Railway Company.

This was an application by the city of Ottawa, made on October 8, 1903, to the Railway Committee of the Privy Council for an order directing the construction by the Canada Atlantic Railway Company of a subway under its tracks on Bank street and apportioning the cost of such work between the Canada Atlantic Railway Company and the Ottawa Electric Company. The application was transferred to the Board after the coming into force of the Railway Act, 1903.

The Ottawa Electric Railway Company, whose undertaking was declared by the Parliament of Canada a work for the general advantage of Canada, was authorized by order of the Railway Committee of the Privy Council, to cross the tracks of the Canada Atlantic Railway Company on Bank street, and by agreement the expense of protecting the crossing was borne equally between the two companies.

By an agreement dated June 20, 1893, between the city of Ottawa and the Ottawa Electric Railway Company, provision was made for the construction and operation of the works of the company over certain streets (including Bank street) of the city of Ottawa for a period of thirty years from the date of agreement. Under this agreement the company was obliged to pay the city annually the sum of \$450 per mile of street occupied by its tracks for the first fifteen years, and the sum of \$500 per mile thereafter.

By another clause in the agreement the company undertakes to pay \$1,000 per mile on streets which are permanently paved. The agreement also provides that in the event of the city desiring to alter the grade of any street, it shall be entitled to do so without being liable to the company for any damage which it might sustain by reason of the interruption of traffic.

Hearing at Ottawa, April 11, 1905.

Judgment, July 13, 1905. Per Killam, Chief Commissioner (5 Can. Ry. Case, p. 127):

Held, that the city corporation should contribute equally with the steam railway company to the cost of the work.

Also, that the Electric Street Railway Company should likewise contribute to the cost of the work.

Ordered, that the cost of construction of the subway, including compensation for land damages, be borne by the parties in the following proportions: three-eighths by the city corporation, three-eighths by the steam railway company, one-quarter by the Electric Street Railway Company.

Leave was granted by the Board on the application of the Ottawa Electric Railway Company to appeal to the Supreme Court of Canada from its order upon the following questions of law:—

- 1. Whether by reason of the terms of the agreement between the Ottawa Electric Railway Company and the city of Ottawa, dated June 28, 1893, the Ottawa Electric Railway should have been ordered to contribute to the cost of the work thereby ordered to be constructed.
- 2. Whether the Ottawa Electric Railway Company was entitled under said agreement, to have the city of Ottawa furnish to the Ottawa Electric Railway Company, for the use of the said company in the exercise of its running powers, a street or highway known as Bank street, including that portion of the said street where it is crossed by the tracks of the Canada Atlantic Railway Company (either with the existing grade or with a changed grade as proposed), upon terms as to payment or compensation as laid down in the said agreement, and whether if such was the effect of the said agreement, the Ottawa Electric Railway Company should have been ordered to contribute to the cost of the work, thereby ordered to be constructed.

Held, that the electric company was a company 'interested or affected' in or by the said work within the meaning of section 47 of the Railway Act, 1903, and could properly be ordered to contribute to the cost thereof (37 S.C.R. 354).

Re Canadian Pacific Railway Company's branch east of the Don, Toronto.

This was an application by the Canadian Pacific Railway Company, as lessees of the Ontario and Quebec Railway Company, under section 175 of the Railway Act, 1903, for authority to construct a branch line of railway along the east side of the river Don, in the city of Toronto.

Hearing at Toronto, April 27, 1905.

Judgment, August 15, 1905, refusing application.

Killam, Chief Commissioner: It was not shown to the satisfaction of the Board that such a branch was 'necessary in the public interest, or for the purpose of giving facilities to business,' as required by subsection 4 of section 175 of the Railway Act, 1903.

The legislature had committed the interests of that part of the city, in a large measure, to the civic authorities. The Board felt that it should not interfere with the exercise of their discretion except for grave reason, and that it should be left largely to them to decide whether any, or what, railway company should be allowed to construct a branch in that neighbourhood.

It did not necessarily follow that authority would be given to any company chosen by the city. but the fact that the city agreed to the building of such a line would tend to establish its importance, and the city's choice would have great weight provided the terms appeared to the Board to properly safeguard the interests of other railway companies as well as those of the public.

Grand Trunk Pacific Railway Company v. Canadian Pacific Railway.

The Grand Trunk Pacific Railway applied under section 123 of the Railway Act, 1903, for an order approving the location of a section of the main line of its railway from Portage la Prairie to the Little Saskatchewan river, in Manitoba.

The route map was approved by the Minister of Railways, as required under section 122 of the Railway Act, 1903, and by the Governor in Council.

It was objected on behalf of the Canadian Pacific Railway Company that the continuation of the proposed location of the applicant company's line to the boundary between Manitoba and the province of Saskatchewan would be within a very short distance, 9 or 10 miles, of the Pheasant Hills and Manitoba and Northwestern branches of the Canadian Pacific Railway Company, which was contrary to the intent and purpose of parliament as indicated by the Act incorporating the applicant company, which required the applicant company to keep a distance of approximately 30 miles from other roads, and which involved, therefore, a very important question of law, namely, as to the true construction and interpretation of the incorporating Act, and upon which the Board might desire the opinion of the Supreme Court.

Hearing at Ottawa, September 4, 1905.

Judgment, September 4, 1905.

Killam, Chief Commissioner: It does not seem to me that there is any question of law involved in this case. The company obtained a special Act authorizing it to build a line of railway between certain points. Parliament has authorized that to be done, and it is not for this Board to say that it shall not be done.

The Railway Act, which by its terms is to be read as one with the special Act, requires the approval by the minister of the route of the railway. After the minister has approved it, the route is to be deemed the route that the railway is to follow, and it cannot be altered except by the minister himself. The Board has no arbitrary power to refuse to accept location plans which have been approved by the minister. After such approval the proper attitude for the Board to assume is to consider that there is a company empowered by parliament to construct a railway upon the route so approved. The Board has no right to say that the line shall not be built on that route. It must treat the location plans merely as plans of a part of the line according to that route located, and all it can say is as to whether the detailed location along that route shall be adopted or shall not.

There might be reasons why it should vary this a little one way or the other and

still conform to the general route the minister has authorized.

Although the Board should be very chary about questioning the minister's view, still it might not be found approving that location if it believed that the minister had taken a wrong view of the law, and that he had no power to authorize or sanction the route under the special Act of the railway company. A question of that kind is raised here. There is, to my mind, however, no doubt whatever that the Grand Trunk Pacific Company has authority to build on the route that has been chosen, and that the minister has authority to sanction that route.

The company is by its Act given power to build railways from Moncton to the Pacific coast and certain points are specified through which it has to pass. The

minister would be bound by this.

The clause referred to as creating a limitation as to the route in the Northwest Territories does not bind the Governor in Council to anything as a matter of law. In the first place, it requires the location to be approved by the Governor in Council, and it says that he is to have regard to a certain principle; that he shall have regard to that principle except for the purpose of reaching common points. There is one exception. Then it says, or for other satisfactory reasons. That leaves it open to the Governor in Council to say what are the satisfactory reasons. It says further that such location shall, as far as practicable (another exception), be constructed at such distance, generally not less than thirty miles from any other main line of railway, as the Governor in Council may deem reasonable. There is no limitation, in fact, as to the thirty miles. It is a suggestion thrown out by which the Governor in Council may, to a certain extent, feel himself bound to act. The very fact that some portion of the line is picked out, and certain considerations are pointed out to guide in the

approval of that particular location, would indicate that the rest of the route is left open, as it would be to any other railway company under the general Railway Act, and its special Act, when the latter has no particular limitation as to route.

Held, that there is not sufficient in the question of law raised to cause the Board to submit the question to the Supreme Court before acting in the usual way, and that the orders should issue approving the plans.

Application of the Grand Trunk Railway Company, under section 139 of the Railway Act, 1903, for authority to take certain additional lands lying north of the Esplanade and between Yonge and York streets, in the city of Toronto, and for the settlement of the minutes of the order therein.

On April 19, 1904, an extensive fire took place in the business portion of the city of Toronto. On May 4, 1904, before proceedings had been taken by any land-owner to rebuild, this application, which included a portion of the burnt property, was made. A further application, covering more of the burnt property, was afterwards made on August 10, 1904.

The application was in the terms of the statute, to permit the applicants to expropriate the lands burnt over and other lands...... for the purpose of the 'convenient accommodation of the public and the traffic on its railway.' The result of the application was that none of the owners affected had completed any work on the ground looking towards a restoration of the buildings which had been burnt.

Two important points raised at the hearing were:-

First, as to the jurisdiction of the Board. It was claimed that sufficient ground was not laid, under section 139 of the Railway Act, to enable the Board to entertain the application.

Secondly, as to the question of compensation to those interested in the land proposed to be taken.

Hearings, May 26, July 22, December 9, 1904, and January 5, 1905, at Ottawa, and December 22 and 23, 1904, at Toronto.

Judgment, February 23, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 290):

The Board may consider not merely the traffic coming to the station on the railway of the applicants immediately or from a distance, but also future traffic on the railway and the future accommodation of the public.

In dealing with the question of compensation, the Board may require the applicants to do any act whatever, including the payment of money, in addition to the compensation ordinarily allowed under the statute, but any such additional compensation should be allowed only under very peculier circumstances.

Held, that compensation should not be paid to the owners for business losses sustained since the fire and during proceedings taken before the Board for leave to expropriate, but interest from the date of the original application for such leave was allowed.

Bernier, Deputy Chief Commissioner (dissenting): The principles upon which compensation should be allowed are fixed by the Railway Act, and the Board has no power to order payment of compensation for any other damage than that which the statute allows in the ordinary case of expropriating lands under the Railway Act.

Mills, Commissioner (dissenting): That compensation can be allowed under section 139, for business losses sustained while an application for leave to expropriate is pending, and that this was a proper case for allowing damages for such losses.

In re Grand Trunk Railway Company and cities of St. Henri and Ste. Cunégonde.

The Grand Trunk Railway Company applied for authority to expropriate, for the purpose of yard room, land owned by the cities of St. Henri and Ste. Cunégonde, in the province of Quebec.

Hearing at Ottawa, February 14, and at Montreal, February 22, 1905.

Judgment, May 2, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 277):

Under sections 118 and 139 of the Railway Act, 1903, railway companies may expropriate the lands of municipal corporations used by them for municipal purposes.

#### Reid v. the Canada Atlantic Railway Company.

This was an application under section 186 of the Railway Act, 1903, by a private individual, to compel the Canada Atlantic Railway Company to make and maintain highway crossings over or under the line of railway at points adjoining lands of the applicant, and was based upon an alleged agreement between the applicant and the railway company, claimed to have been made by Mr. J. R. Booth on behalf of the railway company.

The existence and alleged terms of the agreement were disputed as well as the authority of Mr. Booth to bind the company in that respect. The railway was constructed through the lands of the applicant, and the right of way acquired from him. He afterwards laid out into town lots, with intersecting streets, lands adjoining the railway, and the application was to have certain of these streets carried across the line of railway.

The municipality had passed a by-law purporting to establish as public highways such streets without complying with section 632 of the Municipal Act, R.S.O., 1907, chapter 223.

It was objected that the applicant had no *locus standi* to be heard on such an application, which should be made by the municipality only, and that no such highway can be opened across the line of railway without the previous enactment of a by-law of the municipality to that effect, after fulfilment of these formalities.

Hearings at Ottawa, May 16 and June 6, 1905.

Judgment, June 9, 1905.

Killam, Chief Commissioner (4 Can. Ry. Cas., p. 272):

- 1. Under section 186, either a railway company or other parties may apply for leave to the railway company, and possibly in some cases to other parties, to construct a highway.
- 2. The by-law of the municipality was imperative to establish a highway across the railway against the will of the company.
- 3. The Surveys Act, R.S.O. 1897, ch. 181, sec. 39, cannot create highways across the land of a railway company or give any right to the applicant to have his streets extended across the railway.
- 4. A railway company may, with the leave of the Board, lay out and dedicate portions of its right of way for use as highways which the municipality could accept without passing a by-law for that purpose.
- 5. The applicant is only entitled to an order from the Board authorizing the railway company to lay out and construct such highways. The by-laws of the municipality may be considered an acceptance of such highways.
- 6. The Board does not enforce specific performance of such agreements. It is not empowered to compel the railway company to construct the highway at the instance of the applicant.
- 7. As no other court or authority than the Board can legally allow the railway company or any other person to construct the highway, the application should proceed for the purpose of enabling the Board to determine whether it will give this permission.

Guelph and Goderich Railway Company v. Grand Trunk Railway Company.

This was an application by the Guelph and Goderich Railway Company, under section 137 of the Railway Act, 1903, for authority to take possession of, use and

occupy land of the Grand Trunk Railway Company at Goderich.

The land sought to be taken was a portion of strip along the harbour of the town of Goderich upon the waterside of which the Grand Trunk Railway Company had a number of tracks and other improvements. The particular portion applied for was not occupied by the tracks or used in any way by the Grand Trunk Railway Company, but that company claimed that it would be likely to require, in the future, for its business at that point, two additional sets of tracks upon the land in question.

The applicant company desired to take and use not only the portion absolutely

required for its tracks, but also a further strip for support.

The Board's Chief Engineer reported that one additional track would meet all the reasonable requirements of the Grand Trunk Railway Company for the future and that the quantity he recommended that the Guelph and Goderich Railway Company be authorized to take was the least that would be reasonably required for its tracks and their support.

Hearing at Ottawa, March 21, 1905.

Judgment, July 17, 1905.

Killam, Chief Commissioner: Railway companies have been granted by the legislature very great powers to take property without the consent of the owners. In the exercise of these powers they frequently cause serious discomfort and inconvenience to individuals, and in many cases deprive parties of property urgently needed for business purposes.

Section 137 of the Railway Act, 1903, places railway companies under liability to be subjected to similar treatment to that which, by the general expropriation clauses

of the Act, they are empowered to mete out to private individuals.

Parliament desires that the way should be kept clear for the construction of additional railways, and that existing railway companies should not be allowed to monopolize the lands advantageously situated for railway purposes at any particular point.

The board is empowered by this legislation to authorize one railway company to occupy and use the lands of another, even to the serious loss and detriment of the latter. Due compensation being made therefor care should be taken to avoid such

injury, except where the public interest imperatively requires it.

It is difficult to estimate in advance the probable requirements of the distant future. On such applications endeavour should be made to allow for future development; and, if it can be avoided, encroachment upon the property likely to be reasonably required for the purposes of the existing railway should not be authorized. On the other hand, the Board must guard against the use by an existing railway company of an exaggerated estimate of its probable requirements for the purpose of placing at a disadvantage an incoming competitor.

It has not been shown that there is any need of even the one additional track for the purposes of the business of the Grand Trunk Railway Company in Goderich 'If that time should ever arrive the Board, or such body as shall then exercise its

present authority, can make such provision as may seem meet.'

Held, that order should be authorizing the Guelph and Goderich Railway Company to take possession, use and occupy the lands estimated by the engineer of the Board to be required for its purpose, such compensation therefor to be paid by that company as shall be fixed by agreement between the two companies, or, in case they cannot agree by the Board.

Held, also, that while the Board has the power to rescind or vary any of its orders, this order should expressly provide that it is subject to be varied or rescinded

by the Board; thus the parties will have full notice that such change may be made as future developments shall require.

Preston and Berlin Street Railway Company v. Grand Trunk Railway Company.

The Preston and Berlin Street Railway Company applied, under section 137 of the Railway Act, 1903, for authority to take possession of, use and occupy so much of the lands of the Grand Trunk Railway Company's right of way at the crossing of Caroline and Erb streets, in the town of Waterloo, as is necessary for the applicant company's crossing at these points.

The Preston and Berlin Company was incorporated by letters patent under the

great seal of the province of Ontario.

Hearing at Ottawa, August 29, 1905.

Killam, Chief Commissioner: Section 137 gives to a company, if the Board authorizes it, the power to take and use the land of a railway company. The words 'the company,' referred to in that section means a railway company within the legislative authority of the Parliament of Canada.

The Board has no jurisdiction to authorize the taking of the lands applied for.

## Bertram & Sons' application Branch line.

This was an application by John Bertram & Sons, Ltd., of Dundas, Ontario, for an order directing the Hamilton and Dundas Street Railway Company and the Toronto, Hamilton and Buffalo Railway Company, or one of them, to construct and maintain a branch line from the railway of the Hamilton and Dundas Street Railway Company from Hatt street, in the town of Dundas, to the lands and premises of the applicants.

The Hamilton and Dundas Street Railway Company was incorporated by Act of the legislature of the province of Ontario, and its railway was never declared by the

parliament of Canada a work for the general advantage of Canda.

The contention on behalf of the applicants was that section 7 of the Railway

Act, gave the Board jurisdiction.

The Toronto, Hamilton and Buffalo Railway Company is subject to the legis-

lative authority of the parliament of Canada.

Hearing at Toronto, December 11, 1905.

Judgment, December 11, 1905.

Killam, Chief Commissioner: These provincial railways are declared to be works for the general advantage of Canada in respect only of the making of the physical connection, the crossing of one by the other, and the through traffic between them. That does not include the making of sidings or the giving of facilities for traffic.

Its purpose is to make those railways authorized by the provincial legislatures subject to the Dominion Railways Act in respect of certain matters only, and not to make the whole of these railways, after they have once been connected, and become in one sense a connection of a Dominion railway, wholly subject to the Act for all purposes.

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Held, that the Hamilton and Dundas Street Railway Company was not within the Board's jurisdiction and that the Board has no power to make an order directing it to give a siding.

The Canadian Pacific Railway Company v. the township of North Dumfries.

Application by the Canadian Pacific Railway Company for authority to construct and operate railway tracks for a term of ten years over the present line of a highway in the township of North Dumfries, Ontario, to close to public traffic a portion of such highway, and to open in lieu thereof a new road.

The company had a spur track running from its main line at Ayr to a mill, and from this spur line sidings were run into a ballast pit, crossing in their course the

highway in question.

Arrangements had been made with the owners of lands adjoining the gravel pit on one side of the highway and adjoining the company's mill spur on the other side of the highway, for the acquisition of further lands containing gravel; and the company desired to excavate farther back into the side of the hill to a depth much below the level of the highway, and for that purpose to cut away the soil of the highway a similar depth, and also for a period of fifteen years to divert the highway so that it would run around the company's land and be crossed on one side by the spur leading from the station at Ayr to the mill and gravel pit.

It was objected that the Railway Act did not authorize the diversion of a highway except for the purpose of its being crossed by or carried opposite the main line

of the railway.

Hearing at Galt, November 6, 1905.

Judgment.

Killam, Chief Commissioner: Gravel is necessary for properly ballasting a line of railway and keeping it in a proper state of efficiency. The ordinary method of obtaining such gravel for use on a line of railway is to construct spurs or sidings to points where the gravel is to be obtained, and to carry it therefrom by railway locomotives and cars to the line on which it is to be used.

Section 141 shows that the acquisition of lands on which gravel is to be found, and the construction thereto of our spur lines, are without the powers intended by

parliament to be exercised by a railway company.

Where the railway company can acquire the lands containing the gravel, and have a right of way thereto, it is not necessary to take the steps prescribed by section 141. For the purposes of such spur line, the railway company can exercise the powers for the diversion of highways given by the Act, as well as for the purpose of the construction and operation of the main line of railway.

In order to the proper excavation of the gravel pit to the depth to which the gravel goes, and for the proper operation of gravel trains, the railway company requires to cut through the highway more than once. A single cutting across the highway of the ordinary width for one track, would be insufficient. In order to keep the highway on its present site in a fit state for travel a long bridge or series of bridges would be necessary.

The railway company, in lieu thereof can properly be authorized to divert the highway at this point for the period of time estimated by it to be necessary for the

purpose of exhausting the gravel pit.

By the municipal law of Ontario, the municipality in which the highway is situated is entitled to dispose of gravel in the soil of a public highway, and to maintain trespass against any person taking the same. The railway company does not desire to deprive the municipality of the gravel in the soil of the highway and is willing to restore the site of the highway to a satisfactory condition for public travel at the conclusion of its operations.

Section 2, subsections (s) and (bb), 118, 119, 141 and 186 of the Railway Act, 1903, referred to.

Held, that the diversion should be allowed upon proper terms for safeguarding the interests of the municipality and of the public.

## T. D. Robinson & Son v. The Canadian Northern Railway Company.

This was an application by T. D. Robinson & Son, of the city of Winnipeg, for an order directing the Canadian Northern Railway Company to replace the siding wrongfully taken up by it from the applicants' property immediately adjoining the station and main line and yards of the said railway company in the said city of Winnipeg or any such other part of the applicants' yard as to the Board may seem just; or in the alternative that general delivery of all freights consigned to the applicants be made to the siding at present erected close to the applicants' yards and for such other relief as to the Board may seem just.

The applicants were owners of lands immediately adjoining the main line passenger station and the yards of the railway company in the city of Winnipeg and formerly had a private siding extending from a point of their land into the station yards of the company and connecting with the railway. The siding was constructed and owned by the railway company, who had, however, acquired no title to any part of the land of the applicants on which the said siding was placed.

The reilway company later took up the siding was placed.

The railway company later took up the siding, alleging, as a reason, that it was inconvenient for them to continue the use of it to the applicants, and as a result

this application was made to the Board.

It was objected, on behalf of the railway company, that the Board had no jurisdiction to make an order as applied for; that the only section of the Railway Act empowering the Board to order the construction of spur lines is 176, and unless the parties should consent to an order made with any other provisions, the Board would be limited to making this order strictly in accordance with the provisions of that section.

Hearing at Winnipeg, September 11, 1905.

Judgment, January 6, 1906.

Killam, Chief Commissioner: In taking from the applicants the sidings and railroad connection formerly enjoyed by them, the railway company deprived the applicants of reasonable facilities which the company should be directed to restore.

The applicants did not apply under section 176 of the Railway Act as owners of an industry for an order to compel the company to construct a branch or spur line. Their lands adjoins the railway yard of the company, and no order was necessary to enable the railway company to construct a line upon its own land to the boundary line between its property and that of the applicants, or to make connection at such boundary line with a siding upon the applicants' land and transfer cars to and from such siding.

The siding and connection, and the privilege of loading cars and delivering goods for carriage on such a siding and of receiving and unloading goods by means thereof,

may properly be required as facilities within the Act.

While the Board does not hold that the railway company should be made to furnish similar facilities to every applicant, in view of the previous supply of the same to the applicants and of the company's practice in freely furnishing such accommodation to those engaged in the same and other branches of business, as well as the other facts and circumstances disclosed, these facilities should be regarded as reasonable and proper ones which the company should afford to the applicants.

Under all the circumstances, the discontinuance of the former service was unreasonable. Railway companies should not be allowed to furnish and cut off such

facilities capriciously.

An order directing the railway company, in the general terms of section 253, to afford to the applicants all reasonable and proper facilities for the receiving, &c., would not be sufficient. The authorities cited by counsel for the company were not, in the opinion of the Board, conclusive against its jurisdiction to direct specifically the continuance of previous facilities which had been unreasonably discontinued.

Held, that an order should go directing the railway company to restore the spur track facilities formerly enjoyed by the applicants for the carriage, despatch and receipt of freight in carloads over, to, and from the line of the railway company and the connection for that purpose, between such spur track and a railway siding on the land of the applicants; the company to have the option of constructing the siding on the applicants' land, at the expense of the applicants, or of allowing this to be done by the applicants, who shall bear the expense of making the necessary connection. The company should also have the option of constructing the track from such point on its line, and to such point on the applicants' land, as it shall think proper.

Order issued February 19, 1906.

Note.—The railway company appealed to the Supreme Court of Canada from the order of the Board, dated the 19th day of February, 1906, on the question of the Board's jurisdiction to make the order. Appeal dismissed.

## Winnipeg Builders' Exchange.

This was an application by the Winnipeg Builders' Exchange for an order directing the Canadian Pacific Railway Company, the Canadian Northern Railway Company, and the Manitoba Railway Company to interchange freight of all grades and classes at the city of Winnipeg.

Hearing at Winnipeg, September 11, 1905.

Killam, Chief Commissioner: Railway companies are not entitled, under sections 214 and 253 of the Railway Act, 1903, to distinguish between different kinds of traffic by refusing to certain commodities the facilities for interchange which are given in respect of other commodities, but in view of the congested state of traffic on railways in Manitoba at that time, the Board did not think it proper to direct that any change be made immediately in the practice therefore followed in that respect.

Held, that an order should issue directing that on and after the 1st day of January, 1906, all freight in carloads shall, when carried over the railway of the Canadian Pacific Railway Company or the Canadian Northern Railway Company to the city of Winnipeg, or the town of St. Boniface, or delivered to such other company at Winnipeg or St. Boniface for carriage, be transferred by the one company to the other in the original car at some point of junction of their lines in the vicinity of St. Boniface or Winnipeg, when so consigned.

In view of the condition of the line along the west side of the Red river, commonly known as the 'transfer track,' and the total insufficiency of that line for the interchange of such traffic, the railway companies were left to make the interchange

at such points as circumstances appeared to them to warrant.

# The Canadian Pacific Railway Company v. The Grand Trunk Railway Company

This was an application by the Canadian Pacific Railway Company for an order directing the Grand Trunk Railway Company to afford proper facilities for the interchange of traffic between the said companies over the branch authorized by order of the 6th of July, 1904, to be constructed by the Grand Trunk Railway Company from a point on its line between London and St. Mary's to the line of the Canadian Pacific Railway Company, between London and Toronto, and fixed the amount to be charged for such interchange of traffic and the interswitching of cars over the said branch.

The only connection at or near London, between the lines of the two railways, is by this branch.

The Grand Trunk Railway Company's lines in and through the city of London were in evidence long before the Canadian Pacific Railway was constructed. It had extensive terminal properties, including a large number of sidings to various business and manufacturing premises and an extensive business at that point. The terminal facilities and business of the Canadian Pacific Railway Company at London, on the other hand, were comparatively small.

By means of this branch the Canadian Pacific Railway Company was given direct access to a large number of business premises in London, which it did not previously have.

Urged on behalf of the Grand Trunk Railway Company, that as the proposed connection would be much more advantageous to the Canadian Pacific Railway Company than to it, the Grand Trunk Company should receive much the larger proportion in the division of rates for traffic interchanged between the two companies—much greater than that which would be a fair remuneration for the mere service rendered in the transportation of cars over this branch and its London terminal lines and the loading and unloading of the same.

Secs. 253, 266, 267 and 271 of the Railway Act, 1903, referred to.

Hearing at Ottawa, June 20, 1905.

Judgment, July 16, 1905.

Killam, Chief Commissioner: The provisions of the Railway Act which require railway companies thus to interchange traffic at connecting points are introduced, not for the purpose of benefiting one railway company at the expense of another, but solely in the interest of the public. The law cannot recognize anything in the nature of a good-will of the business of either railway company thus affected, for which another should give compensation. The division between railway companies of the joint rates for traffic thus interchanged should be made upon the principle of giving reasonable compensation for the services and facilities furnished by the respective companies in respect of the particular traffic interchanged, and not by reference to the magnitude of the business of the company, or the other particular points, or the respective advantages which each can offer to the other there, or a comparison of the loss which the one is likely to sustain with the gain likely to accrue to the other from the giving of the facilities which the law requires.

The Board cannot properly deal with the question of the division of such rates or the allowance of charges for switching in a general way, and by reference to all the points in Canada where the railways may connect. In each case the nature and value of the service to be rendered and the facilities to be used must be taken into consideration.

The Grand Trunk Railway Company being obliged to furnish, for the carriage over its portion of the continuous line, for the receipt and delivery of the same, and for the loading and unloading of cars for the purpose, the same facilities as in respect of traffic passing over its own lines only or transferred to or by it at distant points of the Canadian Pacific Railway system, the apportionment of rates should be made upon this basis.

Held, that order should go requiring the Grand Trunk Railway Company to afford all reasonable and prorper facilities for receiving, forwarding and delivering all traffic offered to it in cars wholly or partially loaded for passage over the branch in question and its lines connected therewith and of unloaded cars so offered and of freight offered to it for carriage to and over the lines of the Canadian Pacific Railway by the medium of the said branch, and for the interchange by means of the said branch of traffic between its lines and those of the Canadian Pacific Railway Company, as well as between the lines of the Canadian Pacific Railway Company and those of other railway companies connecting with the lines of the Grand Trunk Railway Company,

and providing that the rates to be charged for such traffic shall be those provided for by any joint tariffs in existence between the railway companies interested, and, in the event of there being none, the rates charged by the Grand Trunk Railway Company between the same points, and, in the absence of either the rates charged by the Canadian Pacific Railway Company between the same points; also, that in the division of rates for such traffic, the Grand Trunk Railway Company shall be entitled to charge and receive the following tolls for switching freight and live stock traffic, in carloads, from and to the Canadian Pacific Railway at or near London by means of the said branch, namely:—

(a) Between the point of connection of the Grand Trunk Railway interchange track and the Canadian Pacific Railway siding, and all delivery tracks and siding owned or controlled by, or connecting with, the lines of the Grand Trunk Railway between and including the Canadian Packing Company's plant on the east and the London Street Railway interchange, known as Springbank siding, on the west, except as provided in clause (b), one cent per one hundred pounds, but not less than five dollars per carload, for each complete haul in either direction; no extra charge to be

made for the movement of the empty car in the opposite direction.

(b) For the intermediate switching of through or joint freight and live stock traffic between the point of connection designated in clause (a) and the point of connection of the Grand Trunk Railway with the Père Marquette Railroad, three dollars per car, in either direction, regardless of the weight; no extra charge to be made for

the transfer of the returning empty car.

Held, further, that the order should also provide that all devices, such as free or assisted cartage or cartage allowances intended to equalize the facilities of the respective railways of the Canadian Pacific Railway Company and the Grand Trunk Railway Company for the collection and delivery of freight at or near London, except the customary system of cartage published in the freight tariffs of the respective companies be prohibited and that all preference, prejudice and discrimination in such cartage system be prohibited.

Order dated July 25, 1905, issued.

Note.—An appeal to the Supreme Court of Canada from the Board's order or July 25, 1905, now pending.

## Walker et al v. The Toronto and Niagara Power Company.

Two applications were made to the Board, one by John H. Walker and William Tuck, the other by James W. Alway, for an order rescinding an order of the Board authorizing a deviation from the located power line of the Toronto and Niagara Power Company, previously approved by the Board.

By order dated March 29, 1904, the board approved the location of the line of the Toronto and Niagara Power Company from 3 to 38 miles from the Niagara river. This included the line across lots 7, 18 and 19, in the 3rd concession of the township

of Grimsby. Each of the three applicants is the owner of one of these lots.

On April 15, 1905, the board authorized a deviation from the located line, as approved. This was the order sought to be rescinded. The new plans showed a different location, beginning at lot 15, in the 3rd concession of Grimsby, and extending across (among other lands) lots 17, 18 and 19, at an approximate distance on these three lots three-quarters of a mile from the previous location across them.

The applications to rescind the order of April 15, 1905, were based on the grounds that the Railway Act did not permit a double expropriation, and that the company was in reality not deviating from the original line sanctioned by the board, but was constructing an additional or branch line in connection with its original line.

Hearing at Toronto, November 7, 1905.

Judgment, April 12, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., 190): Held (1) that the company's powers under its Act of incorporation (2 Edw. VII., Ch. 107, Dom.) were not exceeded by the construction of one line, as in the case of a company authorized to build between two termini or any specified number of lines.

(2) That the cases relating to deviations by railway companies do not apply.

(3) Without considering the jurisdiction of the board to make the orders respecting location plans, the applications must be refused.

# The Algoma Central and Hudson Bay Railway Company v. Grand Trunk Railway Company.

This was an application by the Algoma Central and Hudson Bay Railway Company for an order, under sections 266 and 267 of the Railway Act, 1903, to compel the Grand Trunk Railway Company to enter into a joint tariff with it upon traffic partly over the Grand Trunk Railway and partly by a line of steamships of the applicant company.

The Algoma Central and Hudson Bay Railway Company operates a line of railway from Sault Ste. Marie northwesterly for about 70 miles, and also a line of railway from Michipicoten harbour, on Lake Superior, for a short distance. It uses and operates a fleet of steamers, passenger and freight, plying between Sault Ste. Marie and Michipicoten harbour, on the one hand, and points on Lake Huron and other inland waters reached by the Grand Trunk Railway on the other.

Section 276 of the Railway Act, as making the provisions of sections 266 and

267 extend to the traffic mentioned, relied upon.

Hearing at Toronto, April 17, 1906.

Judgment, April 26, 1906.

Killiam, Chief Commissioner (5 Can. Ry. Cas., 196): Sections 253 and 271 relate solely to railway traffic, and not to traffic between a line of railway and water line.

A line of steamships operated by a railway company running to ports reached by the line or lines of another company does not constitute therewith a continuous route within the meaning of sections 266 and 267 of the Railway Act, 1903.

Application dismissed.

## The City and County of St. John v. The Canadian Pacific Railway Company.

Application by the municipality of the City and County of St. John, New Brunswick, for an order under section 187 of the Railway Act, 1903, directing the Canadian Pacific Railway Company to construct and maintain suitable gates over a street in the village of Fairville, and one in the village of Milford, where the Canadian Pacific Railway crosses these streets.

Hearings at St. John, April 18, and Ottawa, November 22, 1905.

Judgment, June 5, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., 161): The railway company was ordered to construct and maintain gates over the street crossing in Fairville and to install an electric bell at the crossing in Milford.

Held, that the board had jurisdiction, under section 47 of the Railway Act, 1903, to order the municipality to contribute to the expense of protecting its highway crossings, as in the case of municipalities in other provinces. City of Toronto v. Grand Trunk Railway Company, 37 S.C.R. 232, referred to.

By later order of the board, dated June 14, 1906, the cost of installing, operating and maintaining the gates of the Fairville street crossing was directed to be borne by the railway company, the wages of the day and night watchman employed at this crossing to be paid one-half by the municipality and one-half by the railway com-

pany; the cost of installing, operating and maintaining an electric bell at the Milford crossing to be borne by the railway company.

## Re Apportionment of Cost for Protection of Highway Crossings.

## Niagara, St. Catharines and Toronto Railway Thorold Street Crossings.

This was an application by the Niagara, St. Catharines and Toronto Railway Company, under section 186 of the Railway Act, 1903, for leave to cross certain streets in the town of Thorold, in the township of Thorold, with its line of railway.

Hearing at Hamilton, May 8, 1906.

The town of Thorold opposed the application, contending that the applicant company's railway is a street railway or tramway, or is operated or to be operated as a street railway or tramway, and that leave could not be given to carry it across streets in the town without the consent of the town by by-law. Upon the evidence, it did not appear that the proposed branch line was a street railway or tramway, or intended to be operated as such. The applicant company's main line was constructed upon the company's right of way and did not run along the streets in Thorold, nor did its cars stop at street corners to take up or let off passengers, but only at its own stations.

In the year 1902, by authority of the parliament of Canada and of the legislature of the province of Ontario, the applicant company acquired the property and undertaking of the Port Dalhousie, St. Catharines and Thorold Electric Street Railway Company, Limited, a company incorporated under the authority of the legislature of the province of Ontario, for the construction and operation of an electric street railway, and the applicant company now operates the line of that street railway in and upon the streets of Thorold and elsewhere; but the branch line authorized by order of the board, and which the applicant company desired to carry across these streets, was to be taken from the main line of the applicant company's railway, and not from the street railway system.

Judgment, Chief Commissioner, June 19, 1906.

The prohibition in section 184 of the Railway Act, 1903, is against the authorization of the operation of a street railway or tramway along a highway. In the present case the application is for crossings only. In one case, the crossing is to be at an angle which would force the railway upon the street for a considerable distance, but it seems to be none the less a crossing. The evident intention of the Act is to require railway companies proposing to operate a street railway system, and to use the streets as their right of way, to procure the assent of the municipality for that purpose. The Act authorizes a company to carry its railway across streets by leave of the board, and the only qualification is that the consent of the municipality is required where the railway is a street railway or tramway which runs along, and not merely across, the street.

Held, that the application should be granted.

## Re The MacGregor-Gourlay Co., Limited, Complaint.

This was a complaint by the MacGregor-Gourlay Co., Ltd., respecting the obstruction of South Water street, in the town of Galt, alleging that the Grand Valley Railway Company had raised its tracks from ten inches to two feet above the level of the street, in contravention of an agreement between the town and the railway company, entered into September 13, 1905.

Under this agreement, the company was required, amongst other things, to-

(a) macadamize 2 feet in width of the roadway where practicable—such work to be done in a manner satisfactory to the board of works, who were to have the power to direct what portion of the roadway of 36 feet in width should form the 22 feet to be macadamized;

(b) lay and maintain the lots of the surface of the ties so as to be flush with the adjoining the surface of the street; but where the track should be laid in or about the centre of the street, it was required to lay and maintain its rails so that the top

thereof should be flush with the adjoining surface of the street.

The engineer expressed the opinion that the company should put its tracks down to the level of the street, so that the owners of the property on the west side of the

street might have unobstructed access to their property.

Under direction, the company was asked to advise the board whether it had since complied with the terms of the agreement between it and the town, and the clerk of the town notified that this had been done, with the additional notification that, under sections 186 and 187 of the Railway Act. 1903, the board has jurisdiction to direct that such works be executed or measures taken as appear to the board best adopted to remove or diminish the danger or obstruction arising or likely to arise from the railway company's tracks; and that the board is not bound in this respect by the decision of the board of works; but may, if the civic authorities allow the railway and the street to remain in such a condition as unduly to obstruct traffic, direct the town, instead of the railway company, to take the necessary measures for protection of the public.

June 25, 1906.

## In re Cockerline and Guelph and Goderich Railway Company.

Robert J. Cockerline applied to the board for an order directing the Gueiph and Goderich Railway Company to make him an undercrossing between the parts of his farm severed by the railway line. The facts are specifically set forth in judgment of the Chief Commissioner below.

Hearing at Stratford, May 28, 1907.

Judgment, June 26, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., pp. 3, 4 et seq.): The board made an order upon the advice of its engineer, directing the Guelph and Goderich Railway Company to provide for R. J. Cockerline three farm crossings over its line through his farm, two level crossings and one undercrossing. The railway company has applied to have this order set aside on the ground that the board has no jurisdiction to require it to make a farm crossing under its railway.

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Section 198 of the Railway Act, 1903, requires that,

'Every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway for farm purposes. In crossing with live stock, the same shall be in charge of some competent person, who shall use all reasonable care and precaution to avoid accidents.'

In the case of Armstrong v. James Bay Railway Company, 7 O.W.R. 75, 12 O.L.R. 137, Sir Wm. Meredith, C.J., expressed the opinion that the first subsection of section 198 did not apply to a passageway under the railway track; he referred particularly to the provision requiring live stock, when crossing, to be in charge of a competent person, as indicating this view.

In this connection, it seems well to refer to section 191 of the Railway Act of 1888, by which

'Every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway by farmers' implements, carts and other vehicles.'

That required crossings to be made 'convenient and proper' for the purposes specified.

In Reist v. Grand Trunk Railway Company, 6 U.C.C.P. 421, Draper, C.J., expressed the opinion that, under 14 and 15 Vict., ch. 51, sec. 13, requiring a company 'to erect and maintain' (among other things) 'farm crossings for the use of proprietors of lands adjoining the railway,' the expression 'farm crossing' might include' a passage across and upon the railway itself—a crossing at grade, or a bridge over, or a tunnel under the railway,' adding, 'I observe nothing in the Act which necessarily excludes either of these interpretations.'

The language of the first subsection of section 198 is much changed. The crossings are required to be 'convenient and proper for the crossing of the railway for farm purposes.' In Armstrong v. James Bay Railway Company, 7 O.W.R. 715, 12 O.L.R. 137, the learned Chief Justice indicated a doubt as to the power of the Board, under the second subsection of section 198, to require a company to provide an undercrossing.

Apart from the reference to live stock, in the first subsection, I should feel no difficulty in agreeing with the view taken by Draper, C.J., in Reist v. Grand Trunk Railway, and in applying that to the construction of section 191 of the Act of 1888.

In construing section 198 of the present Act, we should, I think, start from the position that the previous law required undercrossings, if other convenient and proper ones could not be obtained. Subsection 2 is wide enough in its terms to include undercrossings. It gives the Board power to order a company to provide a suitable farm crossing, and to order and direct how, when and where it shall be constructed.

The principal argument against that view is that the word 'across' means 'over,' or 'on the surface of.' In Webster's dictionary the word is defined as meaning 'from side to side,' 'athwart,' 'crosswise,' 'quite over.' The latter expression certainly does indicate something above, but the other equivalents do not. Usually, resort must be had to the context. We may go across a river upon a bridge, by boat, by swimming, or by a tunnel underneath the water. A net or a rope may be properly said to be stretched across a river although underneath the water. The word 'across' is equally applicable in any case.

In section 184 of the Railway Act, 1903, authority is given to carry a railway 'upon, along or across' a highway.

By section 186 authority is given, on any application for leave to construct the railway 'upon, along or across' a highway, to order it to be carried over or under the highway. The section makes it clear that in crossing, the highway may be placed under the railway, or the railway under the highway; but the undercrossing and the overcrossing equally are included under the expression 'across.'

Section 197 of the Act speaks of drainage or drainage works 'upon and across the property of the landowners,' and 'upon and across the railway and lands of the company.' Having reference to the subject, drains underneath the property or railway would naturally be considered as included, and this is obvious by the latter part of the section providing that 'no drainage works shall be constructed or reconstructed upon, along, under or across the railway or lands of the company's &c.

In the present case, the railway is carried across Mr. Cockerline's farm upon a high embankment constructed for the purpose, any crossing over which would be inconvenient. I do not think that the so-called level crossings alone would be considered

to be 'suitable.'

Some attempt was made, upon the hearing of the application, to show that Cockerline, in conveying the right of way to the railway company and agreeing upon a price therefor, intended to release the right to a farm crossing, or farm crossings. and to accept compensation for their loss.

To my mind, the evidence establishes directly the contrary, and that Cockerline acted under assurances calculated to lead him to believe, and which did lead him to believe, that his application to the Board for an undercrossing would not be prejudiced by the execution of the conveyance and acceptance of the purchase money.

Under all the circumstances, it appears to me that the order should be affirmed, with costs to be fixed by the secretary of the board.

#### Re Complaint of Staunton's, Limited, Toronto.

This was a complaint by Staunton's' Limited, of Toronto, against the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company, alleging that the freight rates charged by these companies on wall paper shipped from Toronto to points in eastern Ontario and in the provinces of Quebec, New Brunswick and Nova Scotia, were excessive and discriminatory in comparison with the rates in effect upon similar merchandise carried in the opposite direction; and complainants applied for an order disallowing the present east-bound rates on their goods and restoring those in effect prior to November 15, 1905.

Hearing at Toronto, May 9, 1906.

Judgment, Chief Commissioner, June 28, 1906.

The Board considers that the long continued existences of the former tolls affords strong evidence of their reasonableness, and that it does not appear that there has been any change of circumstances, or that there is any sufficient reason for the changes recently made in those tolls; that the charging of higher tolls for the traffic in question from Toronto eastward than are charged for similar traffic from Montreal and other points westward constitutes an unjust discrimination against the Toronto shippers, and that these tolls should be equalized.

Order of Board, July 31, directing that the said companies reduce their tolls for the said east-bound traffic from Toronto to Montreal to those in the tariffs for similar west-bound traffic between the same points; that the tolls to Montreal be not exceeded to Ottawa, nor to intermediate points; and that the tolls to points east of Montreal be reduced by the amount of the said reduction to Montreal. Also that the tariffs to be made under the order come into force not later than September 10, next.

## P. C. Pathiarche and Burlington Canning Co. v. The Grand Trunk Railway Co. and The Hamilton Radial Electric Street Railway Co.

This was an application, under sections 253 and 271 of the Railway Act, 1903, to compel an interchange of traffic between the two railways.

The Hamilton Radial Electric Street Railway Company was incorporated by Act of the legislature of the province of Ontario. Its undertaking and railway have

never been declared by the parliament of Canada to be a work for the general advan-

tage of Canada, or for the advantage of two or more of the provinces.

The Grand Trunk Railway was, by the Railway Act of 1888, declared a work for the general advantage of Canada, and subject to the legislative authority of the parliament of Canada.

The Act of 1888 was repealed upon the coming into force of the Railway Act, 1903. By section 7 of the latter Act.

'Every railway, steam or electric street railway or tramway, the construction or operation of which is authorized by a special Act passed by the legislature of any province, now or hereinafter connecting with or crossing a railway which, at the time of such connection or crossing, is subject to the legislative authority of the parliament of Canada, is hereby declared to be a work for the general advantage of Canada in respect only to such connection or crossing or to through traffic thereon or anything appertaining thereto, and also to the provisions set forth in this Act relating to offences and penalties, navigable waters and criminal matters, and this Act shall apply to that extent only.'

Some years before the coming into force of the Railway Act, 1903, a physical connection was made between the two railways, but no order was obtained authorizing such connection either under section 173 of the Railway Act, 1888, or section 177 of the Railway Act, 1903, although a crossing had been authorized by the Railway Committee of the Privy Council in 1897.

Hearing at Hamilton, May 9, 1906.

Judgment, June 28, 1906.

Killam, Chief Commissioner (5 Can. Ry. Cas., 200): Held, that parliament has the incidental power to determine the terms upon which a railway, not otherwise subject to its legislative authority, may connect with or cross one that is so subject, and the obligations between the companies concerned.

British North America Act, section 91 (10) and (c), and section 92 (29), sections 306 and 307, Railway Act, 1888, and section 7, Railway Act, 1903, referred to.

Held, that such connection being illegal, no order should be made. An application to authorize the connection, under section 177 of the Railway Act, 1903, must first be made.

The Guelph and Goderich Railway Co. v. The Guelph Radial Railway Co.

The Guelph and Goderich Railway Company applied under section 177 of the Railway Act, 1903, for leave to construct and operate its railway across the railway of the Guelph Radial Railway Company on the Elora road, outside the limits of the city of Guelph.

The Guelph and Goderich Railway Company was incorporated by an Act of the parliament of Canada, 4 Edward VII., chapter 81, assented to June 6, 1904. A plan showing the location of its line across the Elora road, outside the city of Guelph, was approved by the Board on July 2, 1904, filed in the Registry Office on July 8, 1904, and notice of the proposed location published in local newspapers in August, 1904.

This application was filed on August 16, 1905, and an order was made giving leave to the Guelph and Goderich Railway Company to cross the highway at that point, on October 16, 1905.

On the 25th May, 1905, by 5 Edward VII., chapter 91, the Guelph Radial Railway Company was empowered to build and operate an extension of its railway on the Elora road, outside the city of Guelph. Its location had been authorized by a by-law passed by the council of the county of Wellington on June 4, 1904.

Hearing at Stratford, December 4, 1905.

Judgment, July 5, 1906.

Killam Chief Commissioner (5 Can. Ry. Cas., 180): Held, that the location and operation of the Radial Railway Company had, under the circumstances, become authorized on May 25, 1905; and was prior to that of the applicant company, and that, following the usual course, the applicant company must be at the expense of the crossing and maintenance of any necessary protection.

## Ruling v. Erroneous Rate Questions.

Chief Commissioner, July 31, 1906:-

The Board is appointed to enforce the Railway Act—not ordinary contracts. In my opinion, the Board should recognize as valid only the tolls set out in the tariffs authorized by the Act, and it should not assume to interfere with charges made in accordance with such tariffs on the plea that lower rates were quoted by a company's agent. Such a practice would open the door to rebates and preferences.

If parties have any right to relief in such cases, they should seek it in the ordin-

ary courts on the ground of breach of special contract or misrepresentation.

The Act giving the Board jurisdiction respecting rates of express companies does not apply to past transactions, and the functions of the Board will be confined to the approval of tariffs for the future and dealings with tolls under them.

Chief Commissioner, September 19, 1906.

## Re Grand Trunk Pacific Right of Way at Clover Bar, Alberta.

Complaint was made to the Board respecting the methods adopted by agents of the Grand Trunk Pacific Company for the acquisition of lands for the company's

right of way.

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Held, Chief Commissioner, October 9, 1906, that the subject-matter of the petition is one over which the Board has no jurisdiction; that, under the Railway Act, 1903, upon approval of its location plans, a railway company is entitled to acquire its right of way either by voluntary conveyance for the owners of the necessary lands or by expropriation proceedings. The Act gives to the Board of Railway Commissioners no authority respecting either method of acquisition of these lands. If parties are induced by unlawful misrepresentation or redress to part with their lands on unfavourable terms, they must seek their redress in the ordinary tribunals. The proceedings for expropriation are set out in the statute, and the Board is given no authority over either the procedure or the amount of the compensation.

#### Re Postal Cars.

Judgment, Chief Commissioner, October 10, 1906.

I am not at all clear that the Board has jurisdiction to compel railway companies to alter their ordinary practice in regard to the respective locations of mail and baggage cars. Possibly the jurisdiction may exist under section 212, subsection 2, of the Railway Act, 1903; but, even if there is such jurisdiction, I do not think that the board should interfere with the discretion of railway officials upon this point.

It is not easy to determine whether there is materially greater danger to parties

in the first than there is to those in the second car.

Even if greater consideration should be given to those who are not employees of the railway company, there does not appear to be any reason for giving preference to mail clerks over the employees of express companies.

## In re Highway Crossings.

Statement of facts taken from judgment of Chief Commissioner:

During the official trip of the Board in western Canada in the summer of 1906, a number of applications were brought before it in respect of street crossings over

railways in the province of Alberta. One of these related to a large number of crossings in the city of Calgary over the line of the Canadian Pacific Railway Company. This was settled by agreement between the city and the railway company, and an order, in conformity with the agreement, was issued later.

Another was an application by the town of High River for an order directing the Canadian Pacific Railway Company to provide and construct a suitable highway crossing where its railway intersected Fourth street in that town. The application alleged that there was no railway crossing between the Calgary and Macleod trail and Seventh street, according to a plan which showed Fourth street as lying in the intermediate space, and that the opening of Fourth street was necessary for the proper enjoyment of the use of the streets of the town and for the safety of the inhabitants.

A third was the application of the town of Olds for leave to construct certain highways across the railway of the Canadian Pacific Railway Company's Calgary and Edmonton branch at Olds, to join and connect certain main streets lying on each side of the railway.

While this application alleged the previous existence of certain crossings upon the lines of certain main streets, known as Second and Third streets, is further alleged that the only legal crossing which the town had at the time of the application was at the extreme north end of the town, which was north of either of the streets named.

A fourth was that of the town of Didsbary, for an order, 'under the provisions of the Railway Act, 1903, respecting highway crossings, being sections 184 to 191, inclusive, and particularly under section 187, directing the Canadian Pacific Railway Company to construct and provide a suitable crossing, and to maintain the same perpetually where the continuation of Hespeler street, in the said town of Didsbury, if continued easterly, without the obstruction being placed thereon by the Canadian Pacific Railway Company, would cross the said railway company's right of way.'

The application alleged that Hespeler street in Didsbury, 'for some years past, and until it was obstructed by the said Canadian Pacific Railway Company on or about the 1st day of August, 1906, was a highway, and was used as such by the public.' It further alleged an express agreement between the railway company and the town for making Hespeler street a perpetual highway across the railway, and that the town had, at the request of the railway company, improved Hespeler street upon the company's right of way, and had expended a considerable sum of money in doing so; that the railway company had placed a large quantity of earth upon Hespeler street where it crossed the company's right of way, and that the town had used and employed this earth in further grading and improving the street at the request of the railway company; and that the railway company had indicated by a sign that there was a highway crossing over the railway at that point; and setting forth other circumstances as showing the importance, in the public interest, of having a highway crossing at Hespeler street.

The application further alleged that the railway company had recently obstructed the crossing at Hespeler street and deprived the public of the use and enjoyment thereof.

A fifth application was made by the village of Leduc for a street crossing over the Calgary and Edmonton branch of the Canadian Pacific Railway Company at Mill street. In answer to this application, the Canadian Pacific Railway Company submitted a plan of the town site and existing crossings at Leduc, pointing out that 'from the plan it will be seen that there is already a crossing at the point known as "Edmonton Trail," another nearly opposite Main street, and a third about 1.600 feet south of the latter.'

Upon examination of the locality by an engineer of the Board, he reported that he had inspected the site of the proposed crossing in company with the overseer and principal business men of the village, and that 'the overseer and the others agreed'

that, if the village has to build and maintain the crossing, it would be just as well for them to build a road along the east side of the railway from Mill street north to Main street, and cross there where there is already a crossing.

Subsequently, the village presented to the Board a formal petition with reference to the crossing at Main street, setting out that what was and is sought was the making permanent of a crossing at Main street, which crossing is and always has been the

most commonly used access to the railway station.

In the case of High River, negotiations took place between the town and the railway company which did not result in a complete agreement, but served only to indicate the respective positions of the parties. The town desired, in addition to the crossing at Fourth street, to have the passenger station of the company removed to the neighbourhood of that crossing, and offered, in consideration of these advantages, to pay a certain sum towards the expense of such removal, and to procure for the railway company a piece of land for the prolongation of its yard at the town in a southerly direction. The company claimed to be bound by an agreement with a private party which prohibited it from removing the station to the desired position, and objected to the establishment of a street crossing at Fourth street, but offered to allow a crossing to be established at Third street and to remove the station to the neighbourhood of that crossing, provided that town would procure for the company the proposed lands, and would close the admittedly existing highway crossing over the railway at Seventh street. The town refused to accept the condition for the closing of the crossing at Seventh street.

In the case of the town of Olds, the railway company offered a crossing at Second street, with an extension of Railway street (which runs parallel with the railway) to Seventh street, and another crossing at Seventh street. The town was willing to limit its request to a crossing at Third street and one at Seventh street, with the extension mentioned.

Didsbury is not a town, but a village municipality, established under the ordinances of the Northwest Territories. Counsel for the village claimed that a public highway had been established at Didsbury by dedication of the railway company, after the construction of the railway. It was not suggested that any public highway had existed at that point before the railway was constructed. The contention on behalf of the railway company, was that it was incompetent for the company to establish a highway by dedication without leave of the Railway Committee of the Privy Council under the legislation preceding the Railway Act, 1903, or of the Board since its establishment. Counsel for the village argued that the railway company could so dedicate without leave.

In the case of the Leduc application, which is also a village established under the ordinances of the Northwest Territories, counsel for the railway company submitted an offer to allow a crossing to be authorized at Main street, as well as another at Douglas street, in the village, upon the condition that it should be ordered that, in case of any protective measures or appliances being required at the crossing in the future, the cost thereof should be borne by the village. It was claimed, on behalf of the village; that it had for a long time a crossing at Main street, and that the village ought not to be now bound to bear such expense.

Judgment, Chief Commissioner Killam, November 6, 1906.

ider the functions of the Board with respect to railway and highway crossings. Section 184 authorizes the Board to grant leave to a railway company to carry its track upon, along, or across an existing highway. Section 186 lays down a method of procedure 'upon any application for leave to construct the railway upon, along or across an existing railway,' and authorizes the Board to grant such application upon such terms and conditions as to protection, safety, and convenience of the public as it may deem expedient, or to order that the highway be carried over or under the railway

and works to be executed or measures taken to remove or diminish the danger or obstruction arising or likely to arise therefrom; and section 187 confers upon the Board the power, in the case of a railway already existing upon, along, or across a highway, to make any order in respect thereto as in the previous section provided.

Other provisions of the Act impose upon the railway company specific duties with reference to highways, or assign to the Board certain specified powers with respect thereto; and the Board, under the general jurisdiction given by section 3, is empowered to compel railway companies to observe the duties cast upon them by such

provisions of the Railway Act.

As I have previously had occasion to point out, the Board is a creature of the statute, and has only the powers given to it by statute. While constituted a court for the purpose of exercising the jurisdiction conferred upon it, the Board is not a court for the determination of all questions arising between the public or individuals and a railway company. The Board has no general jurisdiction to determine wheter a public right of crossing over a railway exists; but, in cases in which it is called upon to exercise the powers specifically conferred upon it with respect to highways, or its jurisdiction to enforce performance of the duties of railway companies with respect to highways, it has incidentally, the power to inquire and determine whether, in fact, a right of crossing does or does not exist at a particular point.

For two or three years the public were in the habit of crossing the railway upon the line of Hespeler street in Didsbury, and this was facilitated by the grading of a street line upon the company's right of way outside the rails and by planking at and between the rails. This work has been undone and the crossing so obstructed that the public cannot now cross. It appears to me, that, if there is a public right of crossing at that point, the Board has jurisdiction, under sections 186 and 187 of the Act to direct that such measures be taken as to enable the public to cross there safely and conveniently, and that, for the purpose, the Board has jurisdiction to determine

whether the right of public crossing exists.

The Railway Act, 1903, nowhere prohibits in express terms the construction of a highway, or the giving of a public right of crossing over a railway, without the leave of the Board; but it appears to assume that, for some purpose, such leave is necessary. I take it to be assumed that, without some provision therefor, a municipality or other body having power under the local law to open a highway across private property without the consent of the owner, could not open such across property dedicated by authority of the parliament of Canada to the purposes of a railway; and it appears to me that the provisions of section 186 are intended, in part, to afford the means of enabling such municipality or body to do this where the public interests require it. But, in my opinion, this clause enabling the Board to give leave for the construction of a highway across a railway, was not intended to provide a means by which private individuals, or bodies not otherwise possessed of power to open highways, could do so.

In this connection the question naturally arises whether the steps to open such a highway must be taken by the municipality or other body in accordance with the law generally applicable to the opening of highways, and whether compensation has

to be given and determined according to such law.

I have never hitherto been called upon definitely to determine that question, which is by no means a simple one. Hitherto, without careful consideration, I have expressed an inclination to the view that the local law is applicable. On further consideration, however, I doubt this; but, in view of the fact that the point is, so far as I know, wholly unsettled by authority, and of my having previously used expressions which may have induced parties to consider the question to be settled so far as this Board is concerned, I would be ready to receive any argument upon the point which any one might desire to offer. It is very probable that parliament intended the whole matter to be settled by this Board, and all the conditions in respect of

compensation, as well as of procedure, construction and precautions, to be determined by the Board. Section 36 gives to the Board general power to impose terms in making an order, and the provisions of section 47 appear capable of application to such a case without undue straining of language. The Board has already decided that it is not bound to grant compensation to one railway company for the crossing of its line by the railway of another company; and the same principle might be applied in cases of highway crossings.

But it should be observed that the power of the Board in this respect is to give leave. The Board is not authorized to direct or compel railway companies to construct or make highways across their lands where a public right of crossing does not already exist by law, though it may give leave to a company or to some other bodies,

on some terms, to do so.

In the Didsbury case, counsel for the railway company cited the remarks of Hon. Mr. Blair, when Chief Commissioner, in an application made by the city of Calgary, in 1904, reported in volume 10 of the reports of proceedings of the Board, at page 457, as follows:-

'Hon. Mr. Blair: Your legal position I cannot think would be very much improved or strengthened by reason of what has transpired; without an order of the Railway Committee of the Privy Council, or without an order of this Board, you have no legal right whatever to cross those tracks, notwithstanding or no matter what may have been the understanding between you, or the agreement between you, or the user which has taken place, and no matter what dedication may have been made. The matter of dedication of a highway there would be a totally distinct and separate thing from the legalizing of the use of the right of way, or that portion which is occupied by the tracks of the railway company for the purposes of a public highway. You have got to have that authority or else you have no legal ground upon which to stand.'

Upon a previous citation in another case of these remarks, I expressed myself as being inclined to the same view. Counsel for the village, however, argued strongly for the power of the railway company to dedicate a portion of its right of way for use as a public highway without leave of the Railway Committee or of this Board. Upon a reference to Canadian authorities I do not find that the contention of the railway company is as well supported as I was inclined to think at the time of the hearing. Guthrie v. Canadian Pacific Railway Company, 31 S.C.R. 155, and Grand Trunk Railway Company v. Valliear, 2 Can. Ry. Cas. 45, 3 Can. Ry. Cas. 399, 7 O.L.R. 364, related to private rights; and Grand Trunk Railway Company v. Valliear was so distinguished in the Court of Appeal.

The expressions used by Hon. Mr. Blair and myself may have led counsel for the railway company to omit careful examination or argument of the question; and counsel for the village did not discuss the Canadian cases or the terms of the Railway Acts. It appears to me desirable, therefore, that before the Board makes a definite decision upon this important question, an opportunity should be given to the parties to present such further arguments in writing as they may desire; and, in this connection, it would be desirable that further consideration be given by counsel to some other questions, such as the sufficiency of the evidence to warrant an inference of an intention on the part of the railway company to dedicate, and the power of the Canadian Pacific Railway Company to do so in respect of the line of the Calgary and Edmonton Railway Company; and the Board should be furnished with evidence of the relations of these two companies respecting the line. I understand that the line is under lease to the Canadian Pacific Railway Company, which may have no power to dedicate any portion of the land of the Calgary and Edmonton Railway Company as a public highway, even if it could so dedicate a portion of its own land; and circumstances which would warrant the inference of a dedication by the company whose

officials are operating the railway, might be quite insufficient to warrant such an inference as against the lessor.

Towns and villages along the line of the Calgary and Edmonton Railway owe their existence to that railway. Necessarily they must submit to many inconveniences inseparable from such a situation. Where the Board exercises a discretionary power to determine at what points on such a railway street crossings shall be opened, it is obliged to consider the relative convenience of the public and the railway company as well as the public safety. The efficient operation of the railway is a matter of importance to the public generally and to the residents of the particular locality dependent upon it. It is particularly incumbent upon the Board to protect the public from the dangers attending such crossings; and in the performance of this duty, it must be on its guard against being too readily influenced by the insistence of those desiring relief from present inconvenience and led by self-interest to minimize the danger.

An examination into the position at High River indicates the importance to the community of a street crossing near the business centre of the town. It is admitted that the town was laid out by the original promoters of the railway, who, therefore, are in some measure responsible for the situation which has developed; and the company at present operating the railway must, for an application of the kind in question, be treated as affected by this responsibility. On this ground, it appears to me that there should be a crossing at Third street upon the terms agreed to by the town, which appear to afford reasonable compensation to the railway company. Under the circumstances of the town and the probability of its growth westward, the closing of Seventh street should not be insisted upon.

As regards Olds, the situation appears to be much the same. The convenience of the community, it appears to me, demands the crossing at Third street; but, for the present, I do not think that more should be allowed, or that the southern crossing offered by the railway company as a condition of being relieved of the crossing at Third street should be authorized.

At Didsbury, the promoters of the railway laid out the town site on one side of the railway only, retaining, in one block, land lying along the other side of the line. They held out no inducement to the growth of a town or village to the east of the railway. Such growth as has arisen there is upon land thus separated from the railway and the town on the western side. The village is much smaller than High River, and the importance of a crossing at a particular point is not so great. The public have not long been accustomed to regard the crossing at Hespeler street as an open one. If there were no question of the existence of a public highway at Hespeler street, but the case was submitted merely to the discretion of the Board, I would not be in favour of authorizing the crossing at that street. If the railway company will so place the warehouses on the east side of the track as to be convenient to the crossing at Waterloo street, that crossing should, in my opinion, sufficiently answer the needs of the village.

It does not appear that the village has full power to open highways. Apparently this power was not given by the ordinances under which it was constituted. We have been referred to a late statute of the province of Alberta, the terms of which I have not yet had an opportunity of learning. Unless the village has such power, I do not think that this Board can authorize the village to open a highway over the tracks of the railway company against the will of the company, although the Board might empower the company to open such a highway if it was willing to do so.

As to Leduc, I think that the company ought to open Main street, at least, unconditionally, leaving the question of protection for future consideration when the necessity arises. The company expressly indicated the crossing at Main street as open in answer to the application for the making of a crossing at Mill street. If the company is unwilling to do this, the matter is open to the same difficulty as in the case of Didsbury, though, upon its appearing that the locality has become incorporated as

a town, an order might be made. If, upon further consideration of the Didsbury application, it should appear to the Board that, without leave, the company could dedicate a strip across its land as a public highway, and the company is unwilling to allow the crossing at Main street as suggested, the village should have an opportunity of showing the existence of a public highway across the railway at that point.

Orders issued accordingly in the case of the applications of the town of High

River and the town of Olds.

Note.—The parties have been asked to submit further arguments in writing in respect of the question of the power of a railway company to dedicate a portion of its right of way for use as a public highway without authority of the Railway Committee of the Privy Council, under the Railway Acts, previous to the establishment of the Board, or of the Board since its organization.

## High River Case.

Judgment in concurrence, Mr. Commissioner Mills.

I cannot help feeling that when a company, running a line of railway through a locality, fixes upon a place for its station and lays out a town site on both sides of its tracks, providing for streets running through the town (across its railway), and prohibiting the people who may settle in the town and use the said streets, from crossing the said railway within the limits of the railway yard, varying in length from one-third to one-half mile or more, it (the said company) thereby creates an unreasonable and intolerable business condition, such as no class of people, whether living in the town or going there to do business, should be asked to submit to.

The unreasonableness of the prohibition above referred to is shown by the fact that in nearly every such instance the local railway officials allow people on foot to pass illegally across the railway tracks within the prohibited limits, as the members of the Railway Commission, their officials, and many others did on the day of the recent visit of the commission to the town of High River; and in not a few such places, vehicular traffic is allowed to pass illegally across the right of way and over the tracks within the prohibited limits, because the prohibition is felt and tacitly acknowledged by the railway officials themselves to be unfair, if not altogether indefensible.

For this intolerable business condition, the railway company is primarily responsible; and the people who, with knowledge of the facts, settle in a town where such a condition exists, are perhaps to some extent responsible. in so far as they thereby tacitly agree or consent to work and live where such condition is imposed.

Therefore, I am of opinion that, in such cases, some measure of relief should be granted, and that the railway company should bear, say, one-half of the expense of

providing such relief.

All rail-level crossings involve more or less danger, farm crossings, highway crossings, street crossings over single tracks in cities, towns and villages, and street crossings over two or more tracks within the limits of railway yards, some close to stations and others at greater or less distance therefrom. Nevertheless large numbers of each of these kinds of crossings are found all over the country, because public opinion (the law-making power) long ago decided and still maintains that such crossings are absolutely necessary. I admit that rail-level crossings through a railway yard are specially objectionable and should be avoided as far as possible; but, on account of the intolerable condition above described, the need for such crossings has been so great that, notwithstanding the danger, they have been made in nearly every town or village (not to speak of cities) through which a railway passes in the older provinces; and it appears to me that the Board of Railway Commissioners, especially on account of the increased and ever increasing length of railway yards, is now and

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will hereafter be under obligation to grant such crossings in response to reasonable applications and appeals by the business people of the country, until such time as there is special legislative provision for distributing and in some way defraying the expense of subways, overhead bridges, or other special forms of protection at many, if not most, of the crossings in our cities, towns and villages.

Further, rail-level crossings, especially crossings through a railway yard, cause a certain amount, possibly a considerable amount, of inconvenience to a railway company. This is admitted. Nevertheless I think it is manifest that such crossings must continue to be made until, as above suggested, there is special legislative provision for the construction of subways or overhead bridges at crossings which cannot be properly protected by the ordinary and less expensive methods. At present the question is who shall bear the inconvenience, the public or the railway companies? My opinion is, first, that the inconvenience should be equitably divided; and, second, that no class of people in any city, town or village should, in the transaction of business or the discharge of social or civil duties and obligations, be compelled to walk or drive unreasonably long distance in order to cross the right of way and track or tracks of any railway company.

In speaking of the Calgary and Edmonton Railway, I may say that I do not question the correctness of the statement that 'the towns and villages along the line of the Calgary and Edmonton Railway owe their existence to that railway'; but, I might ask, if it is not equally true that the Calgary and Edmonton Railway owes its existence and its manifestly profitable traffic to the said towns and villages and the

trade of the farmers use the streets thereof.

I admit also that the Board should 'consider the relative convenience of the public and the railway company, as well as the public safety,' and should not forget that 'the efficient operation of the railway is a matter of importance to the public generally, as well as to the residents of particular localities dependent upon it'; but the experience of railway companies and of the public generally in the older provinces of the Dominion goes, I think, to show that the interests of neither the one nor the other have been seriously sacrificed by granting the residents of particular localities reasonable facilities for doing business on the opposite side of the lines of railway which pass through the cities, towns or villages in which they live.

I do not attach much importance to the insistence of those who seek relief, but I desire to give due weight to the facts in each case; and I never can bring myself to think that the board, on any mere theory of inconvenience to the railway company or from a desire to meet the wishes of the general public for more rapid transportation, is justified in allowing a railway company to create and maintain unreasonable or intolerable business conditions in any city, town or village through which it passes; and while I do not desire to minimize the danger of crossings through railway yards or elsewhere, I would venture the statement that most of the accidents on the railways in this country are due, not to crossings, but to collisions of various kinds on the railways, to carelessness or recklessness in shunting, which results in the death of so many railway employees.

Therefore, my opinion is that the municipality of High River should be authorized to cross the right of way and track or tracks of the Calgary and Edmonton Railway Company on Third street in the said town as soon as it obtains and transfers in fee simple to the said company, the plot of land agreed upon between the company and the municipality, all as per agreement between the parties; and that Seventh street, in the said town, should be kept open and maintained as heretofore for the use of the public in that locality.

November 10, 1906.

Didsbury Case.

Judgment in dissent, Mr. Commissioner Mills.

#### Findings-

That the Calgary and Edmonton Railway Company graded and planked the railway crossing on Hespeler street, Didsbury, Alta., opened the said crossing, and main tained it during a continuous period of about four years, for hauling freight to and from between the village on the west side of the railway and the freight tracks or sidings on the east side of the main line, and for general use by all who cared to travel to and from the east side of the railway, whether the residents of the village on the west side, the property holders on the east side, or the farmers and others in the country lying east, northeast, and southeast of the village.

That during the time that the crossing on the said street was in use, and without any kind of notice or intimation that it would ever be disallowed or closed, some seventy lots of lands were bought on the east side of the railway, in what is now called Lacknerville, or Didsbury East. These lots, it appears, were bought and some houses were built in good faith and under the undoubted impression that on Hespeler street there would continue to be, as there had been, a regular public crossing over the railway, open at all times for the use and convenience of those who might wish to pass to and fro between their property on the east side and their place of business in the village on the west side of the railway.

That the owners of the said lots, with or without houses, have vested rights which they acquired on the faith that the railway company would continue to do as it had done regarding the said Hespeler street crossing, which crossing the company had itself establish, maintained, and allowed the public to use without let or hindrance

for a period of four years or longer.

#### Expressions of Opinion

No doubt the railway crossing on Hespeler street did, when in use, and will if restored, involve two things:

(1) Some danger to the travelling public in that locality.

(2) Some inconvenience to the railway company.

All rail-level crossings involve more or less danger—farm crossings; highway crossings; street crossings over single tracks in cities, towns and villages; and street crossings over two or more tracks within the limits of railway yards—some close to stations and others at greater or less distances therefrom. Nevertheless large numbers of each of these kinds of crossings are found all over the country, because they are regarded as absolutely necessary; and they must, in my opinion, continue to be made with or without protection and notwithstanding the danger, until such time as special legislative provision is made for defraying the cost of subways or bridges at crossings which involve serious risk. This, I take it, is the reason why the Railway Committee of the Privy Council allowed and legalized hundreds of more or less dangerous rail-level crossings on streets and through railway yards in the cities, towns and villages of the Dominion.

Further, every rail-level crossing, especially a crossing through a railway yard, causes a certain amount, possibly a considerable amount, of inconvenience to the railway company; and, after carefully considering the whole situation and circumstances, I am of the opinion that this inconvenience, like the danger above referred to, must continue until legislative provision is made for subways or overhead bridges at such crossings as cannot be satisfactorily protected by the usual means now in use. At present, the question is, who shall bear the inconvenience, the public or the railway companies? My opinion is that the inconvenience should be equitably divided; on the one hand, the railway companies should not be embarrassed by too many crossings

through their yards—municipalities should not, in some instances, be given all the crossings they ask for; and, on the other hand, no class of people in any city, town or village should, in the transaction of business or the discharge of civil and social duties or obligations, be compelled to walk or drive unreasonably long distances in order to get across the right of way and track or tracks of a railway company.

In my opinion, the aim of the Commission should be, not to restrict, hamper or embarrass the business community by refusing or closing such railway crossings as reasonable convenience demands, but to provide protection at dangerous crossings and endeavour to distribute as equitably as possible the cost of such protection.

The distribution of the cost of protecting a railway crossing must always depend upon the facts and circumstances: Who created the necessity for the crossing? Who is responsible for the facts and circumstances which have made the demand for the crossing a reasonable one? Who is or are served by the crossing—the railway company alone, the municipality alone, or both, or the railway, the municipality and the outside, surrounding public? What has caused the danger that makes the protection necessary—increased traffic on the railway, the running of fast through trains, or the growth of population and industries in the municipality?

I had stated my views re the distribution of the cost of protecting certain crossings in the village of Didsbury; but out of deference to the opinion of the Chief Commissioner, I decided to leave that question for future consideration—to be settled when the occasion arises—and shall deal only with the application for the reopening of the crossing on Hespeler street in the said village.

In reference to this application, I may say that, for reasons which were obvious, though not openly avowed at the hearing, the railway company did not, in the case of Didsbury, lay out and sell any portion of its land on the east side of its line of railway, and did not thus contribute to any inconvenience which might result from a lack of crossings over its railway in the village; but, as already stated, it laid out the village on the west side of its line, placed its freight shed and freight sidings on the east side of its line, and established a regular crossing over its tracks on Hespeler street in the said village. For a period of four years or longer, the said Hespeler street crossing was used, not only for the business of the company, but for all kinds of traffic -village and farm traffic alike-without let or hindrance from the company, or any kind of intimation that the said crossing would ever be closed; and the evidence shows that, under the impression that on Hespeler street there would continue to be, as there had been, a regular public crossing, a number of people bought lots on the east side of the line, some of them built houses there, in order to improve the road leading up to the crossing on the said street. Then, after a number of people had thus acquired rights on the east side of the railway, the railway company, without notice, closed the crossing on Hespeler street and opened another which it thought would better serve its purpose. This course of action by the company does not seem to me to be quite fair or reasonable; it might, perhaps, be described as arbitrary; and if the Railway Commission should approve of it as a fair and reasonable proceeding, it would, I think, thereby take a serious step towards establishing a new principle of law in dealing with the question of vested rights.

Therefore, my judgment is:

That the said Hespeler street crossing over the right of way and tracks of the Calgary and Edmonton Railway, in the village of Didsbury, in the province of Alberta, should be reopened and maintained as a regular public crossing over the said railway at that point; the grading on each side of the track or tracks to be maintained in good order by the village, and the planking, not less than twenty feet long, between and on the outside of each pair of rails, to be laid and kept in good condition by the railway company.

February 1, 1907.

## Re Queen's Wharf Crossing, Toronto.

This was an application by the Canadian Pacific Railway Company for an order to vary the order of the Railway Committee of the Privy Council, dated February 8, 1898, and the order of the Board, dated July 27, 1905, by directing that the entire cost of operation and maintenance of the diamonds, interlocking, derailing, and signal appliances at the Queen's wharf crossing, in the city of Toronto, of the applicant company's line of railway by the Grand Trunk Company's lines be borne by the two companies in the proportion which the total number of cars belonging to one company passing in any direction over the crossing bears to the total number of cars belonging to the other company passing in any direction over said crossing.

By an agreement between the two companies, the Grand Trunk Railway Company granted to the Canadian Pacific Railway Company running rights from the city of Toronto to the city of Hamilton, and by the agreement the expenses of maintenance of the tracks, &c., so used, and the other expenses connected with the operation of the section jointly used, were to be divided between the two companies upon a wheelage basis. The tracks so used are a portion of those crossing the Queen's Wharf spur

of the Canadian Pacific Railway Company.

At the hearing (October 23, 1906), the applicant company claimed to be the senior company and to be entitled, on that account, to have the total cost of the pro-

tective appliances borne by the Grand Trunk Company.

The order of the Railway Committee of the Privy Council orally pronounced was that as the origin of the two companies was so close together in point of time, the committee was not called upon to determine the question of seniority, and that, therefore, each company should bear half the cost of construction, the cost of maintenance to be governed by the agreement.

It does not appear that any application was made by the applicant company to the Railway Committee for a change in the order, although there was some correspondence between the two companies in respect of the apportionment of the expenses between them.

Judgment, November 16, 1906.

Chief Commissioner Killam: It appears to me entirely too late to take the ground that the order orally pronounced by the committee was varied on a subsequent application of the Grand Trunk Company without notice to the Canadian Pacific Company. Such an objection should be raised at once upon the order coming to the notice of the complainant company. And it appears to me, also, that this Board should not now reconsider a decision of the Railway Committee upon the facts which were before it. It was the body established by law to determine such questions when the application came before it and when its order was made. The Railway Committee was a body whose membership was frequently changing. It would have been wholly unreasonable for that body to adopt the policy of changing its decisions with changes in the opinions of individual members of the committee. It would be equally unreasonable, it appears to me, for the new tribunal which has taken the place of the committee to substitute the individual views of its members for those of the former tribunal. It is true that the Railway Act gives to this Board authority to vary orders of the Railway Committee, as well as to vary its own orders; but such jurisdiction, it appears to me, should not ordinarily be exercised except under changed circumstances, or for the purpose of rectifying errors which appear to have occurred through want of information, oversight or otherwise. Even in the latter cases, application should be promptly made, as the facts respecting any alleged error or oversight are much more likely to be then ascertained.

When the application was before the Railway Committee it was, of course. unknown in what proportions the crossing would be used by the two companies, and there was very little before the committee which would enable it to judge the probabilities in this respect. But such must usually be the case.

I do not think that it would be reasonable or just to take up in this way individual cases in which it may appear that one company or the other is contributing an undue proportion of expenses of the kind in question, having reference to the respective proportions in which they use a crossing. If former orders of this kind are to be revised on such a principle, the general policy should first be determined upon, and a general inquiry made respecting at least all such as any railway company should desire to have considered. I doubt whether any company would derive from such a general inquiry an advantage which would recompense it for the expense and labour of engaging in it, and I doubt, also, whether the result would repay railway companies for keeping the necessary accounts respecting a number of crossings. If it is desired that the Board should take up the consideration of the adoption of such a general policy, it might be made a subject of discussion with the railway companies generally; but, in the meantime, it appears to me that the Board should not interfere with the order of the Railway Committee. The question whether, under the agreement between the two companies, the half ordered to be paid by the Grand Trunk Company should be charged against the expenses to which the Canadian Pacific Company has to contribute, is not a question, in my opinion, for this board to determine.

Re Crossings of Railway Companies by Transmission Lines of Power Companies. ,

By order of the Board of August 7, 1906, the Kaministiquia Power Company was granted leave to erect and maintain its transmission lines across the tracks of the Canadian Pacific and Canadian Northern Railway Companies' right of way at West Fort William, subject to the conditions set forth in the order, among which were the following:—

'1. That the applicant company, at all times, at its own expense, maintain, in good order and condition, the wires crossing the said railways so that at no time shall any damage be caused to the companies owning, operating or using the said railways,

or to any person lawfully upon or using the same.

'2. That the applicant company, at all times, wholly indemnify the companies owning, operating or using the said railways of, from and against all loss, costs, damage and expense to which the said railway companies may be put by reason of any damage or injury to person or property caused by any of the said wires or any works or appliances herein provided for not being erected in all respects in compliance with the terms and provisions of this order, or if, when so erected, not being at all times maintained and kept in good order and condition, and in accordance with the terms and provisions of this order, as well as any damage or injury resulting from the imprudence, neglect or want of skill of any of the employees or agents of the applicant company.

'That no work, at any time, be done under the authority of this order in such a manner as to obstruct, delay or in any way interfere with the operation or safety

of the trains or traffic on the said railways.'

The Canadian Pacific Railway Company applied for an order amending the said order, to provide that the erection, construction and maintenance of the said wires be wholly at the risk of the Kaministiquia Power Company, and the said company indemnify and save harmless the Canadian Pacific Railway Company 'of, from, and against all loss, cost, damage and expense from any cause whatsoever to which the applicant company may be put by reason of any damage or injury to person or property or otherwise resulting from the erection, construction, operation or maintenance of the said wires or any working appliances which may be provided in connection therewith.'

In support of this application, the Canadian Pacific Railway Company alleged that the construction, operation and maintenance of high potential wires across its right of way was a source of the gravest danger to it, its property, and to the property and persons of those using the railway; that the presence of the said wires,

even though properly protected so far as human foresight could provide, nevertheless meant that, in the case of an accident, whether due to exceptional causes or not, the resultant damage to the applicant company's property and that of third persons would be very far-reaching and was not a risk that should, under the circumstances, be assumed by the applicant company; that they should, therefore, be insured against any such loss, and requested that clause two of the order in question be amended in accordance with the application. The Canadian Northern Railway Company concurred in the application.

By agreement, written arguments were submitted upon the question thus raised. Express agreements had been entered into between some of the power companies and some of the railway companies affected respecting a number of such crossings and the protection to be provided thereat. These agreements were approved by the Board and orders issued accordingly. Among the provisions of such agreements are the following:—

'And the power company covenants and agrees that it will indemnify and save harmless the party of the first part, its agents, operatives and employees of and from any and all claims of every name, nature and description which shall be made against the railroad company or against such operatives or employees, by reason of any injury which shall come to any of them, or to the public, or to any property in transit upon such railway because of the operation of its transmission lines or any thereof under this grant and license, and whether such injury shall be sustained through the derailment of any locomotive or car of the railroad company or otherwise, it being intended that all the risk of all accidents incident or arising from the construction, maintenance or operation of such cables over the railroad of the railroad company, however occurring, shall be borne by the power company. The railroad company is to notify the power company in writing of any such claims or of any suit for the recovery of such damages, and the power company may with the support of the railroad company arrange with the claimant or defend such suits.

'All the work to be done by the power company or by its contractors, agents or servants in connection with the doing of the said work, or in connection with the repairs, renewals, or maintenance thereof, shall be done at the risk of the power company without expense to the railroad company.............

'The power company covenants and agrees to keep, abide, and perform all the terms and provisions hereof, and shall and will at all times indemnify and save harmless the railroad company of and from all loss and damage which may happen or arise, or be done, incurred or caused by reason of the construction, repair, renewal, maintenance or use of the said work.

'The railroad company shall not in any case be liable to the power company or to its contractors, agents or servants, or to the agents or servants of any such contractors, for any injury or damage to the person or property of the power company. or to the person or property of any of its contractors, agents or servants, or to the agents or servants of any such contractors which may happen, or be done, or caused by, or by reason of the doing of the said work, or during the repair, renewal, maintenance or use thereof; and the power company shall and will assume and does hereby assume all responsibility and liability for any and all such injuries and damages, whether caused by negligence of the railroad company, its agents or servants, or otherwise; and the power company shall and will indemnify and save harmless the railroad company, its successors and assigns, of and from all damages, claims for damages. demands, suits, recoveries, judgments or executions which may arise, or may be made had, brought, or recovered by reason of or on account of any such injuries or damages. And it also covenants and agrees to indemnify and save harmless the railroad company, its agents, servants and passengers of and from all loss, injury or damage to it or to its agents, servants, or passengers, which may happen or be done or caused

by reason of the doing of the said work, or by, or by reason of the repair, renewal, maintenance or use thereof, or by, or by reason of any failure to repair, renew or maintain the said work.'

The contention of the Canadian Pacific Railway Company was that the lines of the Kaministiquia Power Company were carried across land owned by the railway company; that no compensation had been given to it for this interference with its right of property; that the wires were to be used for the transmission of something from which there was great risk of injury; and that the railway company could not be compelled to bear any of the risk this occasioned while it arose from the default of the power company or from any source beyond the control of the power company.

The original application asked that the risk be thrown absolutely upon the power company, without providing for cases in which the injury might be due to the default or negligence of the railway company or its agents; but in the written arguments referred to, the railway company did not go so far, but suggested a clause which excepted from the liability proposed to be thrown upon the power company 'any loss or damage directly attributable to any act, default, or negligence on the part of the railway company, its agents or employees.'

Judgment, Chief Commissioner Killam, November 17, 1906.

It appears to me that the contentions of the Canadian Pacific Railway Company are well founded, and that it ought to be at no risk of loss arising from the placing of such wires across its right of way or the transmission of electric power thereon, excepting in cases in which the loss is primarily due to its default or that of those for whom it is responsible. Telephone wires over railway tracks cause a measure of physical obstruction, from which there is some possibility of danger. Contact between such wires and other wires may result in injury. But there is no such danger ordinarily attending their existence over railway tracks as in the case of wires transmitting high electric power. Usually, too, telephone wires are carried along highways and across railway tracks where the company does not own the land but has merely a right of crossing the highways; and it is not necessary, at present, for the Board to determine what orders shall be made where power wires cross a railway upon a highway.

It appears to me that the clause now suggested by the Canadian Pacific Railway Company as a substitute for clause 2 of the original order and of the draft of the order proposed to be made in respect of the power company's second application, is a reasonable one and should be adopted. The clause is as follows:—

'That the applicant company shall, at all times, wholly indemnify the railway company of, from, and against all loss, cost, damage, and expense to which it may be put by reason of any damage or injury to person or property or business caused by any of the said wires, lines, or any work or appliances herein provided for, or by the continuance or use thereof, whether caused by the same or any of them not being erected in all respects in compliance with the terms and conditions of this order, or if, when so erected, not being at all times maintained and kept in good order and condition and in accordance with the terms and provisions of this order, or otherwise howsoever caused, as well as of any damage or injury resulting from the imprudence, neglect or want of skill of any of the employees or agents of the applicant company; Provided, however, that the applicant company shall not be required to indemnify the railway company from and against any loss or damage directly attributable to any act, default, or negligence on the part of the railway company, its agents, or employees.'

The power company now alleges that it has constructed its work under the order of August 7, and that that order at least should not now be varied. It appears to me, however, that as the question is a new one and as it was raised so promptly after the railway company had received notice of the order made, the power company's objections should not prevail.

January 24, 1907. Upon the statements made in Mr. Montgomery's further communication of December 11, 1906, it appears that the Kaministiquia Power Company

has power to construct lines for the transmission of electricity upon and along highways. I understand that this is not disputed by the railway companies, although opportunity has been given for the purpose. This being the case, I think that the power company stands in the position of the telephone company, acting under the provincial order of the Board of Trade, referred to in the National Telegraph Company v. Baker (1893), chapter 186; and the Tramway Company, whose lines were constructed under statutory authority, referred to in Eastern and South African Telegraph Company v. Capetown Tramway Companies (1902), A.C. 381.

The lines authorized by the Board's order of August 7, 1906, are not constructed across the lands of railway companies, but along the highways in respect of which the railway companies have merely rights of crossing. Under those circumstances, it does not appear to me that the power company should be responsible for any injury except such as may arise from its negligence or that of its servants or agents, and, in respect of such, the railway companies need no protection by order of the Board.

I am, therefore, of opinion that we should not vary the original order in this case. February 4, 1907. The Kaministiquia Power Company was incorporated by the legislature of the province of Ontario, from which it derives any authority that it may have to construct lines along the highways. With its action in this respect, this Board has nothing to do. The board is not asked to give the company any authority to carry its lines along the highways; but as it is doing, and has done, so in accordance with the right which it claims, and as these rights are not contested by the railway companies interested, we may assume for the purposes of the applications before us, that the power company's action is lawful.

As the Board has no authority to give or refuse leave to run along the highways, it does not appear to me that it should impose any condition to that being done. The company applied for leave to carry its wires across the tracks of the Canadian Pacific and Canadian Northern Railway Companies; and an order was made authorizing it to do so. The railway companies have since asked for the insertion of a condition throwing upon the power company the responsibility for any damage that may occur to the railway companies or those using the railways. Upon the grounds expressed in my memorandum of January 24, I do not think that such a condition should be imposed, as between the railway companies and the power company; and I think it best that we should simply refuse the applications of the railway companies, leaving the municipality and the public using the highways to such protection as is given by the provincial law.

## In Re Canadian Pacific Railway Company and Grand Trunk Railway Company, Lennoxville Crossing Case.

Under an agreement between the Grand Trunk Railway Company and the International Railway Company it was agreed that the said International Railway Company should bear the cost of providing, maintaining, equipping and working an ordinary level railway crossing, together with all risk arising from such construction and operation. The agreement also contained the following provision: 'In the event of the government of this Dominion passing any Act whereby certain signals, interlocking switches, or other appliances shall be used on level railway crossings. it is hereby understood and agreed that the party of the second part' (being the International Company) 'will provide, work and maintain such at their own expense.'

Hearing, October 30, 1906. Judgment, November 17, 1906.

Chief Commissioner Killam (6 Can. Ry. Cas., pp 78 et seqo): Held, that the said clause of the agreement should not be narrowly construed; that the Board had authority under the Railway Act. 1903, to order an interlocking system at this crossing for the protection of the public.

Ordered, that the Canadian Pacific Railway Company install, maintain, and operate the ordinary interlocking, derailing and signal system, at its own expense, at the said crossing.

Windsor, Essex and Lake Shore Rapid Railway Company Crossing, Talbot Street, in the Town of Essex.

The Windsor, Essex and Lake Shore Rapid Railway Company applied, under section 177 of the Railway Act, 1903, for leave to cross, at rail-level, with its track the track of the Michigan Central Railroad Company, on Talbot street, in the town of Essex.

After hearing and a personal inspection by the Board, and upon the report of its engineer, the Board, on May 25, 1906, made an order authorizing the applicant company to construct its line of railway across the track of the Michigan Central Railroad Company by means of subway at a point distant not less than 1,200 feet west of the proposed point of crossing on Talbot street.

Later, the applicant company asked for a further hearing of its application, claiming that it had not previously received notice that the Michigan Central Railroad Company proposed to urge the construction of a subway, and that it was not prepared with proper evidence upon that point; that, on account of the nature of the locality, a subway crossing was not feasible there.

The company was directed to formally apply to rescind or vary the Board's order; and upon a further hearing, and in view of the opinions expressed by the chief engineer of the Board, as well as by other engineers, the Board, by order, dated November 16, 1906, rescinded its previous order of May 25, 1906, directing the construction of a subway, and authorizing the crossing by the applicant company at rail-level, requiring:

(a) That the said crossing be protected by an interlocking plant known as the 'McSwain Interlocking Device'; derails to be placed on the applicant company's line of railway, on both sides of the said crossing; and the said derails to be interlocked with home and distant signals on the line of the Michigan Central Railroad Company;

(b) That the tracks of the Michigan Central Railroad Company be bonded to a

point 400 feet beyond the distant signals;

(c) That the normal position of signals on the Michigan Central Railway be at

'safety,' and the derails open on the applicant company's line;

(d) That the plan showing the position of the derails and signals, the description of machinery to be provided, and other necessary details, be submitted to the engineer of the board for his approval;

(e) That a day and night watchman be appointed to take charge of the said interlocking plant, who shall also operate the gates at the said point of crossing throughout the whole twenty-four hours for the protection of those using Talbot street in the ordinary course, the said men to be appointed by the Michigan Central Railroad Company, the wages of one of whom to be paid by the applicant company, and the wages of the other by the Michigan Central Railroad Company.

At the later hearing it was urged by the Michigan Central Railway Company that, before the applicant company can be authorized to carry its track across the line of the Michigan Central Railroad Company, it must have its route and its location

plans approved in the manner required by the Dominion Railway Act.

Judgment, Chief Commissioner Killam, November 20, 1906.

It does not appear to the Board that this is necessary. Apparently the provincial Act did not require approval of the route or location of the railway by an authority. As the Board held before, the requirement in the Electric Railway Act of Ontario that plans be filed with the provincial Minister of

Public Works was a condition only to the exercise of the right to expropriate land and not a condition precedent to the right to construct or operate the railway. The company's Act of incorporation, 1 Ed. 7, c. 92 (Ont.), provided that the railway might be carried along and upon such public highways as might be authorized by the by-laws of the respective corporations having jurisdiction over the same. It is not disputed that the necessary authority to run along the highways has been given by municipal by-laws. The original Act, as well as the Ontario Act of 1905, cap. 110, authorized the railway company to carry its line across the line of any other company on the level. Before the passing of the Dominion Act declaring the company's railway to be a work for the general advantage of Canada, the Board heard the application for a level crossing, and made an order authorizing the line to be carried underneath the Canada Southern Railway. The last mentioned Act provided that the Railway Act, 1903, and amendments thereto, with a certain exception, were to apply to the company and to its works, to the exclusion of the Electric Railway Act of Ontario or any provision of the Act incorporating the company or any amending Act inconsistent therewith, but provided that nothing therein contained should affect any action thereto fore taken pursuant to the powers in such Acts. The application with which the Board has now to deal is one for a variation of the former order, so as to allow of the crossing being made at grade. The Board is of opinion that such an order may be made without approval of the route or the location of the railway under the Railway Act. 1903.

In accordance with the report of the engineer, the Board decided to refuse the application of the Windsor, Essex and Lake Shore Rapid Railway Company for permission to cross the Michigan Central Railway on Talbot street, in the town of Essex, and, instead, to grant the said company permission to construct a subway under the main line of the Michigan Central Railway in the southwestern part of the said town, and to carry its line at rail-level over the tracks of the Amherstburg branch of the Michigan Central Railway.

From this judgment, Mr. Commissioner Mills dissents as follows:-

Whereas steam railway companies have been and still are permitted and authorized to carry their lines of railway, even those on which are the heaviest traffic and fastest trains, across one another at rail-level in all parts of the country;

Whereas the ordinary derailing and interlocking appliances now used by railway companies were approved and ordered by the Railway Committee of the Privy Council and have frequently been approved and ordered by the Railway Commission as affording sufficient protection to the public where one steam railway crosses another at rail-level;

Whereas, by the junction of the block system in use on the Michigan Central Railway with the ordinary derailing and interlocking appliances and the use of the gates and electric bell now maintained by the Michigan Central at the said crossing on Talbot street, the protection could, in my opinion, be made more perfect and complete than anything yet ordered by the board;

Whereas the construction of a subway at the point suggested will necessitate such an abrupt, long, and to my mind unreasonable diversion of the electric line as no municipality would permit—much less propose—in the case of a highway for ordinary vehicular traffic:

Whereas the proposed diversion of the electric line in the town of Essex will involve the making of two crossings instead of one, one by a subway under the main line of the Michigan Central Railway where it is impossible to get drainage, and the other at rail-level by the use of a diamond and derailing appliances on the Amherstburg branch of the Michigan Central Railway; and

Whereas interurban electric railways, intended especially to meet the wants of the farming community by carrying passengers for short distances and collecting scattering freight in small quantities throughout the rural sections of the country, receive no bonuses from the Dominion government, local governments, or municipalities, and consequently are unable to bear the cost of expensive subways or overhead bridges such as the heavy subsidized steam railway companies may be able to provide;

Therefore, I have to dissent from the above judgment, on the ground that in my opinion, the proposed diversion of the electric line, with all that it involves, is unnecessary, unreasonable and oppressive—not necessary for the protection of the travelling public, not even efficient for that purpose, as it proposes and involves a level crossing of a regular line of steam railway, at rail-level, with very much less complete and effective protection than could and would be provided at the crossing on Talbot street; unreasonable, because of the length and abruptness of the diversion, which, by the creation of a steep grade and three or four right-angle curves, will greatly diminish the hauling power of the electric line; and oppressive, because it imposes on the Electric Company heavy expense for the purchase of a new right of way through a good and well-peopled part of the town, the burden of an expensive subway where drainage cannot be obtained, and the outlay necessary for a diamond and protective appliances at a rail-level crossing over the Amherstburg branch of the Michigan Central Railway.

May 26, 1906.

Judgment in concurrence, Mr. Commissionner Mills.

This is an application by the Windsor, Essex and Lake Shore Rapid Railway Company, an electric road, to cross the tracks of the Michigan Central Railway, at rail-level on Talbot street, in the town of Essex, Ontario.

After considering the evidence submitted, the arguments of counsel, the report of the chief engineer of the Board, and the whole situation and facts of the case as set forth at the hearings in Windsor and Essex, I may state briefly my opinion on two or three points:—

- 1. That if a subway off at Talbot street (as proposed), with all the difficulties regarding drainage, were insisted upon, a very heavy, if not altogether intolerable, burden would be imposed upon the applicant company; and the danger to the travelling public in that locality would be greatly increased beyond what it now is, by adding a rail-level crossing of the electric road over the Amherstburg branch of the Michigan Central Railway to the rail-level crossing which now exists (and will continue to exist) for vehicular and pedestrian traffic on Talbot street. In fact, we might fairly say that two things would follow: the applicant company would be burdened, possibly bankrupted; and the danger to the travelling public would be doubled—without any compensating advantage, except in the matter of convenience to the main line of the Michigan Central Railway.
- 2. That the proposed subway, with its five per cent grade, would greatly hamper and injure the electric road in its freight traffic.
- 3. That if a rail level crossing by the electric road over the tracks of the Michigan Central Railway on Talbot street, where a crossing protected by gates now exists for vehicular and pedestrian traffic, is granted, and stipulation is made that the most perfect form of protective appliances for such a crossing are installed, connected with the gates now in use at that point, and all (the new protective appliances and the gates) operated night and day by men chosen and controlled by the Michigan Central Railway.—if, say, all this is done, there will be only one rail-level crossing instead of two; the Michigan Central Railway will be well served; the electric company will not be embarrassed either by heavy capital outlay or in the operation of its line of railway; and above all the danger to the travelling public will be very much less than it would be with a subway and two level crossings one partially protected and the other with little or no protection.

Therefore I can only re-affirm my judgment of May 26, 1906, and concur in the conclusion to-day reached by my colleagues, the Chief and Deputy Chief Commissioners.

November 20, 1906.

## Re Kaladar Drainage.

The facts are fully set forth in the judgment of the Chief Commissioner.

November 20, 1906, Chief Commissioner Killam:

The Canadian Pacific Railway Company applied to the Board for an order authorizing the company to construct a ditch upon and across certain specified lands according to a plan submitted with the application.

The lands in question consisted of certain lots in concessions three and four of the township of Kaladar, and in concession two of the township of Sheffield, owned by different private individuals, only one of whom, James Murphy, has made objection to the construction of the drain through his land or the granting of the order.

The railway actually intersects all the lots except Murphy's, the nearest portion of which is distant several hundred feet from the line of the railway, and is separated from the railway company's property by the lands of other private owners which actually adjoin the railway.

The applicant company relies upon the powers given by subsections (m), (p) and

(q) of section 118 of the Railway Act, 1903:

'(m) make drains or conduits into, through, or under any lands adjoining the railway, for the purpose of conveying water from or to the railway;

'(p) from time to time to alter, repair or discontinue the before-mentioned works or any of them, and substitute others in their stead;

'(q) do all other acts necessary for the construction, maintenance and operation

of the railway.'

On behalf of Murphy it has been argued that section 196 makes it the duty of the company to make and maintain sufficient ditches and drains along each side of the railway for the purposes of any necessary drainage; that this method is the only one that can be used after the railway has been completed; that this railway has been completed and in operation for many years, and any powers of expropriation of land, or of the use of adjoining lands for purposes of drainage, have been exhausted and cannot now be resorted to; that drainage by means of ditches along the railway has been found to be sufficient for the maintenance of the railway, as evidenced by its use for so many years; and that Murphy's lands were not 'lands adjoining the railway' within the meaning of subsection (m) of section 118.

Section 196 provides that 'the company shall in constructing the railway make and maintain suitable ditches and drains along each side of, and across and under the railway, to connect with ditches, drains, drainage works and water courses upon the lands through which the railway runs, so as to afford sufficient outlet to drain and carry off the water, and so that the then natural, artificial or existing drainage of the

said lands shall not be obstructed or impeded by the railway.'

This clause is evidently inserted for the purpose of imposing upon the company the duty of instituting such a system of drainage along its tracks as will prevent the interference of its works with the drainage of the lands of others. It is not intended to indicate the powers which the company may exercise for the proper construction and maintenance of its railway. These powers are found in section 118, and among them are powers from time to time to alter, repair or discontinue the works previously referred to and to substitute others in their stead, and to do all other acts necessary for the construction, maintenance and operation of the railway.

Under these powers it appears to me that, when a system of drainage established upon the construction of the railway is subsequently found to be insufficient improve-

ments may be made therein and such further drainage works executed as will assist in keeping the railway in an efficient condition and relieve it from the danger of injury by water. And I think that, for this purpose, the company may avail itself of the power contained in subsection (m) to make drains into or through lands adjoining the railway.

We have been referred to the case of Kingston and Pembroke Railway Company v. Murphy, 17 S.C.R. 582. In that case it was considered that a railway completed according to its charter could not be farther extended and lands compulsorily taken for the purpose. It should be noted, however, that that case was decided under the Railway Act of 1879, 42 Vic., c. 9, which did not contain the provisions of subsection (p) and (q) before-mentioned, and that what the company there sought to do was to construct an extension of its railway, not to alter or repair the works of its existing railway.

The natural meaning of the word 'adjoining' is lying next to or in contact with; contiguous. Such is the sense usually ascribed to it by the courts. See I Bouv. L. Dict. 93, 1 Am. and Eng. Enc., pp. 635-8; 1 Cyc. 765; Rex. v. Hodges, M. and M. 341; Josh. v. Josh, 5 C.B.N.S., 454; Lighthound v. Higher Bebington Local Board, 14 Q.B.D. 849. Numerous United States authorities are cited in the dictionary and encyclopedias just mentioned. But, just as in the case of other words, when it is apparent from the context and subject-matter dealt with that the literal meaning of the word would defeat the purpose of the legislature, it must be assumed that the word was used in a different sense. Moore v. Phænix Insurance Company, 64 N.H., 140, 6 Atl. Rep. 27; Marsh v. Concord Mut. F. Ins. Co., 71 N.H. 253, 51 Atl. Rep. 898. See also L. & S.W.R. Co. v. Blackmore, L.R. 4 H.L. 610, 39 L. J. Ch. 713; Coventry v. L.B. & S.C.R. Co., L.R. 5 Eq. 104; Bateman v. Parker (1899) 1 Ch. 599; Hobbs v. Mid. R. Co., 51 L.J. Ch. 234; Ind. Coope & Co. v. Hamblin, 81 L.T. 779, 48 W.R. 438.

The general principle is best stated in the language in Maxwell on Statutes, 4th Ed., p. 78. 'The words of a statute are to be understood in the sense in which they best harmonize with the subject of the enactment and the object which the legislature has in view. Their meaning is found not so much in a strictly grammatical or etymological propriety of language, nor even in its popular use, as in the subject or in the occasion on which they are used and the object to be attained.' See also Beal on Cardinal Rules of Interpretation, p. 34; The Dunelm, 5 P.D. 171 and Wakefield Local Board v. Lee, 1 Ex. D., at p. 343.

The statute authorizes the construction of drains into adjoining lands. It is obvious that it must be necessary in many instances to find outlets for the drains or ditches along the sides of the railway tracks, and for this purpose to carry drainage works out of and beyond the land used for the railway right of way according to the natural configuration of the ground. In authorizing the carrying of drains through or under adjoining lands the legislature must have contemplated that the drains should leave the boundary line between the company's lands and those of other owners; and it must have contemplated that the distances to which they would be carried would differ according to circumstances. And it appears to me that the 'arislature could not have had in view the ownership of the particular parcels or strips of land through which it would be necessary to carry such works. Having once adopted the view—which, as it appears to me, is the necessary view—that under subsection (m) the railway company was authorized to carry drains away from the point of contact and into lands of others. I think that it necessarily follows that the power to carry the drains as far as might be reasonably necessary to effect the purpose for which they were to be constructed was included. Naturally such drainage works must be adapted to the formation of the land. It would be unreasonable to suppose that they were to stop at the boundary of the owner of the land next adjoining the railway, leaving the water to run as it would thereafter. In my opinion, ownership should not be treated as an element in determining whether or not the lands are 'lands

adjoining the railway' for the purposes of a case such as that with which we are now dealing.

After consideration of the report of one of the assistant engineers of the Board and the evidence taken upon the hearing, the chief engineer of the Board has reported that he is 'of opinion that the sooner the water is taken away from the railway at this point the safer it will be for the railway embankment, and that this is necessary for the proper maintenance and operation of the railway.'

Under the amending Act passed at the last session of parliament, the Board is empowered to make an order giving its sanction or approval to any matter, act or thing sanctioned by the general Railway Act. It does not appear to me that the company needs any sanction or approval from the Board to enable it to exercise the power contained in subsection (m) of section 118; but it is convenient that it should submit to the Board proposals for the construction of any such works in order that the Board may exercise some control as to the nature of the works and for the protection of other parties.

The evidence shows that the portion of Mr. Murphy's lot which would be cut off by the proposed drain is of little, if any, value, and that no serious injury would be done to the remainder of his land by the proposed work.

I think, therefore, that the order should go sanctioning and approving the construction of the drain as indicated by the railway company, with a condition that the railway company is to construct and maintain a suitable crossing over the drain for Mr. Murphy at such place and in such manner as shall be approved by an engineer of the board.

## Re Express Companies' Contract Forms.

Section 27 of the Act 6 Edward VII., chapter 42, amending the Railway Act of 1903, gave the Board certain jurisdiction respecting express companies and the carriage of goods by express.

Under subsection 10 of that section, certain contracts for carriage by express are not to have any force or effect until first approved of by order or regulation of the Board.

By section 11 any such contracts lawfully in use at the time of the passing of the Act were allowed to be continued to be used and to have effect until November 1, 1906, or until such later date as the Board might by order in any case, or by regulation, fix and limit. Before the said November 1, 1906, a number of express companies submitted forms of contract used by their respective companies with a request for their approval.

Upon an examination and consideration of these forms, the Board decided to extend for six months from the said November 1, 1906, the time within which the forms previously in use could be used by express companies, or for carriage by express, and did extend the time as aforesaid by regulation dated November 13, 1906, with the qualification that the regulation should 'not have the effect of authorizing any company, person, or corporation, after approval of its or his tariffs of tolls by the Board under the provisions of the said Act, to contract or collect in or under any transaction or contract any express toll or tolls within the meaning of the said section 27 higher than the toll or tolls set out in the tariffs so approved, applicable to such transactions or contract.'

## Re Express Companies' Tariffs.

Section 27 of the Act, 6 Edward VII., chapter 42, amending the Railway Act, 1903, applies to tolls or charges for the carriage of express matter, either wholly or partly in Canada and between points in Canada and points in the United States by

any one company, and the provisions of the Railway Act, 1903, with reference to joint tariffs, are applicable to tariffs of express tolls under the amending Act.

Chief Commissioner Killam, November 29, 1906.

# CLAIMS AGAINST RAILWAY COMPANIES.

The Board has no jurisdiction to compel the railway company to pay for loss of cattle killed or injured by its trains, or for property burned by fires kindled by locomotives, as the statute expressly provides that relief in such matters is to be obtained by action in a court of competent jurisdiction. The Board, however, has jurisdiction to compel the company to put in proper cattle-guards and highway approaches, where it is the company's legal duty to do so.

Chief Commissioner Killam, November 30, 1906.

# Re Rounding off Passenger Tolls.

Section 258 of the Railway Act, 1903, provides '.....; and in estimating the tolls to be charged in passenger tariffs any fraction of five cents less than two and a half cents shall be waived by the company, and above two and a half cents and up to five cents shall be considered as five cents by the company.'

The question was whether, when a special tariff is made up at less rate per mile than the standard tariff rate, the railway company is obliged to apply the principle laid down in the part of the section quoted.

Chief Commissioner Killam, December 3, 1906.

It does not appear to me that a railway company is so bound. Provided the standard rate is not exceeded and the clauses respecting discrimination and other provisions of the Act are not infringed, a special tariff may be made up either upon a uniform mileage rate or otherwise. Even if made up in general upon a mileage rate less than the standard rate, the company may violate that principle in some cases, and make the rates between certain stations upon another basis, arbitrary or otherwise.

I am, therefore, of opinion that a special tariff can be made without attention to the provisions of section 258, provided the fares are expressed in whole, not fractional, multiples of 5 cents. For instance, if a special tariff is made up at a rate of 2 cents per mile for a line where the standard rate is 3 cents per mile, 25 cents may be charged, instead of 22 cents or 20 cents for a journey of 11 miles.

# Re Neelon Highway Crossing.

The Railway Act, 1903, does not empower the Board to order or compel a railway construction of a highway across the railway; such leave may be given to the railway company to construct a highway crossing over its railway where no highway has previously existed. The power of the Board in such a case is merely to give leave for the company, in which case it will be at liberty, but not obliged, to construct the crossing, or leave may be given to the municipal, or other body, having authority to open up a highway across private property without the consent of the owner. In the latter case the railway company is no more under obligation to bear the expense than a private owner would be.

Re James Bay Railway Company's Application to Cross Grand Trunk Railway Belt Line on Robert Davies' Property

This application came before the Board as the result of an agreement between the two companies made on the hearing of the two actions for injunction between the

two companies in the High Court of Justice for Ontario The agreement was that the James Bay Railway Company should apply to the Board for leave to make the crossing, and that on this application the Board was to decide 'which railway is bound to cross the other, and on what terms, and at whose expense the crossing is to be made.'

The evidence before the Board showed that, before the lodging of the application and before the agreement for making it, the James Bay Railway Company had entered upon the property under a warrant of possession and constructed its tracks across the spur in question, although met with forcible opposition by the Grand Trunk

Railway Company.

The Board decided that it was unnecessary for the James Bay Railway Company to make any such application, and treated the track on the Robert Davies' property at the point of crossing as not being a railway line or track of another company within the meaning of section 177 of the Railway Act, 1903, but as being personal property, or, if real estate, as the property of Robert Davies, and made an order giving leave to the James Bay Railway Company to construct its line of railway across the spur track in question without putting in a diamond or otherwise providing for the operation of the spur by the Grand Trunk Railway Company across the line of the James Bay Railway Company, and without compensation to the Grand Trunk Company, thus leaving Davies to get such compensation as he might be entitled to under the Railway Act.

The Grand Trunk Railway Company applied to the Board for leave to appeal

from this order upon the following grounds:-

'1. That the tracks of the Grand Trunk at the point in question is a railway line of a company, for the crossing of which by the tracks of the James Bay, leave of the Board is required under section 177 of the Railway Act.

'2. That leave of the Board was not necessary in order to enable the Grand Trunk

legally to construct (at the point of crossing) the line of railway in question.

'3. That the Grand Trunk Railway Company has an interest in the land at the point in question as against the James Bay, and the James Bay cannot legally use or occupy such land without the leave of the Board.'

Judgment, Chief Commissioner Killam, December 3, 1906.

Held, that if these questions or one of them should be answered in the affirmative, the James Bay Railway Company could not lawfully have placed its tracks over the site of the spur in question without leave of the Board, and that such leave would not have been given upon the terms embodied in the Board's order. Either a diamond should have been inserted, and the proper method of protection at the crossing determined, or some compensation should have been awarded under section 137 of the Railway Act, 1903.

Leave to appeal upon the following grounds granted:-

1. Did the railway tracks from and connecting with the Belt Line railway constitute, where such tracks crossed the approved location of the James Bay Railway over Robert Davies' property, a railway line or track of a company, leave to cross which by the line of the James Bay Railway Company was required under section 177 of the Railway Act, 1903?

2. Could the Grand Trunk Railway Company of Canada legally construct the said railway tracks on Robert Davies' property at the point of crossing by the James

Bay Railway Company, without the leave of the Board?

3. Had the Grand Trunk Railway Company, when the James Bay Railway Company constructed its line of railway across the said railway tracks on Robert Davies' property, such an interest in the land occupied by such railway tracks at the said point of crossing as against the James Bay Railway Company that the James Bay Railway Company could not lawfully use or occupy such land without the leave of the Board?

Re Canadian Pacific Railway Spur to Great West Development Company's Premises. 20c-13½

## Winnipeg

Judgment, December 5, 1906. Chief Commissioner Killam:

The Canadian Pacific Railway Company should be asked for some evidence that the proposed spur is necessary in the public interest, or for the purpose of giving increased facilities to business. (Under subsection 4 of section 175 of the Railway Act, 1903.)

Where a body like a city or town consents to the construction of a spur line, the Board frequently takes this as sufficient, or it may consider that the nature of the locality to be served, or sone other circumstances, afford sufficient prima facie evidence to satisfy the statute. In the present case there is nothing. We do not know what the Great West Development Company is. It may be only a speculative real estate company; and as the city of Winnipeg does not consent and shows some reluctance to consent to the construction of the spur, there should be some evidence to satisfy the statute.

## Station Sites.

By section 256 of the Railway Act, the location of station must be approved by the Board, and in case of a railway which, since July 18, 1900, has been granted a subsidy in money or land by the parliament of Canada, the railway company is required to maintain and operate a railway station or stations, with such accommodation or facilities therewith as are defined by the Board, at such point or points on the railway as are designated by the Board's order; and in any case, every station of a railway company is required to be erected, operated, and maintained with good and sufficient accommodation and facilities for traffic, a provision which, under its general jurisdiction, the Board is authorized to enforce.

The view the Board has taken is that the approval by the Board of location plans which appear to leave spaces for station sites, does not satisfy the provisions referred to, requiring that the locations of stations be approved by the Board, but there must be separate orders expressly approving such sites.

Chief Commissioner Killam, February 11, 1907.

## Re Jacob Wright's Farm Crossing.

This was an application by Jacob Wright for a farm crossing over the line of the Canada Southern Railway Company on lot 29, concession 5, in the township of Enniskillen, in the county of Lambton, Ontario.

Wright is the owner of lands on both sides of the railway. The engineer of the Board reported that the applicant had no farm crossing and that the only way to reach the portion of this land lying to the north of the railway was by way of his neighbour's lands, north of the concession line, necessitating a long and out of the way route.

It appears that when the railway was built the lands were owned by the Crown, but were subsequently surveyed and sold to the original owners. The contention of the railway company is that the lands were surveyed and obtained before the construction of the railway but that the right of way across the lot was conveyed to the company without reservation before Wright acquired the land on each side of the railway; that under its original Act of incorporation it was not bound to grant farm crossings to the owners of lands adjacent to its right of way; that the subsequent legislation does not impose upon the company that liability; and that, while not admitting the jurisdiction of the Board to require the making of the farm crossing for the applicant, the company expresses its willingness that such an order be made

upon the terms of the applicant bearing the cost of construction and maintenance and paying such sum as the Board thinks reasonable and proper for the privilege, taking into consideration the attendant liabilities in connection therewith.

In the similar case of the Ontario Lands and Oil Company v. Canada Southern Railway Company, 1 Ontario L. R. 215, Meredith. J., decided that the railway company was not bound, under its Act of incorporation and the general Railway Act in force when the railway was built. to grant farm crossings, and that the Dominion Railway Act of 1888, which was enacted after the construction of the company's railway, did not apply to cases in which the railway had been previously constructed on land conveyed to the company and the owner of adjoining land had purchased subsequently to such conveyance, as, in his opinion, the railway could be said to be carried over the land of a person where such person did not acquire the property until the railway was constructed.

#### Chief Commissioner Killam:

I agree with Meredith, J., in thinking that the decision of the Supreme Court of Canada, in Vezina v. the Queen, 17 S.C.R., 1, conclusively established that, under the general Railway Act in force when the Canada Southern Railway Company was incorporated and when its line was constructed, a company was not bound to grant farm crossings over its line where a right thereto was not reserved in the grant or otherwise agreed to by the company; and I am also of opinion, with him, that where, prior to the passing of the Act of 1888, a person had acquired lands on opposite sides of a railway across which his predecessor in title had the right of way of crossing. the Act of 1888 did not operate to give that right to the new owner. In my opinion, also, the Act of 1888 cannot properly be construed retroactively so as to apply to a railway previously constructed on lands vested absolutely in the company. Section 190 of the Act of 1888 provided—as did section 198 of the Act of 1903—that 'every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway.' &c. According to my interpretation, this provision is applicable only to cases in which the railway has been carried across a person's land since the enactment of the Act of 1888. I have formed this opinion after consideration of the jurisprudence in the province of Quebec. and particularly the cases of Bolduc v. Canadian Pacific Railway Company, Q.R. 23 S.C. 238, the Grand Trunk Railway Company v. Huard, Q.R. 1 Q.B., 501.

Under the report of the engineer I think that we may properly find that the crossing is necessary for the proper enjoyment of the applicant's land on either side of the railway, and that it would be safe in the public interest; but as such an order is one to which the applicant is not entitled of right, and as it would have the effect of creating an easement over property which belongs absolutely to the railway company, and would involve some danger to the company's trains, any expense of construction and maintenance should be borne by the applicant, and the company should receive reasonable compensation.

Deputy Chief Commissioner Bernier expressed the view, in which Mr. Commissioner Mills concurred, that the railway company should undertake to open, construct and maintain a farm crossing at its own expense; and under the ruling of the Chief Commissioner that the Board has jurisdiction to make an unconditional order requiring the railway company to construct the farm crossing in question, although

he did not depart from his previously expressed opinion, the order issued February 15, 1907.

Judgment in concurrence, Mr. Commissioner Mills.

From the report of an engineer of the Board in this case, it seems clear that Mr. Wright's application for a farm crossing should be granted; and the only question is, at whose expense is the crossing to be made and maintained.

After full consideration of the principle involved and its wide application to Crown and Company lands in the western provinces and elsewhere, I am of the opinion that farm lands everywhere, actually occupied or to be occupied, carry with them the right of free passage (saving natural obstacles) from any one part of a lot to any other part of the same lot, which lot is or is to be occupied and worked as a farm; and that when a railway company or other corporation, for its own purposes and advantages, infringes upon this natural and fundamental right, it should do so with the clear understanding that it will, when constructing its line or at some later date, be compelled to provide and thereafter maintain, at its own expense, at least one adequate and satisfactory farm crossing on every lot or farm which it crosses.

Therefore, I concur in the judgment of the Deputy Chief Commissioner, that the Michigan Central Railway Company, as the successor of the Canada Southern Railway Company, should provide and maintain, at its own expense, an adequate and satisfactory farm crossing, at a point to be agreed upon, on the farm of Jacob Wright, known as lot 29, con. 5, in the township of Enniskillen, county of Lambton, Ont.

## Re Complaint of the Dominion Concrete Company, Limited.

This company applied for an investigation by the Board into the matter of the Canadian Pacific Railway Company's rate of 12 cents per hundred pounds on concrete blocks from Kemptville, Ont., to Graham station, a distance of 107 miles, as against a rate of  $6\frac{1}{2}$  cents per hundred pounds on brick, and alleging an unjust discrimination in favour of the latter commodity and against the former.

This matter was taken up by the chief traffic officer of the Board, and after considerable correspondence with the railway company the rate on concrete was reduced and made satisfactory to the complainants. After the lower rate had gone into effect complainants claimed to be entitled to a refund of the difference between the higher and the reduced rate. The railway company refused to recognize any such claim and the complainants applied to the board for an order directing a refund.

Judgment, Chief Commissioner Killam, March 5, 1907.

Under the Railway Act a railway company is required to obtain approval of what are called standard tariffs specifing the maximum mileage rates which the company is authorized to charge, and upon approval of such tariffs, the company is authorized to charge the rates set out therein, unless it files special tariffs giving lower rates than those in the standard tariff; and section 327 of the Railway Act provides that, when a railway company's standard freight tariff has been approved and published, the tolls specified therein—except where other tolls are provided for by special or competitive tariffs—are the only tolls which the company is authorized to charge for the carriage of goods; and, by section 401 of the Railway Act, 'any person or company, or any officer or agent of any company, (a) who shall offer, grant or give or shall solicit, accept, or receive rebate, concession, or discrimination in respect of the transportation of any traffic by the company, whereby any such traffic shall, by any device whatsoever, be transported at a less rate than that named in the tariffs then in force...... shall for each offence be liable to a penalty not exceeding one thousand dollars and not less than one hundred dollars.' The authority of the Board

to deal with tolls and tariffs, as set out in section 323 of the Railway Act, is as follows: 'The Board may disallow any tariff or any portion thereof which it considers to be unjust or unreasonable, or contrary to any of the provisions of this Act, and may require the company, within a prescribed time, to substitute a tariff satisfactory to the Board in lieu thereof, or may prescribe other tolls in lieu of the tolls so disallowed.

'2. The Board may designate the date at which any tariff shall come into force.'

Held, that this does not empower the Board to make retroactive alteration in a tariff which is not contrary to any of the provisions of the Railway Act, so as to apply the alteration to past transactions; and that the railway company is not entitled to make rebates from tolls which have been charged in accordance with the tariffs lawfully existing when the transaction took place.

Held, further, that the Board has no authority to direct the Canadian Pacific Railway Company to refund any portion of the tolls charged by it under the tariffs existing before March 20, 1906.

A later application was made by complainants against this ruling of the Board, and it was argued that as the Board had power to designate the date at which any tariff should come into force, this could be done so as to give the same a retroactive effect.

Held, Chief Commissioner Killam, March 20, 1907, that the power of the Board to designate the date at which a tariff shall come into force does not enable the Board to give such tariffs a retroactive effect, and to make them applicable to prior shipments.

#### Discrimination.

Railway companies have no right to discriminate in regard to passenger rates as between passengers arriving at Canadian ports by different steamers. By sections 315 of the Railway Act tolls are required, under substantially similar circumstances and conditions, to be charged equally to all persons and at the same rate in respect of all traffic of the same description, and carried in or upon the like kind of cars, passing over the same portion of the line of railway; and that no reduction or advance in any such tolls shall be made, either directly or indirectly, in favour of or against any person or company travelling upon or using the railway.

Chief Commissioner Killam, March 7, 1907.

(Immigrant Passenger Tariffs.)

Re Complaint Brown Brothers Company v. Canadian Northern Railway Company.

The complainants alleged that on May 2, 1906, they delivered to the Canadian Northern Railway Company at Warman, Alberta, two boxes of nursery stock, consigned to L. H. Daly, of Vegreville, Alberta, and that the shipment proved a total loss to them, occasioned by the neglect or refusal of the railway company to carry and deliver the traffic without delay.

It appeared from the answer filed on behalf of the railway company to this complaint that a period of fifteen days had elapsed from the time of receipt at Warman Junction until their arrival at Vegreville, a distance of 262 miles, and the railway company was advised that the Board felt that, under the circumstances, it should take into consideration the Brown Brothers Company's claim for damages, and that such steps should be taken as would prevent the recurrence of such delays.

Held, Chief Commissioner Killam, March 12, 1907, that, under the Railway Act, the Board has not power to award compensation to parties for delays in forwarding traffic, as the Act expressly provides that the remedy is to be had by action in the ordinary courts; that the function of the Board is to require the furnishing of accommodation and the forwarding of traffic without delay, while the circumstances admit

of the Board interfering; but that, in case of a transaction which is closed, the Board can only deal with it as showing the necessity for action to prevent such delays in the future.

## Re Complaint of Canadian Canners, Limited.

This was a complaint by the Canadian Canners, Limited, that the Canadian Pacific Railway Company charged a rate of 33 cents per 100 lbs. on a carload of canned goods shipped from Wellington, Ontario, to Sturgeon Falls, Ontario; or 4 cents per 100 lbs. more than the combination of the local rates from Wellington to North Bay and from North Bay to Sturgeon Falls.

Upon the application of the complainants, the railway company refused to refund the difference between the published rate of 33 cents and the combination of local rates, on the ground that it would be illegal to protect other than the published tariff rate, namely, 33 cents per 100 lbs.

The application to the Board is for authority to make the refund.

Judgment, Chief Commissioner Killam, March 12, 1907.

Held, that, not only would the railway company be justified in refunding the difference between the fifth-class rate from the point of shipment to Sturgeon Falls and the sum of commodity rate to North Bay, and the fifth-class rate from North Bay to Sturgeon Falls, but that it ought to do so. The later two rates are those of lawfully published tariffs; and a shipper has the right to the carriage of his traffic at the commodity rate to North Bay, and at the tariff rate from North Bay to Sturgeon Falls, although he consigns his shipment direct to Sturgeon Falls without mentioning the intermediate point.

It may happen that ignorant shippers will not be given this privilege, while those better informed will obtain it; but the uninformed shipper should not, on that ground be refused the lower rate.

# Re Somerset Bridge, Ottawa.

The city of Ottawa applied to the Board for an order under sections 186 and 187 of the Railway Act, 1903, directing the Ottawa Electric Railway Company, the Grand Trunk Railway Company of Canada, and the Canadian Pcific Railway Company to submit a plan and profile for the purpose of widening the bridges and approaches thereto constructed by them at Somerset street, a public highway in the city of Ottawa.

The bridge in question spans the tracks of the Canada Atlantic Railway and the Canadian Pacific Railway at the western boundary of the city. The eastern approach and bridge proper lie within the city of Ottawa, the western approach within the village of Hintonburg. The Ottawa Electric Company, which is subject to the legislative authority of the parliament of Canada, owns and operates a street railway system in the city of Ottawa and its suburbs. The portion within the city was constructed and is operated under an agreement between the city and the company authorizing the company to exercise its franchise for the period of thirty years from August 13, 1893. By a later agreement between the electric company and the city, the city consented to the construction, maintenance and operation by the electric company of its railway upon and along Cedar street and other streets in the city, and by this agreement it was provided that nothing contained therein, or in the original agreement between the city and the company, or in the by-law of the City Council ratifying these agreements, should be 'construed to impose any liability on the corporation for the construction, repair, or maintenance of bridges on Cedar street, crossing Canada Atlantic Railway lines and the Canadian Pacific Railway lines, or any bridge or bridges that may be constructed in place of the same; or should be 'construed as an assuming by the corporation of the said bridge or either of them.'

The street referred to as Cedar street is the one now known as Somerset street, on which the bridge in question is situated.

By agreement between the Electric Railway Company, the Canadian Pacific Railway Company, and the Canada Atlantic Railway Company, for certain considerations therein named, the Electric Company agreed from time to time and at all times thereafter, to 'indemnify and save harmless the railway company from and against all liability to maintain, alter, repair, or reconstruct the said bridge or the approaches thereto, and also from and against all claims for damages of every kind or nature whatsoever, or for any penalty imposed upon the said bridge or crossing, or the approaches thereto'; and further agreed that, if it should at any time become necessary to reconstruct the then existing bridge or to alter the same, plans of the said alteration or of the new bridge to be constructed should first be submitted to and approved by the railway company.

The substantial question for consideration was as to the body which should bear the cost of the alteration. The city, through its counsel, offered to bear one-fourth of the expense. The railway companies contended that, in view of their agreement with the Electric Company, and of the fact that the necessity for the widening of the bridge arises wholly from its use by the Electric Company, that company should bear the remaining portion of the expense.

Judgment, Chief Commission Killam, March 13, 1907.

Held, that, as between the Electric Company and the two railway companies, the contention of the railway companies was correct, and that, as between the Electric Company and the city, the Electric Company should widen the bridge by sixteen feet according to the plans to be approved by the Board, and that the city should pay the Electric Company one-fourth the expense involved in the addition.

## Passenger Rates.

By order of the Board, dated March 18, 1907, the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company were directed to reduce the passenger rates for their lines east of and including the Calgary and Edmonton Railway, to three cents per mile.

## Re The E. B. Eddy Company's Complaint.

This company has asked the Board to give the Grand Trunk Railway permission to reduce its charges on certain traffic carried at the rate of 10 cents per 100 lbs. under the tariff in force at the time, to 8 cents per 100 lbs. subsequently substituted.

Section 327 of the Railway Act provides that, when a railway company's standard freight tariff has been approved and published, the tolls specified therein—except where other tolls are provided for by special or competitive tariffs are the only tolls which the company is authorized to charge for the carriage of goods. Section 401 imposes a penalty on any person or company, or any officer or agent of a company offering, granting, giving, soliciting, accepting or receiving any rebate, concession or discrimination in respect of the transportation of any traffic by the company, whereby any such traffic shall, by any device whatsoever, be transported at a less rate than that named in the tariffs then in force; and section 402 makes it an offence in a company to depart from the tolls in a tariff then lawfully in force.

Judgment, March 18, 1907.

Held, that the Act gave the Board no power to permit a departure from the lawfully existing tariffs in respect of past transactions, or to legalize rebates from the previously earned tolls specified in such tariff; and on this ground, the Board should not attempt to interfere. 'In the present instance an attempt to exceed the Board's

power seems to be particularly objectionable, because the Board would not be able to secure to others in a similar position the rebates which the Eddy Company desires, but by becoming a party to the rebate, it would facilitate an undue preference in favour of one shipper.'

Judgment in dissent, Mr. Commissioner Mills.

On October 16 and 17, the E. B. Eddy Company thought of shipping pulp for the manufacture of paper from Danville, Que., to Ottawa, Ont., and called the attention of Mr. Bremner, who represented the Grand Trunk in Ottawa, to the fact that the 10 cent rate quoted on pulp from Danville to Ottawa was prohibitive, and that they could not ship pulp from Danville to Ottawa at a higher rate than 8 cents per 100 lbs.

After considering the question, Mr. Bremner, on behalf of the Grand Trunk, advised the E. B. Eddy Company that the Grand Trunk would give the said company a rate of 8 cents per 100 lbs. from Danville to Ottawa. The Eddy Company accepted the 8-cent rate and notified Mr. Bremner that some cars were then being loaded; and Mr. Bremner says that the Eddy Company was then notified that the 8-cent rate would not apply on cars shipped prior to the date on which the tariff became effective. The correctness of this latter statement, the Eddy Company does not admit, but alleges that in good faith, without any doubt that the 8-cent rate would apply, it shipped five cars of pulp between the time that the 8-cent rate was announced and the publication of the tariff to that effect.

Subsequently the Grand Trunk Company rendered a bill for \$153.68, being an extra charge of two cents per 100 lbs. on six cars pulp shipped between the time of the announcement of the 8-cent rate and the publication of the tariff, 9 days later.

In reference to this account, the E. B. Eddy Company sets forth the following declarations and statements of opinion:—

It declares that it shipped five of the six cars in good faith after the reduction was announced, and had no doubt that the rate was to be 8 cents per 100 lbs.

It expresses the opinion that nine days was altogether too long a time to take in issuing the tariff, and directs attention to the statement of the chief traffic officer that the said tariff could have been issued much sooner, if it had been done in the way which is usual when it is known that cars are loaded or being loaded and waiting for shipment.

It calls attention to the fact that the application of the 8-cent rate from the date of the announcement would not involve a discrimination against any one.

And it further alleges that the Grand Trunk is willing to withdraw or cancel this account for extra charges over and above the 8-cent rate, if the Railway Commission will allow it to do so.

I think the intention of parliament, as expressed in section 401 of the Railway Act, was to prevent all kinds of discrimination—not to compel a railway company to continue charging an admittedly unreasonable or prohibitive rate until such time as it can conveniently prepare and issue a new tariff, when the said company is willing to make a reduction in such unreasonable or prohibitive rate as soon as its attention is called to the matter (before a change in the tariff is made)—provided such reduction is made with the knowledge of the Railway Commission and manifestly without discrimination against any one.

Such a reduction, under such circumstances and conditions, the Grand Trunk Railway Company announced its willingness to make in the published tariff rate on pulp from Danville, Que., to Ottawa, Ont.; and under such circumstances, I think the Board should allow the said railway company, without injury or discrimination against any one, to apply its 8-cent reduced rate from the time when it announced its intention to make the reduction from 10 to 8 cents per 100 lbs.

March 8, 1907.

Re Application of the Toronto, Hamilton and Buffalo Railway Company, under section 175 of the Railway Act, 1903, for leave to construct a branch from its main line in the City of Hamilton to the works of the Canadian Westinghouse Company.

The projected line would cross Sherman avenue south of Princess street and run thence, approximately, parallel to and about 125 feet south of that street, and parallel to, and some 350 feet south of, the line of the Grand Trunk Railway Company crossing at grade, between certain points, the line of the Hamilton Radial Electric Railway Company and curving northerly, about Fullerton avenue, a short distance from the Westinghouse Company's works.

Objection was made to this line by the residents of the locality west of Sherman avenue and between the proposed line and that of the Grand Trunk Railway Company, on the ground that it would be very injurious to them that their properties should be inclosed within a strip bounded by two lines of railway; and the Radial Company objected to a crossing of its line at grade. The Grand Trunk Railway Company also objected to the use of any portion of its right of way for the proposed branch.

Judgment, Chief Commissioner Killam, March 28, 1907.

I am of opinion that it would not be reasonable to compel the Grand Trunk Railway Company to allow such a use of its land at that point.

I am also of opinion that it would not be proper to allow the construction of the branch beyond Sherman avenue south of Princess street. This would leave a strip of property about fifteen hundred feet long by three hundred and fifty feet in width between two lines of railway. At the present time the property between Sherman avenue and the Westinghouse Company's property is wholly residential, and even though the proposed branch were simply to be used as a spur line for access to the Westinghouse Company's works, it would be highly injurious to the residents of such a strip. It may be that circumstances will lead to the strip becoming eventually a manufacturing locality; but, unless it is sufficiently important, the residents should not be forced to this result.

On behalf of the city of Hamilton, objection is made to the proposed lowering of the Radial railway, as this would involve the lowering of Princess street below a large existing sewer, and in such a manner as would injure Princess street for public travel.

While one or more industries are to be served east of Sherman avenue, the extension beyond that is for the purpose of giving access to the Westinghouse Company's works only. If that company did not object, it would be possible to carry the line along that of the Grand Trunk Railway directly into the Westinghouse Company's premises. Doubtless it will be of great value to that company to have the additional railway connection and service, but it has already connection with the line of the Grand Trunk Railway, by means of which traffic can be transferred to and from the line of the Toronto, Hamilton and Buffalo Railway.

No public interests are involved, and it does not appear to me that the residents of the locality should be compelled to submit to the injury that would be done their property or that the Radial Company should have its line crossed at grade in order to enable the Westinghouse Company, which desires the railway communication, to procure it without injury to its own buildings or premises.

Held, Commissioner Mills dissenting, that the application for leave to construct the spur line on the route proposed should be refused, but that authority should be granted, if the applicant company desired, to construct a branch line with the diversion northwesterly over Sherman avenue to the south of the Grand Trunk Railway Company's right of way, and thence parallel thereto over the radial railway to Rosedale avenue, and to take it directly to the Westinghouse Company's premises, or have it connected with the Grand Trunk Railway tracks, as might be arranged, or that leave should be given for the construction of any portion of the line which might be desired.

# Re Cedar Dale-Oshawa Crossing.

This was an application by the police village of Cedar Dale for an order directing the Grand Trunk Railway Company of Canada to provide better protection where its railway crosses Simcoe street, in the said village.

There was at the same point an electric railway crossing the Grand Trunk Railway, with interlocking appliances operated by the electric company, and the Board, by its order of December 19, 1906, directed that the gates be interlocked with those appliances and be operated by the signalman stationed in the tower, and that the Grand Trunk Railway Company should bear the expense incident thereto over and above the expense to which the electric company was subject. The Board also directed that an electric light should be provided and maintained by the village at the crossing.

Simcoe street, over which the Grand Trunk Railway crosses is a continuation of a street of the town of Oshawa but the point of crossing is outside the limits of the town. Counsel for the town supported the application for the order and took part in the examination of witnesses. Among other things he said: 'This corporation is interested in having the lives of the citizens protected—their lives and property—and would urge upon the commissioners as strongly as possible the propriety of providing such protection as may be thought proper.' And after reference to the probable expense of a subway he said: 'But all the other protection that could be afforded would be urged by this corporation.' Further he said: 'The town council do not see that they should be called upon to contribute. They contribute an immeuse amount of business to the railway.'

In announcing to the parties its conclusions the Board expressed doubt whether the town could be considered interested so as to be liable to be made a contributory to the cost of protection of the crossing and intimated that, if the railway company should be of opinion that the town was so liable, the Board would like to be furnished with references to any statutory provisions imposing on the town or bestowing on it any rights with respect to a highway outside the boundaries of the town; and it also stated that it considered that the village of Cedar Dale was not in such financial position that it should be asked to contribute, except by providing and maintaining a light at the crossing.

The Grand Trunk Railway Company then applied to have the order varied so as to apportion the cost of the installation, operation and maintenance of the gates equally among the town of Oshawa, the village of Cedar Dale and the railway company, claiming that the town was interested in the matter and should be compelled to contribute, and that the weak financial position of the village was no sufficient gound for exempting it.

This latter application was heard before the Board. In support of the claim of interest on the part of the town, reference was made to the position taken by the counsel for the town at the previous hearing, and to the case of the Grand Trunk Railway Company v. City of Kingston, 8 Ex. C. R. In that case an application was made to have certain orders of the Railway Company of the Privy Council made rules of the Exchequer Court. By these orders, the city of Kingston was directed to contribute to the expense incident to the construction of a subway for carrying a highway under the Grand Trunk Railway outside of the city limits; and objection was made to the authority of the Railway Committee to impose this condition. The learned judge of the Exchequer Court was of opinion that he had no authority to review the decision of the Railway Committee upon the merits or its methods of procedure. He said: 'Was the city of Kingston interested in the works that were directed to be done?' If that question is answered in the affirmative, the Railway Committee had jurisdiction to make the orders as amended. If it is answered in the negative, then the committee had no jurisdiction to impose upon the city of Kingston the obligation to bear any part of the cost of such works. I think the question should

be answered in the affirmative. Although the works directed to be carried out are not within the limits of the city of Kingston, they are in close proximity thereto, and are intended to protect the public from danger of crossing the Grand Trunk Railway by a level crossing on a road that, within a short distance from the crossing, connects with one of the city streets. In addition to this it appears that the city of Kingston was one of the movers in the application to the railway Committee for an order to have the works in question undertaken; and it seems to me that one could not now with fairness say that the city of Kingston was not interested therein.'

In re Canadian Pacific Railway Company and county and township of York, 27 O.R. 559; 25 O.A.R. 65, Mr. Justice Rose upheld the validity of an order of the Railway Committee under which the city of Toronto, the county of York and the township of York were directed to contribute to the cost of installing and maintaining gates and a watchman for the protection of a highway crossing which was in the township of York and outside the limits of the city of Toronto. The order of the Railway Committee had been made upon the application of the city of Toronto. The county and township of York appealed from the judgment. Burton, C.J.O., and Maclennan, J., were of opinion that the order was invalid in so far as it imposed a burden upon the township and county. Osler, J., held that the township and county were 'persons interested' within the meaning of the Railway Act. and subject to the jurisdiction of the committee. Meredith, J., held that, as the road was not a county road, and the county was under no responsibility for its maintenance, it could not be considered to be interested so as to be liable to the order of the committee.

The city of Toronto did not appeal, and it does not appear to have been represented before the Court of Appeal. As the original applicant for the order, it could hardly be said that it was not interested.

Chief Commissioner Killam:

In the two cases referred to, the courts were called upon to enforce orders made by the Railway Committee. They could not review the decisions of the committee upon the facts. If there was before the committee any evidence that the parties ordered to contribute were 'interested' within the meaning of the statute, the jurisdiction of the committee to make the orders could not be disputed.

In the present case this Board is the court of original jurisdiction which has to decide for itself, not merely the question of law, but also the question of fact, as regards interest, and further, whether, in the exercise of its discretion, it considers that the town should justly and properly be made to contribute to the cost of protecting the crossing in question.

I think that it cannot properly be said that, as a matter of law, there is not some evidence of interest on the part of the town which would support an order of the Board against it, particularly in view of the direct claim of interest on the part of counsel representing the town. But it does not appear to me that the town is necessarily bound by the admission of some interest, having in view the circumstances and the nature of the interest admitted. The town corporation is a statutory body. It has no duty to maintain highways outside of the town limits, or to preserve them from obstruction. It is not authorized to expend the moneys of the town upon such highways. As a public body, having in view the interests of the citizens, a town council often interests itself in many matters of public importance not directly coming within its functions. Naturally the safety of citizens of the town travelling along the highway and over the crossing in question is looked upon by the council as of public interest; but it does not appear to me that, on that account, the municipal corporation can be said to have any legal interest in the matter of protecting the crossing. The individual interests of citizens having occasion to use the highway are not, in my opinion, ascribable to the corporation, and the admission of the counsel for the town, and the part which he took in supporting the application, do not appear to me to

carry the matter farther or to constitute such an admission or evidence of interest as to warrant the Board in finding as a matter of fact that there was such interest.

I think, therefore, that the town should not be ordered to contribute to the ex-

pense of erecting, maintaining, or operating the gates.

As regards the village of Cedar Dale, the matter stands in no different position from that presented at the original hearing. I do not think that the Board should be called upon in such a case to revise its previous decision, where no new facts have been presented and no material point was previously overlooked. In making the order the Board expressed its doubt upon the question of making the town a contributory. That question was fairly open for consideration.

In my opinion the application should be dismissed, and the railway company should be ordered to pay to the village a reasonable sum for costs of the application to vary the order. In view, however, of the state of the previous decisions and of the position taken upon the hearing by the town, I do not think that the railway com-

pany should be made to bear any portion of the costs of the town.

Order dated May 23, 1907, issued accordingly. Costs of the application fixed at the sum of \$25.

# Re St. John Ice Company Complaint.

This was a complaint by the St. John Ice Company alleging that the New Brunswick Southern Railway Company was acting illegally and in violation of the provisions of the Railway Act by

1. Billing cars at 20,000 lbs. which contained 40,000 to 50,000 lbs. actual weight.

2. Billing cars at 2 cents per 100 lbs. contrary to C.R.C. No. 1, their standard tariff, which names  $2\frac{1}{2}$  cents per 100 lbs.

3. Billing cars at 20,000 lbs. contrary to the Canadian freight classification, which specifies 30,000 lbs. as minimum carload weight.

4. That through W. E. Scully, their agent at West St. John, passing and billing as 20,000 lbs. cars which W. E. Scully as 'The Union Ice Company' had sold and delivered as 50,000 lbs.

5. Misrepresenting the existing tariff charges in the following way: In December last past their general freight agent, Mr. P. W. Wetmore, quoted as their current rate on ice from Spruce Lake to West St. John 2 cents per 100 lbs., mimimum carload weight 30,000 lbs., when he must have known that tariff C.R.C. No. 2, giving a rate of 2 cents per 100 lbs. had been cancelled and that  $2\frac{1}{2}$  cents per 100 lbs. was the legal rate, as per C. R. C. No. 1.

6. Through the collusive action of its officials violating the established tariffs, inasmuch as P. W. Wetmore, the accountant, who was also general freight agent, passed entries and way-bills, certified by him and F. J. McPeake, the superintendent, to the auditor, showing carload weights 20,000 lbs. when actually they were from 40,000 to 50,000 lbs., showing a total freight per car of \$4 had been collected when it

should have been from \$10 to \$12.50 per car.

And applied, under section 60 of the Act, for an order for inquiry into the management of the said railway company, and for investigation of the complaints hereinbefore recited against the company and its officials.

Hearing at St. John.

Ordered, that leave be granted the complainant company to institute proceedings, under sections 399, 401 or 402, of the Railway Act, against the company for suffering or permitting.

(a) W. E. Scully to obtain transportation for goods at less than the required

toll then authorized and in force on the railway of the company.

(b) For transporting goods for the said W. E. Scully; and for suffering and permitting W. E. Scully to obtain transportation for such goods at less than the regular

tolls then authorized and in force on the railway in violation of the provisions of the Railway Act.

Later, application was made, on behalf of the complainants, for a certified copy of this order, in order that the same might be made a rule of the Supreme Court under section 46 of the Railway Act.

Section 46 provides that any decision or order made by the Board may be made a rule, order or decree of the Exchequer Court, or of any Superior Court, in any province of Canada.

Subsection 2 of that section reads:-

'2. To make such decision or order a rule, order or decree of any such court, the usual practice and procedure of the court in such matters may be followed; or in lieu thereof, the secretary may make a certified copy of such decision or order, upon which shall be made the following endorsement signed by the Chief Commissioner and scaled with the official seal of the Board;

'To move to make the within a rule (order or decree, as the case may be) of the Exchequer Court of Canada (or as the case may be).'

Application refused.

Held, Chief Commission Killam, that, in the first instance, the usual practice and procedure of the court in such matters should be followed; that the other alternative provided under this section is intended rather for a case where the Board is itself seeking to enforce one of its own orders, that is to say, an order where the Board has taken the initative.

## Vancouver Eastbound v. Winnipeg Westbound Rates.

The boards of trade of British Columbia Pacific coast cities complained to the Board that the rates levied by the Canadian Pacific Railway Company on all classes of goods, from Vancouver to points located in British Columbia and the Northwest Territories, as far east as Calgary, on the main line, and Macleod, on the Crowsnest line, were discriminatory as against them as compared with the rates on westbound traffic from Winnipeg to the same territory.

The complaint was not based on the ground that the rates were, in themselves, so excessive as to be unreasonable or unjust, but merely on the ground that undue preference was given to traffic from Winnipeg westward, as compared with that from the coast cities eastward.

Most of the traffic carried westward from Winnipeg is carried under what are known as 'traders' tariffs,' marked as, 'to be used on reshipment by Winnipeg wholesale houses only to traders doing business at or tributary to stations specified' in the tariffs. A question was raised as to the extent to which those tariffs were used, and the railway company contended that comparison could not be made with them, as the rates were only the balances of through rates from points east of Winnipeg to the western points in question, after deducting the regular tariff rates to Winnipeg.

Hearings at Ottawa, March 6, 7 and 8, 1906.

Judgment of Chief Commissioner Killam, May 25, 1907, concurred in by Deputy Chief Commissioner Bernier.

'It appears to me,' referring to the contention of the railway company mentioned above, 'that these questions are quite immaterial. If, by so basing the rates, an unjust preference is given to Winnipeg as against the Pacific points, it is equally as objectionable as if the rates were computed on any other basis, and the comparison should be made with traffic carried for similar parties and under similar conditions, and on other traffic the tariffs applicable thereto are those between which comparison should be made.

The complainants rely mainly on a comparison of the respective distances from Winnipeg and Vancouver, claiming that the levying of higher rates for shorter dis-

tances raises a presumption of unjust discrimination. They rely also upon a comparison of the practice upon lines in the United States, claiming that the westbound rates from St. Paul are equalized with the eastbound rates from Seattle and Portland at points much farther east than are the rates from Winnipeg with those from Vancouver on the Canadian Pacific Railway.

It appears to me that no inference can be drawn from a mere comparison of distances upon different portions of railways, and that it does not constitute discrimination—much less unjust discrimination—for a railway company to charge higher rates for shorter distances over a line having small business or expensive in construction maintenance or operation, than over a line having large business or comparatively inexpensive in construction, maintenance and operation.

In my opinion, a party raising such a complaint upon a mere comparison of distances should show the nature of the particular lines referred to and that there is a material disproportion of rates as against the shorter line after due allowance is made

for the circumstances just mentioned.

At the hearing, the complainants offered no evidence upon these points; but the railway company gave some evidence showing that the cost of maintenance and operation were much greater, and the traffic lighter, upon the western portion of the line, than upon the portion from Winnipeg westward. While this showed that some difference in rates as compared with distances was reasonable, the information given was not sufficient to form an accurate judgment as to whether, after making due allowance for difference of traffic and expense, the western rates were unduly high as compared with the others.

As the matter was of considerable public importance, the Board did not feel warranted in dismissing the complaint on the mere ground that no sufficient proof of discrimination had been given, but directed its chief traffic officer to make further inquiries and afford it all the information possible for the purpose of enabling it to arrive at a correct conclusion. This inquiry has been made, with the result that the figures given by the railway officials have been found to have been, in the main, correct, and that some further information has been procured.

Members of the Board are aware, from personal investigation of the route, that grades are much heavier and the line much more difficult of operation in British Columbia than in the prairie provinces, and this view has been clearly established by the evidence.

The original report of the chief traffic officer showed that, by computations based upen the evidence as to the cost of operation and maintenance upon different sections of the main line of the railway, the rates from Vancouver to Calgary were really lower, as compared with those from Winnipeg to Calgary, than if they were based upon the proportionate expense. No accurate data were furnished by the evidence, or by the subsequent reports of the chief traffic officer, for comparison of the expense of operation and maintenance on what is known as the Crowsnest route, with that for the prairie lines, though the chief traffic officer reported that the Crowsnest line was much the more expensive to operate. He, however, made some further calculations based on a comparison of grades and the assignment, as a result thereof, to portions of the lines in British Columbia of a constructive mileage at the rate of one and a half miles from Yale to Revelstoke, and two miles from Revelstoke to Canmore, for each actual mile of railway. This estimate was taken from a statement in a letter of Mr. MacInnes, freight traffic manager of the Canadian Pacific Railway Company, that a certain tariff of the company was based upon such constructive mileage. This calculation showed that, using the constructive mileage thus estimated, the rates from Winnipeg westward were less per mile than those from Vancouver eastward. It appears to me that the results of such estimates afford no reliable basis for concluding that the Vancouver eastbound rates are discriminatory as compared with the Winnipeg westbound rates. The estimates are very loose, and are not based upon any

definite calculations. Those based upon actual figures as to comparative expense of operation and maintenance are much more reliable, even though, in some respects, details are not fully given. Although the company may in the past, for some purposes, have made use of such estimates, this should not be taken as establishing that the estimates were sufficiently accurate for the purposes of the complaint now in question. It is clear that an absolutely accurate comparison cannot be made, and the evidence does not appear to me sufficiently strong to warrant the conclusion that the eastbound rates are unduly high as compared with the westbound ones.

The report of the traffic officer further shows that the rates from Vancouver eastward are lower than those in the United States lines, and this although the portious of the United States served by these lines are much more productive and thickly settled, and afford greater local traffic than British Columbia; and, also, that the points at which the eastbound and westbound rates meet in the United States are considerably nearer Seattle than is claimed by the complainants; and that, comparing the proportionate distances from Winnipeg and Vancouver respectively with those from St. Paul and Seattle respectively, the average points of meeting of the rates on the Cauadian Pacific Railway are as fairly situated as the points on the lines in the United States.

So far as the traffic over the Crowsnest line is concerned, it would be much more satisfactory if more definite information as to the cost of operation had been procured; but, taking into consideration the respective rates over that line and over the main line via Calgary to Macleod, and the results of the other inquiries, it does not seem to me sufficiently probable that further inquiry would establish the unfairness of the rates to warrant us in making such inquiry. It must also be remembered that the traffic on the prairie sections of the Canadian Pacific Railway is very much greater than that upon the lines in British Columbia; that the earnings per mile of the company for the prairie lines are very much greater than in British Columbia, and that the company may reasonably be expected to carry the traffic on the prairie lines at lower rates than upon the other lines. At any rate, if it sees fit to do so to a reasonable extent, it cannot well be claimed that this course involves unjust discrimination as against the traffic in and through British Columbia.

There are two minor points which require consideration. One arises under special commodity tariffs for westbound traffic from Winnipeg upon the classes of articles named in the statute 60-61 V., c. 5, s. 1 (d), intituled 'An Act to authorize a subsidy for a railway through the Crowsnest Pass.' That Act authorized the granting to the Canadian Pacific Railway Company of a subsidy towards the construction of a railway from Lethbridge, through the Crowsnest Pass, to Nelson, upon certain conditions, one of which was that an agreement should be made between the government and the company by which, among other things, a reduction was to be made in the general rates and tolls of the company upon the classes of merchandise therein mentioned westbound from and including Fort William and all points west of Fort William on the company's main line, or any line of railway throughout Canada owned or leased by or operated on account of the company.

As a result of this Act and the agreement made under it, the company made tariffs of reduced rates upon the classes of merchandise referred to, not only from Fort William and points east thereof westward, but also from Winnipeg westward, without similarly reducing rates on the same classes of merchandise from Pacific points eastward. These reductions cannot be considered as having been forced upon the company, but were the result of an agreement which it chose to enter into for the purpose of obtaining a subsidy in aid of the construction of a line of railway. The agreement and the statute did not even deal with rates from Winnipeg at all. When the statute was passed, and when the agreement was made, the law prohibited unjust discrimination between localities; and while parliament did not stipulate for

similar reductions over western portions of the company's railway, it should not, in my opinion, be considered as having authorized what would, if done otherwise, have produced unjust discrimination. I think that we are justified in inferring that, in respect of the classes of merchandise to which these tariffs relate, the reductions did result in such discrimination, and that the rates from Vancouver eastward, upon similar traffic carried under similar circumstances, should be proportionately reduced.

The remaining point arises out of the facts that, in order to meet water competition on the Pacific coast, the railway company carries goods from eastern points to the Pacific coast at lower rates than to interior western points, and that the same practice prevails with reference to the rates from Winnipeg westward; and that, at many interior points, the rates from Winnipeg are less than the combined rates from Winnipeg to points of the coast, and from the latter points to the interior ones. The low rates to the coast are made necessary in order to enable the railway companies to obtain traffic in competition with ocean carriers. Such a practice is distinctly authorized by the Railway Act, and, unless the higher rates from eastern points to interior western points are, in themselves, unjust or unreasonable, this practice does not involve unjust discrimination. Necessarily the situation must have a modifying effect upon the rates to the interior points, which must vary with the distances from the Pacific ports. Prima facie the railway company should be entitled to charge reasonable rates from the Pacific ports eastward, and it should not be obliged to charge and would not even be warranted in charging, excessive rates to the interior points for the purpose of equalizing the position of the Pacific coast points. It does not appear to me that the mere fact that the westbound rates from Winnipeg or any other point to such interior western point are less than the rates which would be made up by a combination of the rates from such eastern points to Pacific points, and from the latter to the interior point, in itself constitutes unjust discrimination or undue preference. The railway company is allowed to meet competition at coast points, and I think it should equally be allowed to meet the effect of that competition upon interior points to a reasonable extent.

I am of opinion that the complaint should be dismissed, except in so far as relates to the class of traffic for which reduced rates were given under the Act relating to the Crowsnest line.'

Judgment in dessent, Mr. Commissioner Mills.

'I regret my inability to concur in the judgment of the Chief Commissioner in this case.

'I do not attach so much importance as the Chief Commissioner seems to attach to certain portions of the evidence—evidence into which the element of interest enters largely and regarding the value of which there is clear ground for difference of opinion; and I differ wholly from the opinion expressed as to the bearing of what is called the "constructive mileage" evidence; it has, I would venture to say, a manifestly direct bearing, and is in my opinion the best possible evidence as to the relative cost of the operation and maintenance of the two sections of the railway, the mountain section and the prairie section—because it is an expression of the deliberate opinion of the railway company, with the facts in its possession, at a time when there was no dispute and no issue to be settled; according to which opinion, each mile of the road between Yale and Revelstoke cost as much to operate and maintain as one and one-half miles of the prairie section. The rates were adjusted on this basis and no complaint was made by any section of the country.

'At a later date, the rates on the prairie section were reduced, without any corresponding reduction on the British Columbia (including the mountain) section; the balance was thus disturbed, and has remained so, although no evidence was given at the hearing or since to prove that the traffic on the said British Columbia section had then become or now is relatively any less than it was when the "constructive mileage" basis was established; and for this reason, as I understand it, the chief

traffic officer of the Board used the "constructive mileage' of the company in one of his calculations.

'Further, the chief traffic officer, whose technical knowledge and experience specially fit him for dealing with such questions, investigated the points at issue, in all their bearings, at great length, and with the utmost care; he read and weighed the evidence pro and con; he considered the objections urged by the representatives of the railway company against the statements and recommendations made in his report of the 17th December, 1906, and he came to the conclusion that there has been and is discrimination against the Pacific coast cities as compared with Winnipeg.

'Therefore, without stating my reasons at greater length or further enumerating the portions of the Chief Commissioner's argument and conclusions from which I have to dissent, I would say that I approve of the recommendations of the chief traffic

officer, as follows:-

(a) That the rates between Vancouver and Calgary should be reduced so as to preserve the same relative proportion between these and those between Winnipeg and Calgary as existed before the latter were reduced some years ago; in other words, that the prairie rates should apply between main line points in British Columbia, counting one mile between Yale and Revelstoke as equivalent to one and a half prairie miles, and one mile between Revelstoke and Canmore as equivalent to two prairie miles—equalizing the Vancouver eastbound and the Winnipeg westbound rates at a point 67 miles west of Calgary.

'(b) That the rates between Revelstoke and Macleod via Nelson should be similarly reduced, counting each mile between Yale and Crowsnest as one and a

half prairie miles instead of two miles, as at present.

'(c) That from Vancouver to Calgary and Macleod and intermediate points commodity rates should be given on the same articles as have commodity rates from Winnipeg under the so-called "Crowsnest Pass agreement;" these rates to be calculated in the same manner as the class rates, as in sections (a) and (b) equalizing the Crowsnest reduced rates from Vancouver westbound and the rates from Winnipeg westbound at Wardner, 146 miles west of Macleod.'

Application Canadian Pacific Railway Company for permission to make refund to Messrs. George Moore & Co., of Waterloo, from the local freight charges to Galt, on eggs subsequently reshipped.

The eggs in question were shipped to Galt from the Canadian Pacific Railway Company's station at Eden, Straffordville and Tilsonburg, in less than carload lots, aggregating 51,820 pounds, on which the company's local rates to Galt were paid There was in effect at the time a special tariff which provided that eggs shipped from the company's own stations in lots of not less than 500 pounds, to certain specified cold storage points, would, on reshipment, be entitled to an allowance of one-third from the inward charges to the cold storage point. In the specified cold storage points of the Canadian Pacific Railway Company's original tariff, Galt and Waterloo. Ont., were not included, but were omitted, as the representative of the company says. by mistake, and as a result Messrs. Moore & Co. did not derive the benefits of the stopover arrangements that were granted the points shown in the tariff, the effect of which was, as alleged, to unjustly discriminate against Moore & Co.

Judgment, Chief Commissioner Killam, November 13, 1907, concurred in by the Deputy Chief Commissioner Bernier, was to the effect that the rates paid were those provided for by the existing tariff, and that the fact that the tariffs for other points were discriminatory as against Galt and Waterloo, would not have been proper ground for disallowing some of the tariffs, or requiring a change, if an application had been made therefore, and it did not give the Board jurisdiction to direct or authorize the

rebate for which authority is asked, or to interfere in the matter.

Judgment in dissent, Mr. Commissioner Mills.

'I regret my inability to concur in the decision arrived at in this case. It seems to me to grow out of such a strict and an inflexible interpretation of one section of the Railway Act as results in defeating or nullifying other sections of the said Act—construing section 328 so as to defeat the manifest intention of the equality sections. 315-320 inclusive, which were inserted in the Act to prevent unfair or unjust discrimination.

'The case is one admittedly of unjust discrimination, amounting to \$40.61 against George Moore & Co., of Waterloo, Ont., due to mistake in the tariff. The company admits the mistake and offers to refund the amount. Our chief traffic officer advises that the refund be made, provided two things are done to remove the possibility of discrimination against any other shipper of the same commodity; and the decision of the Commission is that the refund must not be made—that the rate in the published tariff, right or wrong, even though it has admittedly resulted in discrimination. must be charged, no matter who suffers loss, until a new tariff is printed and published. This may be according to the letter of the law; but it is, I think, at variance with the principles of justice; so I have to dissent.'

Held further (Chief Commissioner and Deputy Chief Commissioner), following previous rulings (see complaint Dominion Concrete Company, Ltd., and the E. B. Eddy Company's complaint):

'That the Board is not a court for all purposes, but only for the purpose set out in the Act. Discrimination is forbidden by the Act. The Board, under its general jurisdiction, has power to prohibit the continuance of discrimination when found to exist, and it has the power to disallow tariffs which, in that or other respects, are contrary to the provisions of the statute; but I cannot find anything in the Act which confers upon the Board jurisdiction to direct or authorize rebates on the ground set up in this application.'

Naylor and the Windsor, Essex and Lake Shore Rapid Railway Co.

This was the complaint by C. E. Naylor, of the town of Essex, alleging that the Windsor, Essex and Lake Shore Rapid Railway Company had constructed its line of railway and high tension wire along Talbot street, in the said town of Essex. in such a way that electrical current had escaped from the said wire to the wires of the complainant and thence to private premises, where it had caused damage; and applied for an order directing that steps be taken to remove the danger.

The Windsor, Essex and Lake Shore Rapid Railway Company was incorporated by Act of the legislature of the province of Ontario, passed in the year 1901, c. 92. By that Act the company was authorized to construct a railway, to be operated by electricity, from a point in or near the city of Windsor, through the towns of Essex and Leamington, to a point in or near Wheatley. The Act provided that the railway, or any part thereof, might be carried along and upon such public highways as might be authorized by the by-laws of the respective corporations having jurisdiction over the same.

By Act of the Parliament of Canada, 1906, c. 184, the railway works of the company were declared to be for the general advantage of Canada, and provided that the Railway Act, 1903, and amendments thereto should thereafter apply to the company and the said works to the exclusion of the Electric Railway Act of Ontario or any provision of the Company's Act of incorporation inconsistent therewith; but that nothing therein should affect any action theretofore taken pursuant to powers in such Acts contained.

The Dominion Act also provided that the company should not construct or operate its line of railway along any highway or other public place without first obtaining the consent (unless such consent had already been obtained), expressed by

by-law of the municipality having jurisdiction over such highway or other public place, and upon terms to be agreed on with such municipalities.

On the 7th of April, 1902, the municipal council of the town of Essex passed a by-law granting to the company, subject to the terms and conditions contained in the by-law, the right to construct its line through the town and along the highway known as Talbot street. The by-law provided that the poles and wires of the railway company should be placed so as not to interfere with the poles or wires of any other person or company then existing. The by-laws also provided that the franchises thereby granted should be subject to all other franchises, rights or privileges in respect of Talbot street, within the town, theretofore enjoyed by any person or persons, company or companies.

On the 19th February, 1900, an agreement in writing was made between the town of Essex and the complainant, under which the complainant agreed to furnish certain lamps for street lighting in the town, and to keep the same burning each night. At the time of the passing of the by-law, the complainant had upon and along Talbot street, a number of poles and wires used for the purpose of furnishing power for the lighting of the streets and the lighting of private premises. The railway company constructed a line of railway along Talbot street and put upon the street poles and wires for the purpose of conveying electrical power for the operation of the railway. In doing this, it interfered to some extent with the complainant's poles and wires, and so that there was risk of the escape of the current from their wires to those of complainant. The evidence showed that electrical current had escaped from the company's power wire to complainant's wires and thence to private premises, where it had caused damage.

Hearing at Chatham, October 29 and November 1, 1907. Judgment, Chief Commissioner Killam, December 24, 1907

of the Act declaring the company's railway works to be for the general advantage of Canada, it appears to me that no order of the Board was necessary to authorize their subsequent maintenance and use. If none of these things were done before the passing of the Act, I think that the railway company required the leave of the Board, under sections 235 and 237 of the Railway Act, for the purpose. If part only of the work was done before the Act and a part afterward, difficult questions might arise as to the necessity for such leave, under which the actual facts might be material; and

I, therefore, refrain from expressing any opinion upon such questions.

For the present I assume that the work, or sufficient of it, was done before the passing of the Dominion Act to render the maintenance and operation of the railway upon and along the street lawful. If the company were coming for leave to construct and operate the railway upon the street, the Board would clearly, in my opinion, have the power to impose upon the company such conditions as it might see fit for the purpose of protecting existing telegraph, telephone or electric lighting lines, and for the purpose of protecting the public from the danger necessarily arising from the escape from the railway company's wires of heavy electrical currents to and over any other lines; and it appears to me equally clear that, if the railway and its power lines were lawfully upon the street when the Dominion Act was passed, the Board still has the power, under section 238 of the Railway Act, to impose similar conditions upon the railway company or to make orders requiring the railway company alone, or other parties interested or affected or the company and any such other party or parties jointly, to execute such works or take such measures as, under the circumstances, appear to the Board best adapted to remove or diminish the danger.

Both by the terms of the Railway Act and by those of the Act declaring its works to be for the general advantage of Canada, the company became a railway company subject to the terms of the provisions of the Railway Act so far as applicable. The poles and wires erected by the company formed a necessary and integral part of the

railway works. In exercising the jurisdiction conferred upon it by section 238, the Board must take into consideration the nature of the works and of the protective measures which works that nature render necessary, just as in the case of a railway

operated by the power of steam.

The case is, therefore, one for the exercise of the Board's discretion as to the measures to be taken and the party or parties who are to do the work or bear the expense. The Board's electrical engineer has visited the locality and reported upon the measures which he deems necessary for the protection of the public and of the owners of other lines. The by-law of the town authorizing the construction of the railway upon and along the street required that the railway company's poles and wires should be so placed as not to interfere with any poles or wires of any other person or company existing at the time of the passing of the by-law. Whether a formal by-law of the town council was necessary to enable Naylor lawfully to place and maintain his lines upon the public street, we must presume that they were there with the knowledge and the tacit consent of the municipal authorities.

Under these circumstances, it appears to me that the railway company should adopt the measures and bear the expense necessary to the protection of the existing

lines and of the public.

At the hearing Naylor's counsel expressed his client's willingness, if the railway company would construct the necessary lines for the purpose of enabling him to transmit power across the street where this was necessary for connections on the other side, and would allow the use of its poles on the opposite side of the street, to do the work and bear the expense of running his wires along these poles.

This appears to me to be a reasonable solution of the difficulty, and an order should, in my opinion, go accordingly; the order to be drawn under the advice of the electrical engineer and to direct the railway company to provide and place, in accordance with the recommendations of the electrical engineer, the wires necessary for this purpose, and to allow Naylor the use of its poles for carrying his wires—the same to be placed to the satisfaction of the Board's electrical engineer.

The railway company should pay Naylor the costs incurred by him in respect of the proceedings before the Board in this matter, and the order should so provide.

It does not appear to be necessary to enter into consideration of the objections to the by-law or to Naylor's authority for the use of the street, or to any of the other questions of law raised by counsel. I would put the case wholly as one for the exercise of the Board's discretion under the express terms of the Railway Act, and impose the expense upon the railway company in view of the terms of the by-law which was necessary to enable it to use the street.'

Order, dated January 15, 1908, issued accordingly.

# Interswitching.

Several applications and complaints from different places were made to the Board respecting what are known as switching charges, and related—

(a) To the amount of the charges;

(b) To the practice of adding to the tariff rates of the company carrying to a particular place the switching charge of another company to which the traffic is transferred for carriage to and delivery at another point in or near the same place; and

(c) To the practice of railway companies, in cases where the traffic originates at a place common to the two companies, or what are usually designated as competitive points, while adding the charge when the point of origin is non-competitive.

Hearings at Winnipeg, Lindsay and Toronto.

Judgment, Chief Commissioner Killam, concurred in by the Deputy Chief Commissioner Bernier and Mr. Commissioner Mills, December 26, 1907.

'..... In some late cases before the Interstate Commerce Commission in the United States, Nos. 1073, 1074, Laing-Harris Coal and Grain Company v. Atchison, Topeka and Santa Fe Railway Company, 12 I.C.C. Rep. 556, the complainants claimed that the tariff rates of the railway company, which read to Kansas City, included delivery at any points within the corporate limits of Kansas City without regard to whether this was or was not upon the lines of that company. The Commission said in its report: "This claim and argument are entirely at variance with customs of many years' standing and contemplate imposing upon the carrier a duty which it would be utterly unable to perform. The Act to regulate commerce in specific terms provides that one carrier shall not be obliged to give the use of its tracks and terminals to another carrier engaged in like business. The defendant company could not deliver cars to any industry except upon its own rails without the consent and co-operation of the carrier or carriers upon whose rails the industry sought to be reached is located or via whose rails it is reached. A carrier may not reasonably be required to accept and deliver free of charge traffic which is moved by its competitor." And again: "In the absence of tariff specifications to the contrary, the transportation shown in a carrier's tariff to a given point are and always have been understood to include delivery to industries or unloading places located upon its own rails, and if consignee or owner of shipment orders it transported by another carrier to another place, he must expect to pay the lawful charge for that service."

'In those cases the shipments were originally billed simply to Kansas City, and after arrival, direction was given to transfer to destinations not on the line of the originating company. But, the same principles were applied in another set of cases, No. 1078, Leonard v. Chicago, Milwaukee and St. Paul Railway Company and other cases, 12 I.C.C. Rep. 573, where it appeared that at one time the originating company absorbed the switching charge, later discontinued the practice, and subsequently resumed it; and the complainants claimed that the adoption of the practice and subsequent resumption after discontinuance showed the unreasonableness of requiring shippers to pay the switching charge; but the Commission refused to disallow the charge. There the Commission said: "The practice at that time of absorbing switching charges without a specific tariff provision therefor was very general among the carriers." If offence against the law was involved in such practice it would rest in the absorption rather than in requiring shippers to pay, because the switching charge being the charge of another carrier, should appear in its tariff. No switching or other terminal charges should be absorbed except under a plain and specific tariff provision therefor.'

'There is not in our legislation any express provision similar to that in the United States Commerce Act, that one carrier shall not be obliged to give the use of its tracks and terminals to another carrier engaged in like business. But, in the absence of any such enactment, this must necessarily be the law. Express legislative authority is necessary to enable one railway company to use the lands or premises of another company without its consent. Such authority is embodied in section 176 of the Railway Act, provided the approval of this Board is first obtained; and the Board is empowered to fix the compensation to be paid therefor. In the London case, the Board held that the transfer by one railway company to another at a junction point of traffic to be delivered on the second company's line near the junction point did not constitute a use by the first company of the second company's tracks or terminals; but that the second company was to be compensated by a fair rate for the receipt, carriage and delivery of the particular traffic so transferred, including the use of its premises for the purpose. The rule was laid down that the 'division between railway companies of the joint rates for traffic thus interchanged should be made upon the principle of giving reasonable compensation for the service and facilities furnished by the respective companies in respect of the particular traffic thus

interchanged. The order of the Board required the interchange of traffic between the lines of the Canadian Pacific Railway Company and the Grand Trunk Railway Company at the junction point near London to and from the tracks and terminals of the Grand Trunk Railway Company in and near London, and provided that the rates to be charged for such traffic should be those provided for by any joint tariffs in existence between the railway companies interested, and, in the event of there being none, the rates charged by the Grand Trunk Railway Co. between the same points, and, in the absence of either, the rates charged by the Canadian Pacific Railway Company between the same points, and fixed the amounts to be charged by the Grand Trunk Railway Company. In that case the Canadian Pacific Railway Company consented, and offered to absorb the Grand Trunk Railway Company's charges. The order was affirmed on appeal to the Supreme Court of Canada.

I think the principles laid down by the Interstate Commerce Commission are correct—that a railway company's tar'ff to and from particular places should, in the absence of indication to the contrary, be read as covering only traffic originating at and for delivery upon its own tracks and connecting sidings within its own terminals, and not as including traffic originating or for delivery at or near the same places upon the lines of another carrier; that a reasonable additional rate should be payable for what is ordinarily designated switching, namely, the service for short carriage and receipt or delivery as the case may be; and that the company carrying for the long distance should not be obliged to absorb the whole of this charge. I think, however, that the Board may require the two companies to treat such traffic as joint traffic and to establish therefor joint tariffs under which the joint rate may be less than the sum of the two rates, and each or one of the companies required to accept less than its full rates. In such cases the principal carrier does not usually perform the full service which it performs in ordinary cases of receipt, carriage and delivery upon and over its own lines only. There may be cases in which as much services is performed, but usually the service is less.

The Board's chief traffic officer has made a report upon this subject which contains valuable suggestions and recommendations both as to fixing the bases of switching charges and as to divisions of the joint rates between the carriers, and also as to some other matters.

In the case recently heard by the Board at Toronto it appeared that it had long been the practice of the two companies operating there (the Grand Trunk Railway Company and the Canadian Pacific Railway Company) to absorb these charges in respect of traffic upon their respective lines to and from Toronto, received or delivered on the lines of the other, and that, without any change of tariffs, they had recently abandoned this practice and adopted the principle of adding the switching charges to the regular tariff rates. The origin of the practice was explained. It appeared that, when the Canadian Pacific Railway was constructed into Toronto, it had to receive and deliver its traffic wholly or mainly upon the tracks of the Grand Trunk Railway Company and was practically compelled to bear the charges therefor, that, as the Canadian Pacific Railway Company established and enlarged its terminals and acquired siding to industries and places of business, the Grand Trunk Railway Company followed the same practice in reference to traffic received and delivered on the tracks of the Canadian Pacific Railway Company. It does not appear to me that the railway companies are bound to make an exception in the case of Toronto or that, because of their having thus mutually absorbed these charges for a considerable length of time, they must necessarily continue to do so forever. The whole question is one of reasonableness; and while the continuance of the practice affords evidence of its reasonableness, it is not conclusive. I do not feel that we can properly require the companies to continue it. I think, too, that each company, without changing its tariffs, could add the charge of the connecting carrier. The switching tariffs should

certainly be filed with the Board, but, in the absence of filing, the rates set out in the standard tariffs would prevail; and it is not claimed that charges were made at higher rates. All claims made for refunds should, therefore, in my opinion, be disallowed. The exact amounts which should be paid and the exact divisions for the aggregates of the two sets of charges which are to be allowed hereafter, were not considered and discussed at Toronto. Our attention was confined to the main questions of principle. Naturally the scales suggested by the chief traffic officer cannot well be applied generally without consideration of local circumstances.

While, in my opinion, the railway companies by which the principal carriage is performed should not be obliged to bear the whole of these switching charges, it does not follow that they should be debarred from absorbing the whole of such charges provided that this does not involve unjust discrimination or preference. The Railway Act recognizes that what might otherwise constitute unjust discrimination or preference may be justified as the effect of competition. If a railway company receiving or delivering traffic upon its own lines is obliged to charge its full tariff rates without absorbing the switching charges of the line from which it receives or through which it delivers the traffic, it will often be deprived of the opportunity to get traffic from or to places common to it and other railway companies, and such places would often lose some of the competitive conditions. While this may result in some disadvantage to non-competitive points, the existence or possibility of such disadvantage cannot, I think, be considered as constituting the railway companies to absorb the whole of such charges in all cases, or prohibit them from absorbing them where this is induced by real competition.'

Brantford and Hamilton Power Wire Crossing over the Railway of the Grand Trunk Railway Company of Canada at Cainsville, in the Province of Ontario.

This was an application by the Brantford and Hamilton Electric Railway Company, under section 246 of the Railway Act, for leave to carry a wire for the transmission of electric power of high voltage across the Grand Trunk Railway Company's tracks at Cainsville. The applicant company had previously obtained leave to carry its railway under the track of the Grand Trunk at this point. The Grand Trunk Railway Company asked that the wire also be carried under its railway. The electrical engineer of the Board reported that this would not be safe, and that the crossing should be over the railway, and the telegraph and other wires along the railway.

The Board proposed to make a short temporary order, giving the right of crossing, specifying certain precautions, and leaving it subject to further order. A draft of such an order was submitted to the railway companies. It was approved by the applicant company, but objected to by the Grand Trunk Railway Company, which submitted a form of order embodying a number of conditions to which the applicant company objected. Among others, there was a provision for indemnifying the Grand Trunk Railway Company against damage.

Judgment, Chief Commissioner Killam. February 17, 1908:-

'The question of requiring the condition of indemnity was very carefully considered by the Board in some applications of the Kaministiquia Power Co.. and it was there decided by the Board that, when the power wire is sought to be carried over the railway company's own property without other compensation to the railway company, it is reasonable to make the power company responsible for any injury resulting therefrom, except such as may be due to default or neglect on the part of the railway company's servants or agents; but that, where the wires are, under proper authority, being carried along a highway over which the railway company has merely a right of crossing, such responsibility should not be imposed upon the power company, which, in such case, should be left to its common law liability.

The order in that case was settled after contest between the power company and the railway company, and the form seems to be a reasonable one for ordinary use, and should, I think, be adapted to the present case.'

Order issued accordingly, March 24, 1908.

## Re Private Siding.

The facts, as related to the Board, were that 'S,' a private individual, had a siding partially on his own land and partially on the land of an adjoining neighbour 'C,' connecting with the Canadian Northern Railway Company's line of railway. As the siding was not, at the time of the application to the Board, and had not been for some time previous, used by 'S,' 'C' applied to the company for permission to load a few cars of wood, thereby saving quite a haul and the necessity of crossing the company's track. The railway company refused its consent, and the Board was asked to direct the company to grant the same.

The Board caused inquiry to be made, and found that the siding referred to was a private one, put in under an agreement between the railway company and 'S'; that there was no record of any order either of the Board or of the Railway Committee of the Privy Council, authorizing the construction of the siding as a branch of the rail-

way company.

Held, that the Board had no power to compel the railway company to use the spur for 'C's' accommodation; that if the siding had been placed upon 'C's' land without his authority it would be a matter in respect of which the Board had no jurisdiction, but rather a matter of civil right which must be dealt with in the ordinary courts, in case 'C' desired to assert a claim to the land as against the railway company or against 'S.'

January 30, 1908.

# Re Highway Signboards.

Under the Railway Act, signboards at every railway crossed at rail level by any railway are required to be erected and maintained at each crossing, with the words 'railway crossing' painted on each side thereof in letters at least six inches in length.

The Board was asked if any arrangements had been made by it with respect to the placing of these signboards; whether or not a signboard could be placed in the middle of the highway leading to the crossing, or on the side of the road; and whether they could be so placed that there would be a danger to vehicles running into them.

Held, that in the absence of complaints that highway signboards are so placed us to obstruct highway traffic, it was not necessary for the Board to adopt any regulations in respect thereto; that, in the opinion of the Board, a railway company is not justified in placing highway signboards in such positions as to obstruct highway traffic; and that the Board would be glad to be informed of any cases in which such signboards are so placed.

April, 1907.

# Re Complaint of Monypenny Brothers & Co.

Complainants alleged that they had occasion from time to time to make a claim against the Grand Trunk Railway Company for shortages in shipments made to them occurring through pilferage while in transit. The shipments referred to were consigned to complainants at Toronto by the manufacturers in the old country, and were shipped via the English railroads, the steamship line and the Grand Trunk Railway. The contention was that the Grand Trunk Railway Company was responsible to them, but that the company refused to admit liability, alleging that the goods were delivered as received from the steamship company.

Held, that the Board has no jurisdiction to compel railway companies to pay claims for lost or damaged goods; that the remedy given by the statute is by action in a court of competent jurisdiction; and that the Board did not consider that it could properly advise upon the question of the railway company's liability.

January, 1908.

Re Application of the Town of Almonte for Protection of Crossings by Canadian Pacific Railway over certain Streets in the said Town.

This was an application by the corporation of the town of Almonte for an order directing the Canadian Pacific Railway Company to provide suitable and proper protection at the railway crossings in the said town.

After hearing, the judgment of the Board—Chief Commissioner Killam and Deputy Chief Commissioner Bernier, Mr. Commissioner Mills dissenting-was that the railway company be required to place and maintain an electric bell at the Main street crossing and to construct a subway to carry Little Bridge street under the tracks of the railway company, according to plans to be submitted to and approved by the Board's engineer; and to erect and maintain gates at the Bridge street crossing, and keep a watchman or watchmen there at all hours by day and by night, the town to pay one-half the wages of such watchman or watchmen. The order also to provide that by consent of the council of the town, the gates might be closed at such hours of the night as the council prescribed. The order further to provide that if the town should consent by resolution within three months from the date of the order, the subway was to be placed at such point between Bridge and Little Bridge streets as the Board determined, and both the said streets diverted into and through the subway, and the level crossings at both streets closed. In every case the railway company to bear all compensation, except in respect of injury to the property of the town, which was to be borne by the town.

Judgment in dissent, Mr. Commissioner Mills.

At the rehearing of this application on March 26, 1907, it was stated by the mayor that the population of the town of Almonte is 1,200 less than it was about twenty years ago; and, assuming this statement to be correct, I cannot avoid the conclusion that the town has not contributed in any degree to the increase in danger at the railway crossings referred to in the application. This increase in the danger which has made protection at the said crossings now necessary, has, in my opinion, been caused to some extent by the raising of the railway tracks at Bridge street and Little Bridge street, but is chiefly, I might say almost wholly, due to the increase in through traffic on the railway, especially to through trains which run at a high rate of speed and pass Almonte without stopping. Therefore, I am unable to see the equity of requiring the town to pay anything towards the protection of crossings over streets which were in existence when the railway was constructed, and which have been made dangerous, not by increased population or increased traffic in the town, but by through traffic on the railway.

Hence, in view of the admitted facts, and the allegations of the mayor as to the decrease in the population of the town and the consequent decrease in vehicular and pedestrian traffic over the crossings referred to in the application, and his declaration as to the smallness of the total assessment of the town and the very high fixed rate of taxation, my judgment is that an order should go directing the railway company, at its own expense, to put in and maintain an electric bell at Main street, as per the report of Engineer Simmons; construct a subway on Little Bridge street, as per the report of Chief Engineer Mountain; and remove the building and shed which obstruct the view at Bridge street—the town agreeing to pay to the said company one-quarter of the actual cost of the subway on Little Bridge street.

April, 1907.

The Canadian Pacific Railway Company v. The Grand Trunk Railway Company (known as the London Interswitching Case, Reported in the First Annual Report of the Board, at p. 86.)

The Board granted leave to the Grand Trunk Railway Company to appeal from its order to the Supreme Court of Canada, and the following questions were submitted, with the approval of the Board:

- 1. Had the Board authority, under the Railway Act, 1903, and particularly under sections 53, 71 and 214, to make the order in question under the circumstances shown in the record in this case?
- 2. Are sections 266 and 267 of the Railway Act, 1903, applicable under the circumstances of this case where one and the same through rate is charged to and from all points within the district lying in and about the city of London to which the said order applies?
- 3. Does the order appealed from involve the obtaining by the Canadian Pacific Railway Company of the use of the tracks, station or station grounds of the Grand Trunk Railway Company at London, for which the Grand Trunk Railway Company should obtain compensation under the Railway Act, 1903, and particularly under section 137?
- 4. Was the Board 'bound, as a matter of law,' to take into consideration, in estimating the remuneration or compensation to be allowed to the Grand Trunk Railway Company in consequence of or for what was required of that company by the said order:—
- (a) The magnitude of the business of the Grand Trunk Railway Company at London as compared with that of the Canadian Pacific Railway Company at that point.
- (b) The comparative advantage which each of the said two companies can offer to the other there.
- (c) A comparison of the loss which one company is likely to sustain with the gain likely to accrue to the other company from the giving of these facilities which the law required.
- (d) The amount which may have been expended by the Grand Trunk Railway Company in the acquisition of their terminal facilities at London or the value of their investments therein, otherwise than as evidence of the fair value of the service to be rendered and of the use of the facilities to be afforded under the said order.
- (e) The amount of any further investment of capital which the Grand Trunk Railway Company may be obliged to make in order to carry out the terms of the said order, otherwise than as excepted by the last preceding paragraph.

The order was affirmed.

The judgment of the court delivered by Davies, J.: Since this appeal was taken from the decision of the Railway Commissioners, parliament has enacted an amendment to the Railway Act, placing beyond doubt the power of the Commissioners to make such an order as the one now appealed from.

Our decision, therefore, as to what was the true meaning of the original Act is of no public importance, and we do not see any good purpose in stating reasons for the conclusion we have reached that the appeal must fail.

We should answer the first and second questions in the affirmative and all others in the negative.

Ruling re Application for Opinion in Matter not Pending before Board.

An ice company owned a switch from the line of railway of a railway company to their icehouse, which they kept entirely in repair and owned themselves.

The railway company delivered cars to their icehouse over this switch. The Board was asked on behalf of the owners of the industry who would be responsible for

accidents that might occur in the operation of the switch, and whether the railway company would have the privilege of operating the switch against the wishes of the ice company.

Held, Chief Commissioner Killam, that, while the Board is always willing to give information as to the contents of statutes to which parties may not have the means of convenient access, it considered that it should not undertake to give legal opinions as the parties' right under circumstances stated to it, except where it became necessary to do so in dealing with applications and complaints that came before it in due course for adjudication; that, in the case submitted, the rights and obligations of the parties might be affected by the circumstances not known to the Board, and the Board felt, therefore, that it could not properly undertake to advise in the matter.

# Re Brantford and Hamilton Railway re Carriage of Troops on the Brantford and Hamilton Railway.

The Board was advised by residents in Hamilton that it was proposed to transport regiments of troops from Hamilton to Ancaster, stating that an inspection of the Brantford and Hamilton Railway would be necessary before that time, and asked the Board to cause an inspection to be made.

And chief engineer of the Board inspected this company's railway from Hamilton to Ancaster, a distance of six and one-half miles, and recommended that the request of the citizens to haul troops over it for the date asked be granted upon certain conditions.

Held, Chief Commissioner Killam, that there was no authority for the making of an order such as that recommended by the chief engineer. By section 261 of the Railway Act, no railway, or any portion thereof, is to be opened for the carriage of traffic other than for the purposes of the construction of the railway until leave therefor has been obtained from the Board, as thereinafter provided. Two systems of opening are provided for: (1) for freight traffic only; (2) for traffic generally, after a certain application and affidavit has been furnished and an engineer has reported that, in his opinion, the opening of the railway, or portion thereof, proposed to be open for the carriage of traffic, will be reasonably free from danger to the public using the same. The necessary application and affidavit have not been furnished and the engineer has not reported as required by the Act. Upon these grounds, the Board refused to authorize the limited use of the railway as asked for.

# Ocean Bills of Lading.

A railway company submitted to the Board. for temporary approval, forms of bills of lading covering traffic between ports in Europe and Canada. Some of these were intended for ocean traffic only, others appeared to relate to traffic partly by ocean and partly by rail in or through Canada, and while the terms of the bills of lading appearing to be intended to cover the railway service as well as the ocean transportation, they were evidently drawn with special reference to the ocean transportation, and the effect of their application to the railway service was not clear.

Held, Chief Commissioner Killam, that in respect of the bills of lading intended for ocean traffic only, the Board had no jurisdiction; that, in regard to the others, which appeared to be drawn for traffic to be carried partly by ocean and partly by rail, while the terms of the bills of lading appeared to be intended to cover both the railway service and the ocean transportation, they were evidently drawn with reference mainly to the ocean carriage; and the application, in many parts, to the railway service difficult, and their probable effect far from clear; and that in other respects the terms of the bills appeared to the Board not to be reasonable or such as the Board should approve for transportation upon railways; that, by the terms of the

bills, it appeared to be intended that the carrier should be relieved from liability for many intentional wrongful acts and many acts of negligence of employees; that the provision requiring consignees to take delivery of goods within twenty-four hours after arrival, although they may have had no opportunity to learn of the arrival, did not appear to the Board to be reasonable, and that the provision giving a lien on goods not only for the freight and charges thereon, but also for all previously unsatisfied freight and charges due by consignees, appeared to be unreasonable and also to go beyond what is authorized by section 345 of the Railway Act; and that in these and other respects the forms of the bills appeared to the Board to be so objectionable that they should not be approved.

Re Application of the Vancouver, Westminster and Yukon Railway Company, under sections 221 and 224 of the Railway Act, for authority to construct Branches or Spurs in the City of Vancouver.

In this case the Board decided the principle that it could not authorize the construction of a branch line from a point on a line of railway not yet existing.

The question also arose, where the proposed branch line or spur involved the crossing of a navigable water, whether the Board could authorize such construction before the approval by the Governor in Council of the site and plans of the work as required under section 233 of the Railway Act. This section provides that when the company is desirous of constructing any work over a navigable water, a plan and description of the proposed site for such work and a general plan of the work to be constructed must have the approval of the Governor in Council; and upon such approval, application made to the Board for an order authorizing the construction of the work.

Held, here, that while there was no doubt that False creek and the arm in question, as navigable waters, required the approval by the Governor in Council of the site and plans of the work before it could be constructed, such approval was not a necessary condition precedent to the granting of the application by the Board.

Chief Commissioner Killam: 'The converse is, to my mind, the case; the authority to build a branch is a condition precedent to the application for approval of the site and plans of so much as crosses navigable water. In my opinion, the granting of authority by the Board to build a branch does not, of itself, relieve a railway company from liability to comply with the other provisions of the Railway Act, it does not, of itself, authorize the grading of the line across a highway or another railway without specific leave therefor from the Board, though it is convenient in many cases to determine upon the one application, or at the same time, whether the last mentioned leave should be given, as in many cases circumstances affecting applications for such leave might well have to be considered in determining whether the branch should be allowed, and the parties interested in the railway or highway crossings might well be heard upon the original application. In many cases, it may well appear that the objection to such modes of crossing highways or railways as are found practicable, are such that no authority should be given for the construction of the branch, and, in the present case, the Board is entitled to take into consideration the extent to which any of these lines would probably obstruct navigation, before determining the application.'

April 10, 1907.

## Re Montreal Produce Merchants' Association's Complaint.

This was a complaint against the advance in the winter export rate on butter and cheese from Montreal to Portland and West St. John, as proposed by the Grand Trunk and the Canadian Pacific Railway Companies, alleging that for two or three

winters prior to the lodging of the complaint the rate on these commodities had been 16 cents per 100 lbs., and that it was now proposed to increase this rate to 20 cents per 100 lbs., or an advance of 25 per cent. The complainants asked for an order restoring the original rates.

At the hearing it was alleged on behalf of the complainants that the fact that the lower rate had been maintained for a number of years was evidence that such rate was a reasonable and profitable one, and that, therefore, the new rate was unreasonably high.

Judgment, Chief Commissioner Killam, concurred in by Deputy Chief Commissioner Bernier.

The only ground upon which, under section 323 of the Railway Act, the Board is authorized to disallow a tariff, or a portion thereof, is that it considers it to be unjust or unreasonable, or that it is contrary to some of the provisions of the statute.

In this case, the statutory notice of increase was given, and the tariff does not appear to be in any way contrary to any of the provisions of the Railway Act. The Board has no power to compel railway companies to give longer notice than that provided for by the statute.

While the previous existence of a particular rate affords evidence of its reasonableness, it is not conclusive evidence, but more or less cogent according to circumstances. In the present case, having reference to the nature of the service, the lowness of the rate per mile, and the opinion of the chief traffic officer of the Board, 'that, for the season of the year and the services performed, the rate is a reasonable one,' I do not think that the Board can properly find that the rate complained of is unjust or unreasonable. The board has no power to compel a railway company to reduce a rate which it does not consider unjust or unreasonable, merely for the purpose of encouraging traffic or of preserving the vested interests of dealers in a commodity, or others interested in its transportation.

Judgment in dissent, Mr. Commissioner Mills.

First, as to the notice given by the Grand Trunk Railway Company and Canadian Pacific Railway Company, of their intention to raise their rates 25 per cent—from 16 cents to 20 cents per 100 lbs.—on winter shipments of butter and cheese from Montreal to Portland, Me., and West St. John, N.B. Notice was given on the 1st November and the increase was made on the 1st December—30 days afterwards.

Notice of 30 days, under ordinary circumstances, would be quite sufficient. In some cases it might perhaps be more than could reasonably be demanded; but in this case, while sufficient in itself, it was not given at the right time; it was long enough, but not soon enough. It was withheld, or not given, till the greater part of the season's make of cheese had been shipped and the Montreal exporters had bought and stored most of what they required for winter shipment. Therefore, I think the complaint of the Montreal Produce Merchants' Association is well founded and should be favourably considered by the railway companies.

Second, as to the cartage in Montreal. I certainly think that the exporter or other shipper should be allowed to do his own carting, if he so desires. If the rates charged by the railway cartage companies are as low as those charged by other carters, shippers will undoubtedly patronize them in preference to private carters. If they are higher, why should not shippers be allowed to employ private carters or use their own teams to do the work? I have heard no satisfactory answer to this question, and I cannot think of any.

Third, as to the increase from 16 cents to 20 cents per 100 lbs. in the rate on winter shipments of butter and cheese from Montreal to Portland, Me., and West St. John, N.B.

The chief traffic officer (in his report, page 3) says that 'eliminating the rates of previous seasons and the revenue already earned on the bulk of the traffic......

the rate (that is, the present 20-cent rate) is a reasonable one,' but this elimination assumes a condition of things which has not existed and does not now exist, and helps us only to a theoretical conclusion as to what, under non-existent conditions, would be a reasonable rate for the service rendered. On the same page, however, he proceeds to discuss the rate under the conditions which have existed and now exist. He says that if a lower rate had been maintained for a number of years, under practically the same conditions, 'the inference cannot be avoided that the lower rate must have been profitable, and, therefore, that the new rate is unreasonably high.' He shows that with two slight exceptions, the rate was 16.07 cents from 1904 till the time of the increase on 1st December, 1906, and that prior to December, 1904, the rate varied from 14.47 cents to 18.22 cents, averaging 15.19. He calls attention to the fact that the rate of 15 cents per 100 lbs. on packing-house products between the same points is 25 per cent below the standard tariff, and that the 20-cent rate on butter and cheese is only 13 per cent under the said tariff, and concludes that, in view of all the facts and circumstances, the 20-cent rate is unreasonably high.

Therefore, I have not reached the same conclusions as my fellow Commissioners in this case. I approve of the recommendations of the chief traffic officer, 'that the companies be directed to reduce their rate from 20 cents to 18 cents per 100 lbs. on carload lots, and to give exporters the option of making their own arrangements for the cartage of their butter and cheese under the through rate and stop-over system;' and my judgment is to that effect.

April, 1907.

## Re Wire Crossings. Conditions as to Indemnity.

Chief Commissioner Killam:

The question of requiring parties applying for leave to carry wires across railway tracks, to indemnify against injuries arising therefrom, is one that must be determined in each case according to the circumstances; but some general rules are applicable. It is a principle of law that a person storing or placing on his own land something which, in its nature, will be injurious to others if allowed to escape, is responsible to others for injuries caused through its being allowed to escape. This principle, however, is qualified by another, which is that, where a party is authorized by a statute to do anything, as the doing of it is, in such a case, lawful, he is not responsible for the injuries resulting therefrom to others. Unless, however, the statute specifically authorizes it, he is not empowered to enter upon or take the property of others without the consent of the owner. Where the statute gives this latter power, it usually provides for compensation to the owner of the property, and the courts consider that, unless the Act is clear, the presumption should be that the legislature does not intend to give the power without a right to compensation.

Companies authorized to construct railways and to operate them by steam, electricity or other power which involves danger to others, may lawfully do so without liability from any injury through the use of the necessary agencies for the purpose, unless the real cause of such injury is in the misfeasance or negligence of the company, its officers or employees. The same principle applies to companies authorized by the legislature to raise wire structures and transmit electricity thereby.

Railway companies are almost uniformly given the power to take private property without the consent of the owner: but provision is made for compensating such owner. Such provisions may differ in different statutes. Usually, such companies are not required to compensate parties, none of whose property is taken, for the discomfort, inconvenience or positive injury done them or their property by the operation of the railway. Where the company takes a portion only of one man's property, it is obliged to compensate him, not merely by paying the actual value of the piece taken, but also by paying for the injury done by separating it from the other portions of the pro-

perty; and usually, under most statutes, the courts consider that the use to which the company is to put the property taken and the injury which will thereby be occasioned to the previous owner in respect of the property retained by him, should be taken into account. But where a company is given the power to construct and operate a railway, an electrical transmission line or other work, and is now given power by the legislature to carry it across lands of another party without his consent, it must take that consent with such conditions as the owner sees fit to annex.

By section 246 of the Railway Act, 'No lines or wires for telegraphs, telephones or the conveyance of light, heat, power or electricity shall be erected, placed or maintained across the railway without leave of the Board.'

This merely imposes a condition which must be fulfilled in order to make it lawful to place electrical transmission wires over railway tracks. If that condition were not imposed, such wires could be placed over railway tracks only by consent of the railway company or by authority of the proper legislature. It may be that, in the absence of this stipulation, the authority of a provincial legislature would be sufficient. This clause does not, it appears to me, authorize this Board to empower a company authorized by the legislature to construct and operate electrical transmission lines to carry such lines over the property of a railway company without the consent of that company, unless statutory power is given by the proper legislature to do this. A railway company stands in this respect in no different position from any other property owner, and railway companies, like property holders, own the land usque ad coelum. There is no height above the surface of the earth at which the property holder is not entitled to the protection of the law against the invasion of his right. In the case of the Kaministiquia Power Company, we held that, where the line was being carried along a highway by the authority of the legislature—either direct or through a municipality—as the railway company was not given the ownership of the soil of the highway, but merely a right of constructing and operating its railway over the highway, leave should be given to carry the wires over the railway with the imposition of such conditions only as seemed requisite for the protection of person or property, thus leaving the power company liable only for breaches of the conditions imposed or for the misfeasance or negligence of the company, its officers or employees.

If the legislature gives to an electrical transmission company power to carry its wires and transmit electricity by them over a private property, it should be considered by this Board as having a right to do so upon the conditions imposed by the statute giving the authority, and should be given leave for the purpose upon such additional conditions only as we consider necessary for the protection of person and property leaving it liable for injury only as in the case of highway crossings. But if no such statutory authority is given it, we cannot give that authority, and the electrical company must submit to any conditions which the railway company ask, our function in such case being only to see that such precautions are taken as to remove as far as possible the risk to the public or others than the railway company; and if among the conditions sought to be imposed by the railway company is one of indemnifying the company, its employees and those using the railway against injuries from the works or their operation, whether due to negligence on the part of the electrical company, its officers or employees or not, that condition should, I think, be imposed by our order.

April 18, 1907.

## Re Brown Brothers Company's Complaint.

Complainants complained to the Board that certain shipments of perishable stock delivered by them to the Canadian Northern Railway Company at Warman, Alberta, consigned to L. D. Daily, Vegreville, Alberta, were so delayed in transit as to become a total loss, and asked if there was no relief that the Board could give in the matter.

Held, Chief Commissioner Killam, that the subject-matter of the complaint was not one in which the Board could afford any relief; that section 284, subsection 7, of the Railway Act provided a remedy to any person aggreaved by neglect or refusal of a railway company to carry and deliver traffic without delay, that is, by action in the ordinary courts; that the function of the Board is to order the furnishing of accommodation and the appliances and means necessary therefor, in case of the failure of the railway companies to do so; that, as the complaint in question relates only to a particular previous shipment, no order that the Board could make would be of service to complainants; and that the Board was not created to take the place of the ordinary courts, but to exercise an entirely different jurisdiction. It was the function of the ordinary tribunals to award compensation for past breaches of the statute; that of the Board to prevent as far as possible future breaches.

April. 1907.

# Re Ontario Lumber Company's Siding Agreement.

The Ontario Lumber Company, Limited, of Toronto, applied, under section 176 of the Railway Act, 1903, for an order directing the Canadian Pacific Railway Company to repay and refund to the applicant company the sum of \$830 by way of rebate out of the tolls charged by the railway company in respect of the carriage of traffic for the lumber company.

Under an agreement between the applicant company and the railway company, the railway company undertook to construct a siding and to refund to the applicant company the said sum of \$830, being the amount deposited by the applicant com-

pany as the estimated cost for the construction of the siding.

Held, that the Board had no jurisdiction to enforce the provisions of the said agreement under which the siding was built to the lumber company's premises; that at the time the agreement was made there was no provision in the Railway Act then in force corresponding to the provision in the present Railway Act, under which railway companies could be required to construct such sidings upon the condition, among others, that the deposit should be repaid by rebates from other roads; that the siding was constructed wholly under the agreement; and that the Board had jurisdiction only to enforce provisions of the Railway Act and not rights arising out of contracts.

June 27, 1907.

# Re Robertson v. Grand Trunk Railway Company.

This was an application for an order directing the Grand Trunk Railway Company of Canada to issue third-class tickets at the rate of one penny for each mile travelled, and directing the company to provide at least one train having in it third-class carriages which shall run every day throughout the length of its line. The application was based upon a clause in the original Act of incorporation of the Grand Trunk Railway Company, which provided that the fare or charge for each first-class passenger by any train on the said railway should not exceed two pence for each mile travelled; the fare or charge for each second-class passenger by any train should not exceed one penny and one-half penny currency for each mile travelled; and that the fare or charge for each third-class passenger by any train on the said railway should not exceed one penny currency for each mile travelled.

These provisions have never been expressly repealed. The contention on behalf of the company was that they had been impliedly repealed by subsequent legislation.

By its special Act, the several clauses of the Railway Clauses Consolidation Act with respect, inter alia. to tolls, were made to apply to the company and its undertaking so far as these clauses were not inconsistent with the provisions of the special Act.

The Chief Commissioner, in his judgment, traces the history of railway legislation from the Railway Clauses Consolidated Act, 1851, down to the present time, so far as such legislation relates to the question of tolls.

The Railway Act requires a railway company to furnish adequate and suitable accommodation for receiving, loading, carrying and delivering traffic, and to furnish and use all proper appliances, accommodation and means necessary therefor; to afford to all persons all reasonable and proper facilities for the receiving, forwarding and delivering of traffic. The Act empowers the Board to order the company to furnish such accommodation where it has failed to do so, and power is given the Board to order that specific works be constructed or carried out, &c.

Held, that the clause requiring the running of third-class carriages and limiting third-class fares was not affected by any legislation prior to the Act of 1903.

Judgment, in part, of Chief Commissioner Killam, concurred in by the Deputy Chief Commissioner Bernier and Mr. Commissioner Mills:

'As has been said, the provisions of the special Act have not been expressly repealed. None of the enactments in the Railway Act, 1903, or in the present Railway Act, are explicitly inconsistent with those provisions. The contention on the part of the railway company is that, in effect, those enactments, and particularly the portions relating to tolls and those giving the Board jurisdiction respecting the accommodation, &c., to be furnished by the company, are so inconsistent as impliedly to repeal the provisions of the special Act.

"If two inconsistent Acts be passed at different times, the last is to be obeyed; and if obedience cannot be observed without derogating from the first, it is the first which must give way." Per Lord Langdale, M.R., in Dean of Ely v. Bliss, 5 Beav., at p. 582. But a "repeal by implication is never to be favoured." Per Field, J., in Deaha v. Crand Lunction W. W. Co. 20 R.D. et p. 158

in Dobbs v. Grand Junction W. W. Co., 9 Q.B.D. at p. 158.

"We ought not to hold a sufficient Act repealed, not expressly as it might have been, but by implication, without some strong reason." Per Lord Bramwell in G. W R. Co. v. Swindow and Cheltenham R. Co., 9 A. C., at p. 809.

"A later Act of parliament hath never been construed to repeal a prior Act, without words of repeal, unless there be a contrariety and repugnancy between them, or at least some notice taken of the former law in the subsequent one, so as to indicate an intention in the lawmakers to repeal it." Per Lord Hardwicke, L.C., in Middleton v. Crofts, 2 Atk. 650.

'The court must be satisfied that the two enactments are inconsistent before they can from the language of the later imply a repeal of an express prior enactment.' Per Byles, J., in Conservators of the Thames v. Hall, L.R., 3 C.D., at page 419; and in the same case Keating, J., said (p. 420): 'I entirely agree with my Brother Byles, that, before we come to that conclusion, we are bound to satisfy outselves that it is a necessary implication.'

'When the repeal is not express, the burden is on those who assert that there is an implied repeal to show that the two statutes cannot stand consistently the one with the other.' Per Chitty, J., in Lybbe v. Hart, 29 ch. D. 8.

The intention to repeal must appear even more strongly where the first provision is contained in a statute of a private or special nature, in which case the maxim generalia specialibus non derogant usually prevails. 'A later statute in the affirmative shall not take away a former Act, and eo potior if the former be particular and the latter be general.' Gregory's Case, 6 Rep. 19 b.

'The law will not allow the exposition to revoke or alter, by construction of general words. any particular statute where the words may have their proper operation without it.' Lyn v. Wyn, 2 Bridg., C.P. 127.

'The general principle is that a general Act is not to be construed to repeal a previous particular Act unless there is some express reference to the previous legisla-

tion on the subject or unless there is a necessary inconsistency in the two Acts standing together.' Per Bovill, C.J., in Thorpe v. Adams, L.R. 6 C.P. at p. 135.

'Unless two Acts are so plainly repugnant to each other that effect cannot be given to both at the same time, a repeal will not be implied, and special Acts are not repealed by general Acts unless there is some express reference to the previous legislation or unless there is a necessary inconsistency to the two Acts standing together.' Per A. L. Smith, J., in Kutner v. Phillips, 1891, 2 Q.B. 267.

'It is a fundamental rule in the construction of statutes that a subsequent statute in general terms is not to repeal a previous particular statute unless there are express words to indicate that such is the intention, or unless such an intention appears by necessary implication.' Per Bovill, C. J., in Reg. v. Champneys, L.R. 6 C.P. at p. 394.

'In order to show that a particular Act is repealed by a general Act by implication, it is not enough to show that the particular Act may have become useless or futile, that is to say, that the subject-matter of the particular Act comes within the terms of the general Act; it must be shown, as it seems to me, that there are enactments in the general Act, when rightly construed, inconsistent with the maintenance of the particular Act.' Per Brett, J., in Reg. v. Champneys, supra, at p. 404.

'Now, if anything be certain it is this, that where there are general words in a later Act capable of reasonable and sensible application without extending them to subjects specially dealt with by earlier legislation, you are not to hold that earlier and special legislation indirectly repealed, altered, or derogated from merely by force of such general words, without any indication of a particular intention to do so." Per Lord Sherborne, L.C., in Seward v. Vera Cruz, 10 A.C. at p. 68.

'See also the enunciation of similar principles by Sir W. Page Wood, V.C., in

Fitzgerald v. Champneys, 2 J. & H. at pp. 53-61.

'But all of these statements admit that, if the intention of parliament to that reffect sufficiently appears, the later Act should be construed as repealing or varying the former Act, whether special or general, and several cases have been cited in which the courts have adopted such construction. In most of these the circumstances and the nature of the enactments vary so much from those with which we have now to deal that they do not appear to afford us any material assistance.

'In these cases the principles before stated are not contravened; in some they are expressly acceded to. Usually, the decisions turned upon the view taken by the court of particular language or of the scope and intention of the legislation as understood by the court. I will cite from but two of them. In Daw v. Metropolitan Board of Works, 12 C.B., N.S. 161, Willes, J., said: "The rule of construction of Acts of parliament as laid down by Vice-Chancellor Wood in the London and Brighton Railway Company v. Board of Works, 26 L.C., ch. 164, is no doubt a very wholesome one. A subsequent general enactment will not derogate from a prior special enactment. When, as the learned judge says, the legislature has had a special case in view, and has specially legislated upon it, the inference necessarily is that it does not intend by a subsequent general enactment not referring to the former, to deal with those matters which have already been specially provided for. The rule generalia specialbus non derogant is properly applicable to such a case...... In the present case, however, the rule cannot apply. The powers conferred by the two are substantially, if not strictly, the same. So soon as you find that the legislature is dealing with the same subject-matter in both Acts, so far as the later statute derogates from and is inconsistent with the earlier one, you are under the necessity of saying that the legislature did intend in the later statute to deal with the very case to which the former statute applied." And in the Great Central Gas Consumers' Company v. Clarke, 11 C.B., N.S. 814, Keating, J., said: "I agree that, when we find in an Act of parliament a prohibition against a public company exacting more than a prescribed rate, we should require a very clear enactment in a subsequent Act to remove the

restriction, but it is equally clear that, if we find in a later Act of parliament provisions which are utterly inconsistent with those of an earlier Act, we are bound to give effect to the later provisions." And in the same case, 13 C.B., N.S. \$38, Pollock C.B., said: "Although that section is not in terms repealed, yet it becomes a clause in a private Act, of parliament quite inconsistent with a clause in a subsequent public Act of parliament. That is sufficient to get rid of the clause in the private Act. Looking at the 19th section of the general Act, we think it is impossible to read it otherwise than as repealing the 24th section of the private Act. We are bound as well by the plain words of the Act as by the general scope and object of it, and also by the justice of the case."

'By section 3 of the Act of 1903, that Act was to be incorporated with and construed as one Act with the special Act, subject as in the general Act provided; and by section 5, in the event of inconsistency between the general Act and any special Act passed by the parliament of Canada relating to the same subject-matter, the provisions of the special Act were to be taken to override the provisions of the general Act in so far as should be necessary to give effect to the special Act. These provisions are combined in section 3 of the present Railway Act. This would settle the matter if the special Act had been one passed by the parliament of Canada, in which case, although earlier than the general Acts, the provisions of the special Act would prevail. But the portion of the Grand Trunk Railway to which the present application refers was constructed under a special Act of the late province of Canada. I have some doubt whether section 6 of the Act of 1903, and the similar section of the present Railway Act, under which the general Act is to apply to the exclusion of such of the provisions of a special Act of a provincial legislature as are inconsistent with the general Act, were intended to cover the case of a special Act passed by the parliament of the province before the union. The definition of the terms "legislature of any province," and "provincial legislature," in section 2, subsection (r) of the Act of 1903, and section 2, subsection 20 of the present Act, is probably wide enough to include such parliaments; and the Grand Trunk Railway was declared by an Act of the parliament of Canada to be a work for the general advantage of Canada. That declaration was included in an Act amending the general Railway Act, which, though referring specifically to the Grand Trunk Railway and other named railways, may not come within the definition of a "special Act." The Grand Trunk Railway was a railway connecting one province with another, and thus became ipso facto, upon the formation of the Dominion. subject to the legislative authority of the parliament of Canada without a declaration that it was a work for the general advantage of Canada. Section 6 was probably intended to apply to railways constructed under special Acts of provincial legislatures passed after confederation.

'Possibly, however, this may not be important, since section 6 embodies the most important of the beforementioned principles, that the prior special Act is repealed or affected by the general Act only where there is inconsistency between them; and I take it that, under either view, the burden is upon the party asserting it to point out the inconsistency, and that this should be made clear.

'The clause in the special Act is two-fold: It limits the fares for different classes of passengers, and it requires the running of third-class carriages. Necessarily, under the later portion, there was some obligation upon the company to furnish reasonable accommodation; some obligation to give some attention to the comfort and convenience of third-class passengers, even though this accommodation and attention should not be of the same character as required for the other classes. The legislation requiring the furnishing of adequate and suitable accommodation and the affording of reasonable and proper facilities, could certainly not affect a repeal of the provision for running third-class carriages, nor, in my opinion, can the legislation empowering the Board of Railway Commissioners to make regulations providing for the protec-

tion, safety, accommodation, and comfort of the public. Whatever the obligations under the present Act or the former Acts, these could not satisfactorily be enforced by the ordinary methods in the ordinary tribunals. The Board of Railway Commissioners was created to be the tribunal for the settling of these and other matters affecting railways and railway companies. It does not appear to me that the creation of such a tribunal was in any way inconsistent with the continuance of the obligation imposed by the special Act, or could affect its repeal or evidence an intention of parliament that the obligation should be no longer effective.

'Under the Railway Clauses Consolidation Act and all the succeeding legislation, down to the Act of 1903, railway tolls were subject to the approval of, and to be altered by, the Governor in Council. This limitation upon the company's powers was embodied in the special Act by reference to the general Act. The jurisdiction of the Governor in Council could exist, therefore, consistently with the limitation as to fares imposed by the special Act, and it does not appear to me that the substitution of the Board of Railway Commissioners as the body which is to approve, and which has the jurisdiction to alter, railway tolls, makes any change in this respect. Under the former legislation, all the railway tolls required the approval of the Governor in Council; under the present, it is only the standard of maximum tariffs which must be approved by the board; and railway companies are authorized to make special tariffs imposing tolls lower than those in the standard tariffs. The practice has been for the companies to obtain approval of standard passenger tariffs, not distinguishing between classes, and to provide for second-class fares by special tariffs. Third-class fares could be provided for in the same way. I do not think that the provisions requiring special tariffs are necessarily inconsistent with the limitations imposed by the special Act or that they are sufficient to indicate the intention of parliament that the company, in framing special tariffs, was to be free from such limitations.

'I am not informed whether the third-class carriages were at any time used upon the company's railway. To my mind it is clear that the obligation to use them, and to carry at fares limited as in the special Act, continued up to the coming into force of the Act of 1903. I am unable to find in the subsequent legislation any sufficient indication of parliament to abolish the system originally imposed upon the company as having become obsolete or unnecessary. The imposition of this system was one of the terms and conditions upon which the company was granted its franchise, and it should not readily be presumed that parliament intended to relieve the company from such terms and conditions.

The application is limited to the portion of the Grand Trunk Railway between Toronto and Montreal, and it is unnecessary to consider whether the obligation ever extended to any other portion of the company's lines.

'In my opinion, there should be an order requiring the company to run every day throughout the length of its line between Montreal and Toronto at least one train having in it third-class carriages, and forbidding it to charge third-class passengers fares at more than two cents per mile, and directing it to amend its special tariffs accordingly.

The operation of this order, however, should be stayed a sufficient time to enable the company to appeal.'

Ordered accordingly.

An appeal from the board's order now pending before the Judicial Committee of the Privy Council.

Ottawa, July 4, 1907.

Re Galt Board of Trade Application for Connections with the Canadian Pacific, Grand Trunk and Galt, Preston and Hespeler Railway Companies.

This was an application by the Galt Board of Trade, under section 228 of the Railway Act, for an order directing the above-named railway companies to connect

their lines or tracks, in the town of Galt, province of Ontario.

Held, after the hearing of the parties interested, that an order should go requiring the Canadian Pacific Railway Company to make connection between its line and that of the Grand Trunk Railway Company at Galt, so as to admit of the safe and convenient transfer or passing of engines, cars and trains over the tracks or lines of one of the said companies to those of the order; and that such connection be maintained and used, the plans of location of the connecting line and of connections with the existing lines first submitted to and approved by the Board.

Held, further, that the order should direct the Canadian Pacific Railway Company, within one month from the issue of the order, to submit to the Board a plan and profile of the proposed connecting line and all connections with the existing lines and the connections thereof with the existing lines or railway of the two companies. The applications for connection with the electric railway company to stand for nego-

tiations between the parties.

Ordered accordingly. November 12, 1907.

Re Application of the Village of Weston for a Highway Crossing at Dennison Ave.

This was an application by the village of Weston, in the province of Ontario, under sections 250 and 237 of the Railway Act, for an order directing the Canadian Pacific and the Grand Trunk Railway Companies, inter alia, to construct and pro-

vide a public crossing at the east end of Dennison avenue.

Judgment, Chief Commissioner Killam, concurred in by the Deputy Chief Commissioner Bernier, and Mr. Commissioner Mills: 'While the railway companies put up warning notices and occasionally closed gates on each side of their lines, thereby preventing any inference of intention to dedicate these portions of their lines to public use as a highway crossing, they took no effective steps to put a stop to their actual use by the public for this purpose, and the public have used the same for many years. Such a course of proceeding is highly objectionable. Railway companies should either fence off their lines and take steps to prevent the unlawful crossing of their tracks, or allow public highways to be placed across them where the public interests demand such a course. In tacitly conniving at these trespass crossings while endeavouring to protect themselves from liability in respect of the same, they are maintaining a public danger and ought not to expect the same consideration of their interests as in cases where it is sought to construct entirely new highway crossings over their railways. The multiplication of level highway crossings is certainly undesirable. but not so undesirable as the illegal level crossings.

'The order of the Board directed the railway companies to provide and construct a highway across their respective lines of railway at the east end of Dennison avenue, in the village of Weston, and reserved the question as to the protection of the said crossing for further consideration.'

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November 13, 1907.

Application of the City of Winnipeg for leave to build a bridge over the Canadian Pacific Railway in the city, to be used as a public highway connecting Brown and Brant streets, in that city.

These streets are almost in the same line; the one on one side and the other on the other of the yard and tracks of the Canadian Pacific Railway Company.

Although the public were in the habit of crossing the tracks of the railway company near the place where the proposed bridge was sought to be put, and planking maintained there for convenience in crossing, it was not claimed that any highway ever existed over the land occupied by the railway company in the line of these two streets or either of them.

The railway company did not object to the proposed over-crossing itself. question was whether the company should contribute to the cost of the work.

By section 237 of the Railway Act, when an application is made for leave to construct a highway across an existing railway 'the Board may, by order, grant such application upon such terms and conditions as to protection, safety, and convenience to the public as it may deem expedient, or may order that the highway be carried over or under the railway, or be temporarily or permanently diverted.......

By section 59, 'When the Board, in the exercise of any power vested in it by this Act or the special Act, in and by any order directs any structure, appliances, equipment, works, renewals, or repairs to be provided, constructed, reconstructed, altered, installed, operated, used, or maintained, it may order by what company, municipality or person interested or affected by such order, as the case may be, and when or within what time and upon what terms and conditions as to the payment of compensation or otherwise, and under what supervision the same shall be provided, constructed, reconstructed, altered, installed, operated, used, and maintained.

'2. The Board may order by whom, in what proportion, and when, the cost and expense of providing, constructing, reconstructing, altering, installing, and executing such structures, equipment, works, renewals or repairs or of the supervision, if any, or of the continued operation, use, or maintenance thereof, or of otherwise complying

with such order, shall be paid.'

Judgment, Chief Commissioner Killam, concurred in by Mr. Commissioner Mills: 'While upon its face, section 59 appears to give the Board absolute jurisdiction to compel any company, municipality, or person interested or affected by the order to pay or contribute to the payment of such compensation, it cannot have intended that the Board should exercise such discretion arbitrarily without reference to the respective rights of parties interested or affected or proposed to be affected.

'If the property were that of a private person, through whose lands the city could carry a highway without his consent, the city would ordinarily be liable to compensate the landowner for the property taken and for the injury caused by the severance of the remaining property. In some cases the legislation provides for an allowance for any advantage which the property owner may derive from the contemplated work, or that the cost of the same be assessed upon the lands of the parties interested in or

benefited by the work.

'The bridge now proposed to be erected can be of no benefit or advantage to the railway company. It will rest, in part, upon and thus occupy the surface of the company's lands, and it will extend through an upper space, which, by virtue of its ownership of the soil, is the property of the railway company. There seems to be no reason or principle upon which the railway company can be required to defray the cost of such a work or any portion thereof.

'I think that the city should have leave to construct the work at its own expense.'

November 15, 1907.

# Re Bell Telephone Company and Windsor Hotel Agreement.

In the month of November, 1906, the Bell Telephone Company and the Windsor Hotel Company entered into an agreement for the installation of a telephone system by the telephone company in the Windsor Hotel.

As the telephone company's tolls had to be approved by the Board, the execution of the agreement was left in abeyance until the Board should have had an opportunity to consider the agreement, in so far as it related to telephone tolls.

The main points as to which there could be considered to be any question, and with which the board dealt, were:—

1. The clause providing for exclusive use of the Bell telephone system in the building.

2. Rental of instruments.

3. Rates for local messages.

4. Long-distance rates.

5. Terms of agreement.

Judgment, Chief Commissioner Killam, concurred in by Mr. Commissioner Mills:

1. Exclusive rights.—I see no reason why the hotel company should not bind itself to take the Bell system only. No other is at present in sight, and the introduction of another would require considerable time. The Bell Telephone Company's rates being now subject to control by our Board, there seems to be no serious objection to such a stipulation.

2. Rental of instruments.—This is an agreement of a peculiar character. Very few of them are likely to come before the Board for consideration, and those that do will probably have different features. The size, situation of the hotel, number of rooms and of telephones will vary. I see no reason why the hotel company should not be allowed to agree to pay the rental stipulated in this proposed agreement. We should presume that the company is controlled by business men who are able to make their own agreements.

3. Rates for local messages.—The telephone company stipulate for a rate of 10c for connection. The impression that I have formed is that this rate, under the circumstances of the service, is not an unreasonable one. My present inclination is to the view that if telephone rates are to be in any respect reduced, that reduction should come, in the first place, from the annual charges to regular subscribers, and, secondly, from long-distance rates, leaving the 10c. rate for casual messages as at present; but it would probably be wise to provide that this rate is to be subject to any reduction which the Board may at any time order.

4. Long-distance rates.—The agreement (par. 17) provides for payment of 'the telephone company's regular toll charges.' These charges must be made at rates approved by the Board, so that there can be no objection to this stipulation.

5. Terms of agreement.—I would provide that, after the period of ten years, any extension shall be subject to the approval of the Board.

I think that we may properly approve the agreement with the two conditions which I have mentioned:—

1. That the charge of 10c. for each connection had over any telephone hereby leased with the Montreal exchange subscribers of the telephone company shall be subject to reduction at any time by the Board.

2. That any extension of the term of the agreement after the expiration of ten years shall be subject to the approval of the Board.

November 23, 1907.

### Re The Robertson-Godson Company's Complaint.

The Robertson-Godson Company complained to the Board that they were assessed a class-rate by the Canadian Pacific Railway Company on a shipment of paving blocks from Edmonton to the Pacific coast, whereas the lumber rate should have applied, which meant, they alleged, a considerable loss to the company. The railway company took the position that the lumber rate did not apply, as that rate could only relate to those articles specifically mentioned in its tariff filed with and approved by the board, and that this list of articles did not include street paving blocks.

The complainants' contention was that paving blocks were nothing more than fire lumber, and, therefore, should be included in the classification. They asked the

ruling of the Board as to whether their contention was correct or not, and, if correct, whether they were not entitled to a refund.

Held, that the Board had no jurisdiction to direct or authorize the railway company to make any rebate in the rates charged under tariffs lawfully existing when the goods were carried, and that the only action which the Board could take would be to require that paving blocks be included in the commodity tariff; but that this action could not affect past transactions.

November 29, 1907.

Re Vancouver, Victoria and Eastern Railway and Navigation Company's Application to Expropriate Lands in the Municipality of Delta, B.C.

In August, 1907, the Board made an order authorizing the Vancouver, Victoria and Eastern Railway and Navigation Company 'to divert the Ladner highway along the Fraser river, known as the River road, in the said municipality of Delta, to the extent and in the manner shown in pink as route No. 2 on the plan and profile on file with the Board.....; and to maintain, construct, and operate its railway along and upon the existing portions of the said highway between the points of diversion.'

On the 29th October of the same year, the railway company applied, under section 178 of the Railway Act, for authority to expropriate certain lands for the purpose of the diversion of the highway mentioned above, under the Board's order. The land sought to be taken was a strip coloured red on the plan accompanying the application, and was necessary for the highway along the route prescribed by the Board's order. The company's application stated 'that, by-law dated the 12th day of November, 1906, the municipality of Delta gazetted a highway between the termini of the diverted highway and the land coloured red on the plan filed herein practically coincided with the said highway except where it is of a greater width than 66 feet, and then only as to the excess and also where it crosses the ravine on lot 16, group 2.'

The application also alleged 'that it is necessary, in order to construct the diverted highway in accordance with the order of the Board of Railway Commissioners for Canada, to take the whole of the land coloured red on the plans filed herein—where the land required is of a greater width than 66 feet the road crosses ravines or follows along steep hillsides—and the width shown is necessary in order to construct the said highway, and for no other purpose.'

Another of the parties whose property was sought to be taken filed answers stating merely that it was not necessary for the company to take the lands referred to in the application. By consent of the parties the application came on for hearing at Ottawa, when the question of the necessity for taking the land coloured red on the plan was not raised; but counsel for a number of the landowners requested that certain conditions be imposed upon the railway company. These conditions were referred to the railway company by its counsel, which refused to accept the terms, except one for allowing rights of crossing on foot over the railway to the river. The River road ran along the river bank in some places close to the foreshore; in other places leaving small pieces of land between it and the river. The Fraser river opposite the place in question is a tidal navigable river. Counsel for the landowners stated that the township of Delta had passed a by-law for the diversion of the highway practically covering the diversion ordered by the board. The railway company claimed to have a grant from the provincial government of the foreshore along the diverted portion of the highway.

At a later hearing one of the conditions asked for by counsel for the landowners was expressly abandoned, and two others not really insisted upon. Those asked for were, first, a condition requiring the company to pay compensation to the landowners for the portion of land on which the railway was built, upon the basis that the land on which the railway runs reverts to the owners of the adjoining lands upon the closing of the highway. Condition two—that the company pay compensation to the

owners of the land for the right of way over the diverted highway; and the third condition was one for certain crossings and the right to build and maintain landings and net houses on the company's right of way next the river and opposite the lands of the respective owners.

Judgment, Chief Commissioner Killam, concurred in by the Deputy Chief Com-

missioner Bernier on December 26, 1907.

Referring to the first condition sought to be imposed:

'It is not at all clear that such is the effect of the diversion; if so, the party in whom the land occupied by the old highway vests will naturally be entitled to compensation for the taking of his land by the railway company. If such is not the effect, then there is no reason!why compensation should be given on such a basis. If the municipal by-law was sufficient of itself for the diversion of the highway and to close the old highway to public traffic, the question of the landowners' right to compensation must be determined by the local law and by the local courts. If it was not sufficient and the closing of the old highway is affected by the exercise of the company's powers under the Railway Act and the board's order, the landowners should be left to take such compensation as under the Railway Act they are entitled to. This application is one for taking a strip out of another portion of their lands, and it does not appear that any condition should be imposed not directly relating to the taking of the land for which authority is now sought.'

Referring to the second condition:-

'It is not necessary to impose a condition for that purpose. The parties whose lands are taken have a right to compensation under the Railway Act for the taking of their land and the injury done by severance of the remainder. This is admitted by both parties.'

Referring to the third condition:-

'As I have said, the railway company is willing that foot crossings should be allowed to these owners. Apparently the land is not suitable for crossing otherwise than on foot, and it is reasonable that these parties should have crossings in the nature of farm crossings, particularly those whose holdings extend to the river side. These latter need no condition to enable them to have landings and net houses. As to those whose land does not extend across the highway, it is reasonable that they should have access to the water; but there seems to be no reason for imposing upon the railway company an obligation to give up for the purposes of landings or buildings any land not belonging to the parties whose lands they are taking. I think that the order authorizing the company to take the land applied for should be granted, with conditions that the foot crossings, to which Mr. Ritchie at the last hearing limited his request, shall be allowed by the company.'

Order, dated December 26, issued accordingly.

Judgment in dissent, Mr. Commissioner Mills:---

'I am strongly of the opinion that the Railway Commission should not open the way for law-suits, nor advise people to go to the local courts to determine and obtain

their rights, unless it is really necessary to do so.

'Taking the case of six or seven poor fishermen on the banks of the Fraser river, in the township of Delta, B.C., I think it is cruel to send them to the local courts to settle the points at issue between them and the Great Northern Railway Company, when the problems submitted can be solved and the suggested law-suits avoided simply by putting into the order for expropriation the terms and conditions on which the railway company can obtain the rights and privileges for which it has applied under section 178 of the Railway Act.

'It is possible that these concessions or conditions should have been imposed when the application for approval of location was under consideration; but I, for one, was not aware of the facts at the time; and I would rather vary the order approving

of the location, if that is necessary, than send such people to the courts to obtain their rights. I maintain, however, that these rights can be secured by imposing conditions in the order now applied for.

'As nothing is gained by dissenting judgments, I have ventured to submit an alternative draft order embracing two conditions not yet approved of by my colleagues; and I wish to state briefly my reasons for asking that these conditions be

imposed upon the applicant company.

'First.—As to the compensation of the owners of land, for the portions of their land which were formerly given for the river bank road, which portions the railway company has recently been authorized to take. The company contends that, inasmuch as it has to buy land for a new road on the hillside, it should not be required to purchase any portion or portions of the road which it is taking along the river bank. I think, however, that the claim of the landowners is a reasonable one, because they gave their land along the river bank without compensation, for the purpose of getting a level or comparatively level road in that locality. This road is now taken from them for the benefit of the railway company; they are deprived of the benefits which the grant of that portion of their land was made to secure; and a very crooked road at an elevation of 93 feet up the hillside is not equivalent for the road of which they are deprived.

'I think that any one who notices how crooked the proposed road on the hillside is and bears in mind that, according to the statement of our engineer, it involves an ascent of 93 feet above the level of the present road, will admit that it is not, in any proper sense, an equivalent for the latter; and that, therefore, the railway company should not only provide and construct the inferior high-level road, but pay the complainants for the portions of their land which were given for the comparatively level

and much better road by the river.

'This is my reason for thinking that the request of the people set forth as condition 3 in the draft order submitted should be granted.

'Second.—Inasmuch as the men herein referred to are all fishermen depending upon access to the river for their livelihood, they should not be refused the right to construct net houses and landing-platforms along the river bank. To refuse them this privilege is to drive them out of business, making the remainder of their land valueless and compelling them to go elsewhere. This, I think, is something which the board should not do; and, for that reason, I would suggest that they be each allowed to build a net house or net houses and a landing-platform or platforms on the right of way of the applicant company, where it comes to, or within 25 feet of the Fraser river, provided he does not occupy more than 80 feet of space along the river bank and does not build, construct, or place any structure or thing within 25 feet of the centre line of the right of way of the applicant company.

'Application was made for permission to occupy, for such purposes, the land on the river bank, to within 20 feet of the centre line of the railway track; but, with a view to provide for the possibility of a double track, I have increased the space to 25 feet from the centre line of the right of way, allowing the applicants, for the length of 80 feet on each lot, to use the right of way for a width of only 25 feet (instead of 30 feet), wherever the said right of way comes within 25 feet of the river; and I am making this suggestion as a compromise, in the hope that it may be approved by my colleagues—granting the landowners the privilege of building and using net houses and platforms as above, on condition that they keep distant 25 feet, instead of 20 feet, from the centre line of the right of way of the railway company. (See sketch of right of way and double track line submitted herewith.)

The death of Chief Commissioner Killam having occurred before the above suggestions were considered, and the Deputy Chief Commissioner having since concurred in the judgment of the late Chief, I have to dissent from the said judgment and the

order based thereon.

# Re Complaint of C. R. Banks.

This was a complaint against the Dominion Atlantic Railway Company, alleging that as a result of delay in forwarding a consignment of commeal shipped by the St. John Milling Company of St. John, N.B., to complainant at Torbrook Mines, in 'Annapolis county, province of Nova Scotia, complainant suffered a loss of 10 cents per hundredweight, amounting in all to \$30; and applied to the board for redress.'

Held, that the Board had no power to award complainant damages for the delay; that the complaint was in respect of one single shipment, and there was nothing to indicate that such delays were frequent or that the investigation was necessary for the purpose of devising a remedy for a defective system; that the remedy of the party aggrieved was to be found by action in one of the regular courts; and referred complainant to subsection 7 of section 284 of the Railway Act.

January 23, 1908.

# Re Highway Crossings over Railways.

If there is no established highway over the railway, the board has no power to compel the railway company to make and maintain such a crossing. The board's jurisdiction is confined to giving to the municipal authorities the power to carry and construct a highway across the railway.

Chief Commissioner Killam. January 28, 1908.

### Re Moor Lake Accident.

This accident was the result of a head-on collision at Moor lake between the Canadian Pacific Railway Company's passenger train No. 8, coming east, and extra engine 1715, going west, on the night of November 14, 1907, near Moor Lake, in the province of Ontario, in which the engineer was killed and a number of passengers more or less seriously injured, and the mail car, with its entire contents, including a very large number of registered letters and articles and ordinary mail matter, were completely destroyed.

Application was made to the Board by the Post Office Department, and the representatives of the engineer killed, for a copy of the report of the Board's inspector.

Held, that the inquiries and reports of its accident inspectors are made for the purpose of informing the Board in the public interest only, and in order to enable the Board to judge of the causes of accidents and the rules and precautions to be made and taken for the purpose of avoiding them in future, and not for the purpose of giving information to parties desirous of making claims against a railway company for injury to person or property; that this rule was adopted not only because the Board did not consider that its function was to obtain information for the purposes stated, but also because the Board did not desire that railway officials should be deterred from giving information to the Board's officials through fear that it would be used in support of claims against the companies.

January 29, 1908.

# Re Complaint of J. Wilson v. Canadian Pacific Railway Company.

Complainant's horses got on the track of the Canadian Pacific Railway Company between Nanton and Parkland, in the province of Alberta, at a public crossing and were killed. It was alleged that there were no guards of any kind to keep the horses from getting on the track, and estimated his loss at \$850.

The Board took the matter up with the railway company, and was informed that proper cattle-guards had been installed at the crossing.

Held, that the Board has no power to compel railway companies to pay claims for damages for cattle killed upon railway tracks, as the statute expressly provides that the remedy is to be by action in a court of competent jurisdiction; that the Board's only function in this respect is to see that provisions of the statute respecting fences, cattle-guards, &c., are properly observed.

February 8, 1908.

# Re Basil H. Malaher's Complaint.

Basil H. Malaher, of Marshall, in the province of Saskatchewan, the complainant, alleged that he had been overcharged the sum of \$9.97 on the carriage of goods from Liverpool, via Halifax, to Floydminster, the nearest station to Marshall. Under the bill of lading the sum of \$20.94 was to be paid. The amount charged and collected by the agent of the Canadian Northern Railway Company at Floydminster was

\$31.90, making an overcharge, as alleged, of \$9.97.

Held, Chief Commissioner Killam and Deputy Chief Commissioner Bernier, after inquiry into the subject-matter of the complaint, that the Canadian Northern Railway Company had received for carriage from Emerson, Man., to Marshall, in the province of Saskatchewan, only the lawful rate of 25 cents per 100 puonds; that the charge made to complainant for the whole carriage from Liverpool to Marshall, Sask. was in accordance with the lawfully existing joint through tariff, and that the Board had no jurisdiction to enforce any special contract for rates other than those set out in the lawfully existing tariff, or to compel either the railway company or the steamship company to make any reduction from this charge; and that any relief to which the complainant would be entitled could only be obtained by action in the ordinary courts.

February 12, 1908.

Re Application of the Village of Mannville, in the Province of Alberta, for Crossing the Canadian Northern Railway Company's Line of Railway.

This was an application, under sections 252 and 253 of the Railway Act. for an order directing the Canadian Northern Railway Company to provide and construct a suitable street crossing where the railway company's railway interests the village of Mannville, in the southeastern quarter of section 50, range 9, west of the fourth meridian.

Under 'The Village Ordinance' of the Northwest Territory Ordinances, cap. 72, 1905, no authority is conferred upon villages in the province of Alberta to open up

highways across private lands.

Held, that the Board had no power to compel railway companies to open up highways across their lands; the function of the board, under section 237 of the Railway Act, was to give leave to a municipality or other authority having power to open up new highways, to do this across a railway; but this legislation is based upon the view that the railway company's land has been devoted to a statutory use; and that, in the absence of statutory provision therefor, the municipality or other road authority could not construct a highway, over the railway lands.

February 13, 1908.

Re Robertson and Chatham, Wallaceburg and Lake Erie Railway Company.

This was an application by Arthur K. S. McA. Robertson for rescission of an order of the board granting leave to the Chatham, Wallaceburg and Lake Erie Railway Company to carry its line of railway upon and along certain streets in the city of Chatham. The applicant's objection related only to the portion of the railway to be carried along Queen street and to its location on the street opposite property of the applicant. Under the order, the railway was authorized to be located on the side of

the street next the applicant's property, the centre line of the track to be nine feet four inches from the centre line of the street. The applicant asked that it be located in the centre of the street, and claimed that the approved location was very injurious to his property.

The plan showing the location of the railway in the city of Chatham was approved by the Board, subject to the terms and conditions set forth in by-law No. 815 of the city of Chatham. This plan showed the railway to be apparently located along the centre of Queen street. The by-law referred to was one authorizing the city to lend to the railway company a certain sum of money, and provided, among other things, that before the work was commenced on any section or portion of the company's railway in the said city of Chatham, the plans setting forth the proposed location of the company's tracks were to be first submitted to the engineer of the city for approval and should not be altered thereafter without the consent of the said engineer; and that no work should be done by the company upon any of the streets of the city until the engineer had approved of the location of the same.

By by-law No. 946 the company was authorized, 'subject to the terms of an agreement to be entered into between the corporation of the city of Chatham and the Chatham, Wallaceburg and Lake Erie Railway Company, to lay down and construct a street railway upon the following streets, or portions of streets.' Among these was Queen street, from William street to the southern limit of the city. By the by-law it was provided that the location of the line of railway in any of the streets aforesaid should not be made until plans thereof showing the position of the rails, poles and wires were submitted to and in writing approved of by the city engineer and chairman of the industrial committee, or of such other committee as the council for the time being should appoint for the purpose.

By by-law No. 1013, reciting the previous by-laws, and that it was 'desirable to define the terms of the agreement to be entered into as aforesaid under the said by-law No. 496,' many provisions were made respecting the company's railway, among which were the following:—

'(25) The location of the line of the said railway on the said streets, and the position of the rails, switches, turn-outs, and other works thereof, shall be shown upon plans, with figured dimensions showing the distance of all their works from the side lines of the streets, which shall be submitted to the said engineer and chairman of the industrial committee, or of such other committee as the council for the time being shall appoint for this purpose, and none of the said works shall be commenced until the said plans have been submitted to and approved of as required by section 9 of said by-law No. 946, and the same shall not be altered thereafter without the consent of the said engineer and chairman.'

By the indenture between the company and the city, reciting the several by-laws mentioned, the company accepted the by-laws and covenanted and agreed that it would in all things conform to, obey, perform, observe, fulfil and do all and every the terms, agreements...... in the by-laws contained, and would do and perform all matters and things which the by-laws provided to be done by or on behalf of the company, and would not do anything which the by-laws provided was not to be done by the company.

At the hearing at Chatham of the application of the company for leave to carry and construct its railway upon and along certain highways in the city of Chatham and in other municipalities, it was stated that, under by-laws 815 and 946, the city granted a franchise on certain named streets (among which was Queen street), and reference was made to the approval by the board of the location plan, but the proposed location of the railway upon the streets was not otherwise specified. The result of the hearing was that the order was to go subject to the filing of certain plans and the agreements. The plans subsequently filed showed a location on Queen street west of the centre line of the street.

Later, the Board made an order granting leave to the company to carry and construct its railway upon, along and across certain named streets (among which was Queen street), as shown on the plan submitted, subject to the terms and conditions of the laws and agreement mentioned. The order not to issue until the plan had been first approved by the city.

Judgment, Chief Commissioner Killam: 'When the matter came before the Board at Chatham in December, 1905, the Board required to be satisfied, by production of the by-laws and agreements, that the necessary consent of the city to the carrying of the line along the streets had been given. When these by-laws and agreements came to be produced, it appeared that the locations upon the streets were to be fixed by officials of the city, and the Board was furnished with evidence that these officials had fixed the location along Queen street as approved by the Board's order.

It appears to me that it was quite competent for the Board to give leave to carry the railway along a different portion of the street from that set out in the plan to which the application referred, without requiring the making of a new application—and this, whether the change was made at the request of the railway company or against its will.

It appears to me that it was quite competent for the Board to give leave to carry the railway along the street upon a location different from that shown by the location plan approved by the Board. In approving a location plan, the Board does not usually determine precisely where a railway shall cross another railway, or where it shall run across or along a highway; and when the application to cross another railway, or to cross or run along a highway, comes before the Board, it might allow this at a different place or upon a different location from that laid down upon the approved location plan without requiring another location plan to be submitted or an application to be made to authorize a deviation; and the Board's order in such a case is sufficient to authorize the necessary deviation.

When the order in question was made, the Board had been furnished with the evidence of the location upon Queen street, fixed by the proper city officials under the by-law for this railway. The formal plan embodying this conclusion had not reached the Board, but the Board might well determine upon the material that the railway should be allowed to be carried along the street as approved by the city officials, and it might well entrust to its secretary, to whom the order was to be forwarded to be sealed and issued, the duty of examining the plan and ascertaining that it indicated the line as thus approved. I think the Board could thus make the order, although when it was signed the plan was not yet in the secretary's hands, but to be issued after the receipt of the plan and the making of the comparison which the secretary was directed to make.

The company's application for leave to place its railway upon the public street was not a 'complaint,' which, under section 20, the Board was bound to hear and determine in open court on application by any party to it. But the request for a hearing was not one which the Board would ordinarily refuse, and in this case, in view of the agreement for a settlement of the injunction proceedings, the order should not have been made without such a hearing. All of the parties—the city, the railway company, and Robertson-have now been heard and have adduced such evidence as they saw fit upon the question of the location of the railway along Queen street in front of Robertson's property. The railway has been constructed along the side of the street in accordance with the location prescribed by the city engineer and chairman of the committee except opposite Robertson's property, where it has been temporarily carried along the centre of the street. The chief engineer of the board has reported that he is 'of opinion that, as the present road is a country road and not paved, the track should go as the plan originally intended—to one side; but that, if in the future Queen street should be paved as similar streets in Chatham, the tracks could be moved to the centre at very little expense.'

I think it is clear that the placing of the railway along the centre of the street would interfere unduly with the use of the street, and be injurious to the public interest. On the other hand, I have no doubt that the placing of the railway where the company and the civic officials desire to place it would injuriously affect Robertson's property. I am, however, of opinion that the construction and operation of the railway will materially benefit the property, and that the property, with the railway upon the side of the street, will be more valuable than if the railway should not be, or had not been, constructed at all. At present, the land is wholly vacant, a few scattered dwellings are to be found on the other side of Queen street, and there is a probability that the city will grow in that direction and that there will at some time be a demand for lots in that locality for residences, factories, warehouses, &c. The opportunity to procure spurs from this railway should enhance the value for industrial or commercial purposes. While there is not at present a frequent passenger service upon the railway, this must naturally be increased with the growth of the city. At one time Robertson proposed to widen the street in front of his property by giving up a strip along it for the purpose. This fact affords some evidence that such a use of this strip would leave him with property not less valuable than the whole would be if he retained the strip. If he should now widen the street in this way, the railway would then be along the centre of the street, and the remaining property, with the advantages afforded by the railway, would probably be more valuable than the whole is at the present time.

It appears to me that, if we were now hearing the original application, and had before us the evidence which has been given and the arguments advanced on Robertson's behalf, we should still make the order unconditionally, giving the company leave to carry the railway along the street as is proposed by the company and the city.

Judgment, Deputy Chief Commissioner Bernier: "In this case two principles

are involved:

'1. The control, as trustee for the public, of the streets within the limits of the city of Chatham, which, by by-laws, has determined that the electrical road of the Chatham, Wallaceburg and Lake Erie should be located according to the decision of rts officials.

'2. The claim for damages to property owners alongside the streets where the said electric road was to be constructed and operated. I have already expressed my views with regard to the absolute power of the municipalities to fix and determine the terms and conditions with which the railway intended to be constructed would have to comply; the Board to conform its order accordingly. As to the question of compensation or damage, it rests entirely between the immediate landowners and the municipality which has chosen the location of the railway, and to be determined by the ordinary courts of justice.

'The Board is not in a position to fix the compensation, as the damage cannot be appraised without the intervention of the municipality and the parties who may suffer by its decision; such power, in my opinion, not having been granted to the Board.

'My opinion, therefore, is that the order should go according to the decision of the city of Chatham, leaving to the interested parties their recourse to the ordinary tribunals.'

Judgment in dissent, Mr. Commissioner Mills:

The council of the city of Chatham, wishing to have the Chatham, Wallaceburg and Lake Eric Railway run through the city, passed a by-law granting the said company leave to lay its track along the centre of Queen street, in the said city.

After a time, the city, or its aldermen, came to the conclusion that the said track on the centre of Queen street would likely interfere with farm traffic coming into the city along the said street; so a new council at a later date, passed a resolution directing the said company to lay its track, not in the centre of the said street, but on the west side thereof, 9 feet 4 inches distant from the centre, the street being 66 feet wide.

It was alleged, and not denied, at the hearing, that, according to the city by-laws, a space 21 feet wide had to be left on each side of the street for sidewalk, boulevard, curb, and gutter; and the plan approved by order of the Board dated the 15th July, 1907, places the railway track 21 feet 4 inches from the west side of the street, leaving only four inches between the track and the gutter. With such an arrangement, it is manifest that horses with vehicles cannot pass or be tied between the railway track and the west side of the street; and the owner or owners of land on the west side of the street will have no access by vehicles to the front of their property.

Mr. A. K. S. McA. Robertson owns land on the west side of the said Queen street. His land has a frontage of 3,300 odd feet on the street; in fact, it extends nearly the whole distance throughout which the railway is to run on the side of the street, and the only way to make this portion of his property accessible will be for him to add to the street a strip of his own land, 9 feet 4 inches wide, throughout the whole length of his frontage, viz., 3,300 odd feet.

Even if the city should change its by-laws so as to dispense with a boulevard on each side of the street, it would leave only 5 feet for a driveway including the gutter, which every one of any experience knows is not sufficient for the purpose; so it is clear to my mind that Mr. Robertson's property will be materially injured by the running of the railway along the west side of the street in front of his land.

It is true that the property in question is vacant land at the present time; but it is land within the city limits—land which has paid and is paying heavy city taxes; and in case it is decided that it is a fair and reasonable thing to have the railway run so near the said land as to prevent vehicular access to the front thereof, for a distance of 3,300 odd feet, it is morally certain that a great portion of it will *remain* vacant for years to come unless Mr. Robertson is prepared to widen the street at his own expense.

If the Chatham, Wallaceburg and Lake Erie Railway were a street Railway proposing to give to Mr. Robertson and others in the city of Chatham a street railway service and to confer such benefits as usually result from the running of a street railway in a city, I would be disposed to say that the advantage of such a railway beside Mr. Robertson's land might be regarded as offsetting the damage which will result from placing the track so close to his property as to prevent vehicular access to the portion which fronts on the streets; but the said railway is not a street railway in the city of Chatham or anywhere else, but a rural electric railway proposing to run once every hour, within certain time limits, for freight and passengers, from Wallaceburg, south, through Chatham, to Lake Erie. It will certainly damage the front of Mr. Robertson's property; and it is doubtful whether it will do much, if anything, to increase the value of land there or anywhere else in the city, beyond what the Grand Trunk and the Canadian Pacific lines have already done.

Why should the corporation of the city of Chatham, for its own benefit, in order to accommodate the traffic which it wishes to have along Queen street, place a private citizen like Mr. Robertson at a disadvantage as compared with citizens on the opposite side of the street. And why should it make it necessary for him to add a portion of his property to the street without allowing him any compensation therefor?

Therefore, I think the order of July 15, 1907, should be confirmed and allowed to stand only on condition that Mr. Robertson is allowed reasonable compensation, say, \$900 for the strip of his land (9\frac{1}{3} feet by 3,300 feet), which he will have to add to the street in order to get vehicular access to the front of his property, and thus make it saleable for either residential or business purposes; and as the railway was first located on Queen street by permission of the city, and the location was changed from the centre to the side of the street by the city, and solely for the benefit of the city, the city should pay the said compensation; but the question of payment is one which must be left to the city and the company to settle between themselves.

Ottawa, November 23, 1907.

### PRINCIPAL JUDGMENTS DELIVERED BY THE BOARD.

March 31st, 1908, to March 31st, 1909.

Robertson v. Grand Trunk Railway Company of Canada.

This, it will be remembered, was an application to the Board for an order directing the Grand Trunk to issue third-class tickets at the rate of one penny for each mile travelled between Toronto and Montreal; and the Board (6 Can. Ry. Cas. 494) after hearing the application, held that an order should go requiring the company to run every day throughout the length of its line between Montreal and Toronto, at least one train having in it third-class carriages, and forbidding it to charge third-class passenger fares at more than two cents a mile; and directing the company to amend its special tariffs accordingly. The operation of the order, however, was stayed to enable the company to appeal. The Supreme Court of Canada dismissed the appeal with costs (39 S. C. R. 506) 7 Can. Ry. Cas. 267. The railway company carried the case to the Judicial Committee of the Privy Council, which also upheld the judgment of the Board. (1909) O. C. 325; 9 Can. Ry. Cas 149.

# Re Interswitching.

In pursuance of the judgment of the Board, as delivered by the late Chief Commissioner (Honourable A. C. Killam), reported in the third report of the Board, pages 140 et seq., 7 Can. Ry. Cas. 302, the report of its Chief Traffic Officer on the subject of interswitching was forwarded to the various complainants and applicants, as well as to the railway companies interested; and after considering the views of the Canadian Freight Association, as contained in a letter from the chairman of the association to the Board, dated May 11, 1908, the order, dated July 8, 1908, issued. (See ante p. ) 7 Can. Ry. Cas. 332-335.

Doolittle & Wilcox v Grand Trunk and Canadian Pacific Railway Companies.

This was an application by a number of stone quarry operators, under section 323 of the Railway Act, for an order disallowing the proposed increase in freight rates for the carriage of stone on the railway of the Canadian Pacific and Grand Trunk Railway Companies.

Judgment, July 29, 1908, Chief Commissioner Mabee, 8 Can. Ry. Cas. 8.

This application is made by a number of stone quarry operators for an order, under section 323 of the Railway Act, disallowing the proposed increase in freight rates for the carriage of stone upon the Grand Trunk and Canadian Pacific Railways. The increase was 5c. per ton within certain areas. The case, however, upon the hearing was much enlarged and assumed the feature of not being a serious attack upon the proposed 5c. increase, but rather more a proposition submitted for the establishment of entirely new rates, upon a mileage basis. The applicants represent quarries in operation at some eight points, all within 50 miles of Toronto, the principal market. The applicants are not unanimous in their views; and one of them has communicated to the Board his satisfaction with the 5c. increase, provided the rates are not reduced from individual quarry points.

I do not think the attack upon the 5 cent increase has been successful. The stone rates to Toronto have always been low; and I am constrained to think that the case would not have been given the attention it has received, had it not been with the hope of persuading the Board to adopt a mileage basis for stone rates.

 $20c - 16\frac{1}{2}$ 

Now, it is apparent that the quarries located at greater distances from Toronto than the applicants are vitally interested in this matter, as upon this low grade material, with competition keen and prices cut, any disturbance in rates might, and doubtless would, work to the irreparable injury of many interests which have had no notice of this application and no opportunity of being heard. So, had I formed the opinion that it was the duty of the Board to adopt in whole or in part the basis of rates argued for by the applicants, I should have directed these other interests to be notified and given an opportunity to present their views before disturbing the existing order of things. The fundamental ground of the application is to have mileage form the sole basis in making these rates. To those who have not had experience in rate-making the argument that distance must be the principal factor appeals with force; but the history of these cases shows that, while it is of course to be considered, yet in many instances it is a minor matter; and I am not aware that either in England or the United States it has been held by the rate-controlling tribunals that they are bound to regard mileage as the controlling factor. If the argument of Messrs. Doolittle & Wilcox were acceded to, it would have the effect of destroying large industries where proprietors have in good faith invested their money and built up a businesss connection, and turning over to these quarries in the short-haul zone the control of the Toronto market. Of course, no such destruction of capital and consequent hardship upon innocent persons can be permitted, if any other course is open. There are many reported cases in which the Interstate Commerce Commission has paid little or no attention to distance of haul; and the business interests and demands of this country are much the same as there.

The proposal submitted and elaborated in evidence by Mr. Doolittle was ingenious and displayed much industry and care in preparation. The plan suggested was that for the first forty miles the rate be 1-cent per ton per mile plus 25 cents per ton terminal charges; from forty-one to seventy miles, ½-cent per ton per mile plus 20 cents per ton terminal charges; and above seventy miles, 4-cent per ton is added to the 70mile rate. Now, the rate of ½-cent per ton per mile for short hauls is admitted by Mr. Doolittle to be the lowest stone rate; and this, applied to the longest haul, is his basis. The objection to his terminal charge is that terminal cost varies; and he provides for this cost only at delivery points and not at the quarries. Now, there is nothing that requires this Board to compel the carriers to frame their rates upon a basis of the kind proposed; and when it appears that the adoption of such a rate basis would work destruction to many existing industries, enure very largely to the benefit of the applicants, or some of them, and probably in no way reduce the price of stone to the consumer—possibly increase it—I am unable to see why the application should succeed. Comparison with rates upon other low-grade commodities was made; but when each instance was investigated, reasons for differences appeared. The reason for low rates upon clay from Waterdown to Hamilton and other points, and upon marl, iron ore. and the like, is that these rates are based upon the reshipment by rail of the finished products of these raw materials. Low coal rates, of course, result from the composition of water carriers.

It strikes me as not unreasonable that the quarry near Toronto should enjoy the benefit of its natural location; but these nearby quarries has submitted for years to the establishment of these artificial rates by the companies, and without complaint have seen their outside competitors invest their capital and develop their industries; and it could hardly be regarded as fair that the short-haul quarry proprietors should, through the instrumentality of this Board, be enabled entirely to destroy their more distant brethren.

The chief traffic officer has made some revision in the scale of rates from some of the shipping points; and, as revised by him, the following will be the shipping points, distances, as follows:—

TAL TAI LICE TOO		
From.	Miles.	Rates in cents
		per ton.
Cooksville	12	45
Georgetown	27	55
Glen Williams	30	55
Milton	30	55
Terra Cotta	33	55
Campbellville	36	55
Cheltenham	35	55
Inglewood	38	55
Dundas	42	55
Schaw	43	55
Credit Forks	43	55
Cataract	46	55
Orangeville	46	55
Guelph	47	55
Alton	49	55
Galt	55	55
Elora	61	55
Fergus	64	55
Shelburne	62	60
Hagersville	67	60
Kirkfield	73	60
Cameron	74	60
Niagara Falls	77	60
Fells	86	60
Burnt River	91	60
Longford	92	60
St Marys	97	€0
	119	60
Ivanhoe	120	60
Crookston		65
der, dated July 29, 1908, issued accordingly.		

Order, dated July 29, 1908, issued accordingly.

# Weganast v. Grand Trunk Railway Company.

Mr. F. W. Weganast of Brampton, Ontario, applied to the Board for an order directing the Grand Trunk Railway Company to issue to him a fifty-five trip ticket for use between Brampton and Toronto, similar to those in use between Oakville and Toronto, at the same rate as those between Toronto and Oakville were sold, namely, \$7.15.

It appeared from the evidence that the ordinary train service between the cities of Toronto and Hamilton on account of the frequency and hours of service made it possible for persons living at Oakville to travel daily to and from their business in Toronto. The ordinary train service between Brampton and Toronto, however, originating a long distance from Toronto, left Brampton for Toronto either too early or too late and vice versa to be of any value for persons desiring to live in Brampton and attend to their business in Toronto, although a few persons might do so.

The general agent for the Grand Trunk Railway Company, Mr. G. T. Bell, gave evidence that the number of persons would likely be so limited as to render transportation at commutation rates unprofitable, as has been found in the state of Massachusetts, the most favourably situated in North America for the development of suburban business. One of the railways that had made commutation rates between Boston and the adjoining stations and operated between sixty and seventy suburban trains a day, found that such train service was an actual loss, by reason of the competition of the electric railways on the highways in the vicinity.

Judgment, Chief Commissioner Mabee, concurred in by Mr. Commissioner McLean, November 23rd, 1908. 8 Can. Ry. Cas. 42.

The applicant alleges that he is a resident of the town of Brampton, is a law student attending lectures at Osgoode Hall, Toronto, and travels daily, except Saturdays and Sundays, between Brampton and Toronto, the return fare between which places is \$1.10, Brampton being 21.1 miles distant. That between Toronto and Oakville, 21.14 miles from the former city, the railway company issues commutation tickets consisting of 55 coupons good for one trip each way at 13 cents per trip, and also a ticket consisting of ten coupons for \$3.25, or 32.5 cents per trip. The applicant claims that the railway company should be required to issue trip tickets good between Toronto and Brampton upon a similar basis.

The application was supported by counsel for the town and Board of Trade of

Brampton, and by counsel for the city of Toronto.

The case was based entirely upon the contention that the action of the railway company was an unjust discrimination against Brampton in favour of Oakville.

Section 341 of the Railway Act provides that nothing in the Act shall be construed to prevent the company from issuing 'mileage, excursion or commutation passenger tickets,' so that the company is within its rights in issuing these reduced fare tickets between Toronto and Oakville.

Section 77 of the Act provides that whenever the company charges persons in one district lower tolls than it charges to other persons in another district 'for the same or similar services,' the burden of showing that such difference in treatment does not amount to an undue preference, or an unjust discrimination, shall lie on the company.

Much evidence was given showing the train facilities between Toronto and the towns in question, and the history of the granting of these tickets between Toronto and Oakville. It appears that many years ago reduced rates existed between Toronto and Brampton, but they were abandoned by the railway company upon the complaint of the Brampton merchants, who contended that it took trade from them to the Toronto merchants. The former it was said went so far as to threaten the company that they would divert their traffic from the Grand Trunk Railway Company if these reduced fares were continued.

At the same time similar reduced fares existed between Oakville and Toronto, and no complaints were made by Oakville merchants against the practice. It would therefore seem that the withdrawal of these privileges from Brampton was not brought by the railway company upon its own initiative, but was solely upon account of the situation above indicated.

It was said also that during the experimental stages of the cheap fares between Toronto and Oakville, some persons, in consequence thereof, had purchased houses there, and at the time the rates were withdrawn from Brampton they were allowed to continue between Toronto and Oakville, otherwise these persons might have to sacrifice their property.

In view of these facts, it is clear that the present situation is not brought about by the choice of the railway company; that it is not solely responsible for either the discontinuance of the Brampton rate or the continuance of the Oakville rate, and if there is unjust discrimination against Brampton and in favour of Oakville, the people of the former place can hardly lay the blame upon the company.

Between Toronto and Oakville about twelve persons in the winter and twenty in the summer avail themselves of these reduced fare tickets. There never was any

suburban service, and these passengers ride on the regular trains.

Witnesses from Brampton stated that, in their opinion, reduced fares between Toronto and Brampton would have the effect of increasing real estate values there, and persons now residing in Toronto would go there to live. I have no doubt these reduced fares would prove a great convenience to the persons now residing in Brampton, but the point for decision is whether Brampton is 'unjustly discriminated'

against in favour of Oakville. The Act recognizes the right of a railway to discriminate between points, it is only unjust discrimination, or undue preference that the company is required to prove itself free from. There is evidence that no one has chosen to buy property in Oakville who would have purchased in Brampton had reduced fares to that town been in effect. There is evidence that no one has removed from Brampton to Oakville consequent upon reduced fares to that town, and there is evidence that, so far as known, no one has removed from Toronto or elsewhere to Oakville who would have chosen Brampton had reduced fares existed to that town. It may be that Oakville has to a small extent profited by these reduced fares; it may be that Brampton would profit to an equal or greater degree if they were in force between Toronto and that town; but the question is whether Oakville has profited at the expense of Brampton, and I am of opinion that such has been shown not to be the case.

Counsel for the town of Brampton asked that these tickets between Toronto and Oakville be prohibited unless the like privileges were granted to Brampton; but I am of opinion that inasmuch as it has been shown that Brampton has not been injured,

it would not be fair to the people of Oakville to make such an order.

The application must be refused.

Judgment, in dissent, Mr. Commissioner Mills, December 24, 1908, 8 Can. Ry. Cas, 168:—

The Grand Trunk Railway Company admits that it has been and is now discriminating against the town of Brampton as compared with the town of Oakville in the matter of commutation tickets.

Discrimination in tolls, or rates, against any person, commodity, or locality, is prima facie unjust, and should be disallowed by the Board of Railway Commissioners, unless facts are stated and reasons given which are sufficient to prove that, under the special circumstances and conditions of any case in question, the difference in treatment 'does not amount to an undue preference or an unjust discrimination' (Railway Act, section 77).

In every case of a lower toll given to one person, commodity, or locality than is given to another person, commodity, or locality, 'under substantially similar circumstances and conditions,' 'the burden of proving that such lower toll or difference in treatment does not amount to an undue preference or unjust discrimination, shall lie on the company' (Railway Act, section 77).

A great deal of so-called evidence was given in this case, but very little of it bore even remotely upon the point at issue, viz., whether or not the admitted discrimination against Brampton as compared with Oakville in the matter of commutation tickets is just and reasonable. The railway company made an effort to justify the discrimination; but its failure to do so was, in my opinion, most signal and complete. The only witness called for the defence was Mr. G. T. Bell, general passenger and ticket agent of the company.

Mr. Bell went at length into an explanation of the reasons why the company had issued commutation tickets to Brampton and other places for a number of years, and

why it had ceased to do so, especially in the case of Brampton.

Mr. M. K. Cowan, counsel for the railway company, stated that the commutation tickets were withdrawn from Brampton, because 'they had not been taken advantage of'; and Mr. Bell testified that they were withdrawn on account of a demand, backed by a threat, from the business men of the town, because so many Brampton people were availing themselves of the commutation tickets to purchase goods in Toronto. Note Mr. Bell's evidence on this point. Question by Mr. Fullerton: 'When you were giving commutation tickets to Brampton, the traffic got so large that it alarmed the Brampton merchants, and they, as you said, put a pistol to your head?' Answer by Mr. Bell: 'It got enough for them to get excited'; but, he adds, 'it was not the class of traffic the rate was put in to cultivate. It was people doing business and living in Brampton, and coming in daily to the city.' Further—question by Mr. Cowan: 'Is it

possible to bring up a suburban service between here and Brampton by commutation tickets?' Answer by Mr. Bell: 'I cannot believe it possible in the conditions existing.' Thus the company is represented as withdrawing the commutation tickets from Brampton at the direction of the business men of the town because so many people were going 'daily to the city,' and at the same time justifying the withdrawal on the ground that it was then and is now impossible to develop a reasonably profitable suburban traffic between the town and the city,—traffic of the kind which the company desires; but no evidence is given to prove that the admitted discrimination against Brampton is not unjust or unreasonable.

Mr. Bell stated that, after making an experiment with commutation tickets, the company had withdrawn them from certain places, including Brampton, and had decided to continue them at Oakville, because 'some people in Oakville, during this experimental stage, had bought homes in the country, that they might have to sacrifice if the cheap rates were withdrawn'; but farther on, he stated that he could not tell how many people living at Oakville were doing business in Toronto when the company decided to continue the tickets to Oakville and withdraw them from Brampton. He was, he said, 'just stating the general principal'; but he gave no evidence as to how many then had or now have vested interests in Oakville, neither the number of the people nor the extent of their interests; nor any evidence as to the amount of property which might be sacrificed, especially in view of the fact that there is now an electric line between Oakville and Toronto; nor anything which could be called evidence as to whether or not there were and are similar vested interests in Brampton, from which town there is no competing electric line to Toronto.

The population of Brampton is nearly double that of Oakville; the two towns are practically the same distance from Toronto; Mr. Bell's evidence proves that there was a very considerable amount—to the merchants of Brampton, an alarming amount—of daily traffic between Toronto and Brampton when the commutation tickets were withdrawn; and the evidence of other witnesses examined at the hearing, tends to show, without actually proving, that, with commutation tickets such as those sold to the people of Oakville, the suburban traffic on the Grand Trunk Railway between Oakville and Toronto.

I would not at present be disposed to order the issue of any class of tickets which would reduce the revenue of the company; but it was not urged that commutation tickets such as those asked for by Brampton would result in a reduction of revenue. The regular return trip ticket from Brampton to Toronto costs \$1.10; and a 55-trip commutation ticket, good for one month, costs \$7.15. The former is purchased only by people who must, or think they must, travel; and the latter (the cheaper ticket) appeals, not only to those who must do a certain amount of travelling, but also to the much larger number of people who need not travel, but will do so for a consideration—an inducement offered in the way of rate reduction, combined with the possibility of a greater variety of goods and better bargains in buying and selling; but no one can avail himself of the benefit, or supposed benefit, of the cheaper ticket until he has paid the company \$7.15, which is sure income to the company whether the purchaser makes the whole or only a small proportion of the trips within the month covered by the ticket; and so on for each succeeding month. Hence it seems almost certain that the use of commutation tickets such as the above, on ordinary trains, without any additional expense for equipment or service, would pay the company better than the use of the ordinary return-trip ticket; and I think this is true wherever the traffic may be-from surrounding towns and villages to Montreal, Quebec, Toronto, Hamilton, London, Ottawa, Kingston, or any other important business centre. I express no opinion as to whether the issue of commutation tickets, under approved conditions, would benefit the country as a whole, but I am satisfied that it would increase the revenue of the railway companies.

In his evidence regarding the withdrawal of commutation tickets from certain places, Mr. Bell said: 'We took the view that it was right to continue to use commu-

tation rates where the ordinary train service made it possible for people to live in the country and come into the city and do their business and go back at reasonable rates.' Now, this is precisely the condition of things at Brampton. It was clearly proved at the hearing that the present train service on the Grand Trunk at Brampton is adequate, satisfactory, quite equal to that furnished at Oakville; and the council and Board of Trade of Brampton specifically stated that their application was for commutation tickets to be used on the ordinary trains running between Toronto and Brampton—that and nothing more; so, on Mr. Bell's own evidence, it would appear that Brampton should have commutation tickets.

Hence, to sum up, I would say that, as I understand the case, the facts are as follows:—

(1) Complaint was made to the Board by the applicant and other interested parties, alleging that the Grand Trunk Railway Company was discriminating in tolls, or fares, against the town of Brampton as compared with the town of Oakville.

(2) At the hearing of the complaint, the railway company admitted that it was discriminating against the town of Brampton, but not unjustly so—maintaining that the discrimination complained of and admitted was just, fair and reasonable.

(3) The said railway company completely failed to justify the said discrimination—not having given any evidence which, by the utmost stretch of imagination, could be said to prove that the difference in treatment of the town of Brampton as compared with the town of Oakville, is either just, fair or reasonable.

Therefore, my judgment is that the Board is under obligation to take such action as may be necessary to remove the discrimination, either by ordering the restoration of commutation tickets to the town of Brampton, or by simply directing the railway company to cease and desist from further discrimination against the said town as compared with the town of Oakville in the matter of commutation tickets.

Order dismissing the application issued December 28, 1908.

On February 6, 1909, the applicant applied for a re-hearing. This application also refused on the ground that the Board could not see that any benefit would be gained by opening up the case.

### Crowsnest Pass Co. v. Canadian Railway Co.

This was an application by the coal company for an order directing the Canadian Pacific Railway Company to provide a special tariff of tolls to be charged by the railway company to the coal company, under the provisions of the agreement between the British Columbia Southern Railway Company, the Canadian Pacific Railway Company and the Canada Coal Company, Limited (now the Crowsnest Pass Coal Company), bearing date July 30, 1897; and to refund to the applicant all charges in excess of such reduced rates collected by the railway company.

The facts of the case are fully set out in the judgment of the Chief Commissioner.

November 23, 1908.—Chief Commissioner Mabee, 8 Can. Ry. Cas. 33; The applicant asks for an order that the railway company do file a tariff from all points on the property of the applicant company, viz., Michel, Fernie, Coal Creek, Morrissey Junction and Carbonado, and hereafter to all other points at which collieries may be established by the applicant company for all 'plant,' as defined by an agreement of February 19, 1906, which the applicant company may ship over the lines of the respondent, required by the applicant for the construction and operation of their works, such tariff to be not more than six-tenths of the present tariff rates on such materials for carload or less than carload, and to refund to the applicant company all excesses which the respondent has charged the applicant on such plant since May 1, 1907, and generally to file tariffs in compliance with the provisions of paragraph 14 of an agreement of July 30, 1897.

On the last mentioned date a lengthy and somewhat complicated agreement was entered into, to which the British Columbia Southern Railway Company, the respondent, and the Kootenay Coal Company were parties, the applicant company being formerly the Kootenay Coal Company and admittedly entitled to the benefits of the agreement.

Paragraph 14, under which relief is sought, is as follows:-

'The construction materials required by the coal company to be used in the construction of permanent works, and for timber used in its said mines, and carried by the Pacific company to the coal company's said mines from points on the line of the Pacific company's said railway, the coal company will be charged by the Pacific company for the carriage of all such materials no more than the rate of one cent per ton of 2,000 pounds per mile, such construction material to include rails, fastenings, ties, bridge timber, and lumber required by the coal company, provided that such material may be carried a distance of not less than 100 miles on the Pacific company's railway, and that for all plant shipped by the coal company over the lines of the Pacific company, and required by the coal company for the construction and operation of the said works, the coal company shall be charged by the Pacific company at the rate of not more than six-tenths of the ordinary tariff rates on such materials for carload or for less than carload.'

When this agreement was entered into the works of the coal company had not been established, and the respondent had no line of railway in the locality where it was the intention of the coal company to locate what has since become an industry of very large proportions and in which upwards of \$5,000,000 have been invested.

Nothing turns upon the portion of the above paragraph concerning the carriage of materials at one cent per ton per mile, and it was stated that the regular tariff rate of respondent upon such material was less than the amount agreed upon, and the applicant was charged upon such material at the tariff rate.

On February 19, 1906, an agreement was entered into by the parties to this contest under which the following articles were considered as 'plant' under the above clause 14:—

Asbestos.

Babbit metal.

Brattice cloth.

Bridge on Tipple material and machinery, including conveyors, link belt or other transmission machinery, screens, picking tables, dumps, car hauls and parts thereof.

Castings, iron, steel or brass.

Chain iron or steel.

Electrical machinery and parts, including generators, dynamos, motors, lamps, globes, sockets, wire, insulators and transformers.

Engines, stationary, including boilers, condensers, compressors, box car loaders, air receivers, hoists and parts thereof.

Fire engines and apparatus.

Harness and saddlery.

Horses.

Hose, water and steam.

Iron bolts, nuts, rivets and washers.

Iron, bar and other iron and steel.

Locomotives, steam, air or electric (used in and about the mines.)

Machinery and parts thereof, including blocks, pulleys, shafting, coal and rock drills.

Mine cars and parts, including trucks, irons and wheels.

Machine shop material.

Machine shop machinery and parts thereof.

Machinery packing.

Mules.

Nails and spikes used in mine structures.

Pipe, lead, vitrified, soil, wood, including fittings, injectors, lubricators and valves.

Pumps and parts thereof.

Rails, fastenings, and switch material used in and about the mines, not over 45 lbs. weight per yard.

Rope, all kinds.

Safety lamps and parts.

Scales and parts.

Tools, including files, saws, coke forks, wheelbarrows, axes, shovels, spades, picks, handles, lanterns, globes, grindstone, wrenches, anvils, bellows, dirt scrapers, machinists' and machine shop tools.

Wire, plain.

Vehicles and parts, including wagons and sleighs.

The agreement of July 30, 1897, was entered into in good faith, and has been carried out by the parties, except as to the matter which gives rise to this application. Many covenants were entered into by the parties to that agreement, and one result of it was that the respondent company obtained the conveyance of a very large area of coal lands, estimated by a witness at the hearing as being worth many millions of dollars, but in the view I take of this application it is neither needful nor desirable that close or accurate attention be paid to the consideration received by the respondent company for entering into the covenants embraced in this agreement, one of which was the one in contest.

The respondent agreed to construct a line of railway; this was done. The applicant agreed that this large area of coal lands should become vested in the railway company, and this covenant was fulfilled. All other covenants contained in the agreement were carried out, except that the railway company says that the provisions of the Railway Act prevent its carrying over its lines plant shipped by the applicant company for the construction and operation of its works at six-tenths of its ordinary tariff rates, and that such an agreement was and is illegal.

It was stated that when the agreement was originally entered into there was no demand in that locality for the class of articles the railway company was agreeing to carry at reduced rates; that there were no industries in existence, and, therefore, no persons against whom the six-tenths clause of the agreement would be a discrimination, and that, therefore, the agreement was valid when entered into. Be this as it may, it, I think, is not necessary to decide whether the agreement was opposed to the Railway Act of 1888, and the only point for decision here is whether the application can succeed in view of the provisions of the Railway Act now in force; and I am of the opinion that the fairer position to leave the parties in is to deal with the situation upon the footing of the present legislation, leaving the applicant to take such other proceedings as it may be advised with respect to the consideration alleged to have been given for the covenant of the railway company for this reduced freight rate, if such course is open to it.

Admitting the jurisdiction of this Board to make an order of the kind asked for, as to which I have grave doubt, although jurisdiction was not disputed by the railway company, I do not think the application can succeed.

It is admitted that at the present time large development has taken place in the portion of British Columbia to which this agreement applies, and there are many persons, firms, and corporations requiring carriage by the railway company of the class of articles and material as defined by the agreement of February 19, 1906, into that district, and into the towns mentioned in the prayer of the petition, there are other coal companies within varying distances, some within one hundred miles of the applicant's coal area and plant, requiring similar articles and material, and the success

of this application would mean that the applicant would pay but six-tenths of the regular tolls charged to others upon all the various materials mentioned in the agreement of February 19, 1906, and this for all time to come, so that in future years if the railway company reduced its rates upon these articles, or any of them, or were so required by the Board, the tolls to be paid by the applicants would continue to be but six-tenths of such reduced rates, and so discrimination in its favour would continue for all time. I think such a condition is opposed to the spirit as well as the express provisions of the Railway Act.

Mr. Marsh argued with much force that all this was quite permissible, as the applicant had paid an adequate consideration for the favoured treatment, and he cited some English and American cases that go to support that contention. I have gone through most of these, and while some can be distinguished, both as to the facts and the terms of the various statutes upon which they were decided, it is sufficient to say that the same are not binding upon this Board, and no such principle has as yet been introduced into the railway jurisprudence of Canada, and it has been dissented from in other cases both in England and the United States. It is impossible to find as a fact that the consideration passing from the coal company to the railway company It is contended this consideration requires the railway company to was 'adequate.' carry at these reduced tolls for all time. Who can say what the actual sum was that was paid? The area of coal lands so conveyed are undeveloped, and their value is based upon opinion evidence only. Who can say how much material is to be carried by the railway company for the coal company, and what the length of time that such carriage is to continue? Who can say to what extent the tolls upon these articles may be reduced in future years by reason of competition or otherwise? matters upon which reasonably accurate information must be had before it could be said that the coal company had paid to the railway company a consideration that could fairly be said to make up the other four-tenths of the tolls, thereby eliminating the discriminatory feature of the agreement.

In this case no finding could be made that the consideration was 'adequate'; but if the contrary was the case, I would not follow the cases cited for the proposition

that under our law any such agreement can be made.

The Railway Act requires that under substantially similar conditions the tolls charged shall be equal to all persons, and at the same rate, whether by weight, mileage, or otherwise, and any reduction or advance either directly or indirectly, is expressly prohibited. No undue or unreasonable preference or advantage can be permitted to any person or company. The object of the legislation is to place every one upon terms of absolute equality, and if agreements were permitted to be entered into for reduction in tolls or for other preferential treatment, the door would be opened wide for the defeat of the Act, and the Board would be called upon to struggle with all sorts of conditions, opinions, and complications in the determination of such cases.

It will not be understood that I am expressing the opinion that such was the object of the present agreement, the conditions existing when the same was entered

into were such that the contrary opinion might be arrived at.

I think the application must be refused.

Order, dated 20th November, 1908, dismissing the application, issued accordingly.

# Laidlaw Lumber Company v. Grand Trunk Railway Company.

The R. Laidlaw Lumber Company, Limited, of Toronto, applied to the Board for an order directing that the order of the Board No. 4988, dated July 8, 1908 (the general interswitching order), be made retroactive, so as to apply to all cars loaded with lumber received over the line of the Grand Trunk Railway Company from February, 1907, until the interswitching arrangements prescribed by the Board in the said order become effective on the 1st September, 1908; and switched by the Canadian Pacific

Railway Company to the applicant's siding at Dundas street; and also that the Grand Trunk be required to refund certain switching charges collected by that company prior to the said 1st day of September, 1908.

Counsel for the applicant contended at the hearing that the general interswitching order of July 8, 1908, was declaratory and related back to the time at which the complaint was filed—the original application was filed in April, 1907—that the charges paid by applicant were paid under protest and should be refunded; and that the railway company had no lawful right to collect the tolls at all except under an order of the Board.

Judgment of Mr. Commissioner McLean, concurred in by Chief Commissioner Mabee, December 1, 1908 (8 Can. Ry. Cas., 192):—The decision of the Board in this case must be governed by the decision of the Joint Switching Rates Case (Case No. 182); Canadian Manufacturers' Association v. Canadian Freight Association, 7 Can. Ry. Cas., 302.

While the question of interswitching was dealt with in the London Case; Grand Trunk Ry. Co. v. Canadian Pacific Ry. Co., and city of London, 6 Can. Ry. Cas., 327, the Board was careful to limit itself to the mere facts of the particular case before it. For it refused to deal in a general way with the question of the division of interswitching rates in reference to all the points in Canada where the railways of the two companies concerned connected.

It is admitted in case 182 that it had, for a considerable period, been the practice of the railways in Toronto to absorb the interswitching charges. In the hearing at Toronto it was suggested that the applicant company had furnished antecedent consideration for the continuation of the practice of absorption. This was, however, by the way and not material. In addition, the late Chief Commissioner held that the existence of such practice of absorption for a period of time did not preclude railways changing the practice. Canadian Manufacturers' Association v. Canadian Freight Association, et supra, 308.

In the absence of a joint tariff, including the switching charges, it was open to the railway to charge its standard tariff, and in addition thereto switching rates. Thid 306 308

While a comparatively sudden change from the practice of absorption of the switching charges to a practice of charging the shippers for the switching services, may have been arbitrary, the railway was within its legal right in so acting.

It is alleged that the interswitching tariff of the Grand Trunk, effective March 1, 1907. was simply a tariff as between the railways and not having been properly filed was illegal. While it was advisable that switching tariffs should be filed with the Board, the non-filing of such tariffs was not illegal prior to the issue of the order of July 8, 1908, by the Board; *Ibid.*, 308.

While the Board may require the two railway companies to treat traffic involving interswitching as joint traffic, it was not illegal, in the absence of the filing of a joint tariff, covering switching services, for the railway to charge an additional sum for its switching services which are something distinct from the ordinary work of transportation, although such switching charges might not have been filed. The argument then from the switching tariff, as between the railways themselves, fails.

Under an order of the Board of July 8, 1908, effective September 1, 1908, there were established regulations in regard to the switching charges on traffic, both competitive and non-competitive. The applicant claims that in so far as the interswitching rates charged by the railways were in excess of those established by the order of the Board, there should be a refund. The first portion of the complaint of the applicant, namely, that dealing with the conditions under the tariff, effective March 1, 1907, has already been dealt with. There is no complaint that the Grand Trunk tariff, effective June 5, 1907, was not properly filed, or that it did not properly notify the public. While the subsequent order of the board did reduce the switching rates

on non-competitive traffic, the Board has no power to make a retroactive alteration in a tariff, which is not contrary to any of the provisions of the Railway Act, so as to apply the alteration to past transactions; Dominion Concrete Company vs. Canadian Pacific Railway Co., 6 Can. Ry. Cas., 514.

It is clear that the law in regard to interswitching had been in an inchoate condition. The order of July 8, 1908, was the outcome of a series of investigations and reports which dates as far back as 1904. In view of this and of the established policy of the Board in regard to refunds, it is impossible to grant any such retroactive order as is asked for, and the complaint of the applicant should, therefore, be dismissed.

Order, dated January 8, 1909, dismissing the application accordingly.

Note.—Upon application to the Board leave was granted to appeal to the Supreme Court of Canada on January 28, 1909.

Algoma Central and Hudson Bay Railway Co. v. Grand Trunk Railway Co.

This is an application by the Algoma Central and Hudson Bay Railway Company for an order directing the Grand Trunk Railway Company to make a joint tariff with them.

The steamers of the applicant railway wished to obtain a joint tariff with the Grand Trunk, so as to compete for traffic from points in Ontario reached by the lines of the Grand Trunk and carry such traffic from lake ports by their steamers to ports in Northern Ontario and vice versa, reached by their steamboat and railway. The Grand Trunk Railway Company has now a similar joint tariff arrangement with the Northern Navigation Company.

Judgment, Mr. Commissioner McLean, November 23, 1908, 8 Can. Ry. Cas. 46:— This is an application by the Algoma Central and Hudson Bay Railway Company for an order, under sections 7, 317, 333, 334 and 338 of the Railway Act, for a joint tariff with the Grand Trunk Railway Company.

In the earlier case of the Algoma Central and Hudson Bay Railway Company v. the Grand Trunk Railway Company, in which application was made on behalf of the steamboats of the Algoma Central and Hudson Bay Railway Company to obtain a joint tariff with the Grand Trunk, the application was refused, it being held that in terms of sections 266 and 267 of the Railway Act of 1903 a line of steamships operated by a railway company running to ports reached by the line or lines of another railway did not constitute a continuous route within the meaning of sections 266 and 267 of the Railway Act of 1903.

Algoma Central and Hudson Bay Railway Company v. Grand Trunk Railway Company, 5 Can. Ry. Cas. 196.

The applicant company relied upon section 276 of the Railway Act, 1903, as making the provisions of sections 266 and 267 extend to the traffic mentioned.

In the present application the legality of a continuous route composed by the use of vessel and rail is not involved, since this point is now covered by the Railway Act. In respect of the present application, it is to be noted that the jurisdiction conferred under sections 333 and 334 of the Railway Act in regard to through or joint rates is based on section 25 of the English Railway and Canal Traffic Act of 1888. This section is an expansion of the 'reasonable facilities' clause of the Act of 1854. Under this clause the Court of Common Pleas decided so early as 1857 that in order to grant through booking, public convenience must be made out; Barret v. Great Northern and Midland Railway Companies. 1 Ry. & C. Tr. Cas., 38.

The principles involved in the English Act of 1888 are the same as those in the Canadian Act, although the means whereby the through rate may be obtained differ.

Subsection 5. 'If an objection be madé to the granting of the rate or to the route the Commissioners shall consider whether the granting of the rate is a due and reasonable facility in the interest of the public, and whether the route proposed is a reasonable one . . . '

The policy of the English Railway and Canal Commission is indicated by the

following citations:-

Reasonableness of the through rate and the interest of the public are the tests by which the demand must be tried.

Didcot, Newbury and Southampton Railway Company v. London and South-

western Railway Company et al, 10 Ry. & C. Tr. Cas. 9, pp. 15, 17.

' It was not the intention of parliament, nor has it been the practice of the court to encourage applications for through rates, the only effect of which would be to transfer traffic from one route to another, or to reduce reasonable rates.'

Ib. per Lord Cobham, 25.

A through rate was refused because not a facility in the interests of the public. Swindon, Marlborough and Andover Railway Company v. Great Western and London and Southwestern Railway Companies, 4 Ry. & C. Tr. Cas. 349, p. 350.

"... however desirable a reduced rate may be in the interests of the public, it is always necessary to see whether there is a commensurate advantage to the railway company who may be forced by the decision of the Commissioners to accept a lower scale of charge than that which it is actually making and to which it is entitled.'

Per Collins, J., in Plymouth Chamber of Commerce v. Great Western and Lon-

don and South Western Ry. Cos., 9 Ry. and C. Tr., Cas. 72.

"... I for one should be inclined, in a case of this sort, to take very seriously into consideration, on the question of public interest, the fact that two competitive routes must tend to make either company more likely to give reasonable concessions to traders.'

Plymouth, Devonport and Southwestern Junction Railway Company v. Great

Western Railway Company et al, 10 Ry. & C. Tr. Cas. 68.

While the jurisdiction of the Interstate Commerce Commission of the United States differs in various respects from that of the Canadian Boards, the similarity of some of the problems to be dealt with make the findings of the former body of interest. The Interstate Commerce Commission has passed on the question of joint or through rates in Loup Creek Colliery v. Virginian and Chesapeake and Ohio Railway Companies, 12 I.C.C.C. Rep. 471.

In this case Commissioner Clements said: 'Joint rates are only empowered with the manifest intent of giving effect to the general purposes of the Act to regulate commerce by securing reasonable facilities to the public and by preventing unreasonable and unjust rates, facilities and discriminations. P. 477. It has also been held that there should be considered the adequacy of the existing shipping arrangements. Relief to shipping communities, not aid to carriers in obtaining strategic advantages in their contests with one another is what is to be considered.

Chicago and Milwaukee Electric Ry. Co. v. Illinois Central Ry. Co., 13 I.C.C.

Rep. 20.

It is well established that the public interest and the question of the reasonableuess or otherwise of the existing rate arrangements are the vital points in any application for through rates.

I am of opinion:-

(1) That the Algoma Central has not proved that there is a public interest involved, or

(2) That the existing rate arrangement is unreasonable.

Chief Commissioner Mabee.—I agree.

November 24, 1908. Mr. Commissioner Mills.—The serious thing to my mind is that, with the present local rates on the Grand Trunk (so much higher than those charged to the Northern Navigation Company) the applicant company is prohibited from carrying its own supplies and its own manufactured goods in its own boats, and it should not be overlooked that the Northern Navigation Company now finds it necessary to increase the number of its boats in order to accommodate the traffic via the Grand Trunk.

Order dismissing application issued December 12, 1908.

# Cartier Stop-over Case.

The Transportation Bureau of the Montreal Board of Trade complained against an additional charge of one cent per one hundred pounds imposed by the Canadian Pacific Railway Company at Cartier, Ont., on western grain and grain products, in carloads, consigned to Cartier, 'For orders.'

The matter was heard at the sittings of the Board held in the city of Montreal, at which counsel for the complainants, the railway company, the Dominion Millers' Association, and the Canadian Manufacturers' Association were present, and evidence was offered.

The judgment of the Board was delivered by Assistant Chief Commissioner Scott. Judgment, January 2, 1909:—

The Transportation Bureau of the Montreal Board of Trade complain against the additional charge of one cent per hundred pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products, in carloads consigned to Cartier, 'for orders,' under supplement No. 13, effective September 1, 1908, to the company's tariff C. R. C. No. E, 678, and still in force by supplement No. 15 to the same tariff.

It has been the custom for many years, for the railway company to permit grain shippers sending cars from Fort William east, to have the cars billed to some point on the line of railway, formerly North Bay (now Cartier) 'for orders.' Upon arriving at the stop-over point the car is then held, subject to further instructions from the consignee as to the point of destination. The privilege is, undoubtedly, of substantial value, as the shipper in this way is enabled to get his grain some 500 miles nearer its destination without having to name it at the time of shipment.

As the through rate is charged for transportation to the final destination, the company only makes the stop-over charge to pay itself for the services rendered at Cartier. If the consignee's instructions have not been received at Cartier prior to the arrival of the train containing his car to be re-directed, it is placed on a siding and is held by the railway company until his instructions are received. The railway company must, of course, break its train and perform a special shunt if the car is to be put on the siding for orders. As this is a substantial service, I think the railway company is entitled to a fair remuneration.

At present the railway company is charging for this additional service one cent per hundred pounds, so that the charge per car may vary from four to eight dollars. I think the minimum \$4 is too high a charge for the service rendered.

I, therefore, am of the opinion that the present tariff should be disallowed, but I would approve of a tariff containing a charge of one dollar per car for each day of twenty-four hours or fraction thereof, for stop-over 'for orders' privileges. In fixing this amount, I have taken as a fair basis of value the dollar charge per car per day which has been established as a fair allowance for the use of a car standing on the track in the 'Canadian Car Service Rules.'

I would not differentiate between the case, where the instructions for reshipment arrive at Cartier before the car, and the case where the car arrived before the instructions, although the service rendered by the railway company in the second case would

be more than in the first; because, if the question as to which arrived first at Cartier became an important element in determining the charges, there would, undoubtedly, be confusion and friction between the shipper and the railway company. As pointed out by the chief traffic officer of the Board, it would be fair to set off the advantages to the railway company in the first case against the extra service in the second case, and merely allow the standard charge of one dollar per car for twenty-four hours in all cases.

When we had the Cartier stop-over question before us at the Montreal sittings, we were not given any evidence with reference to the Fullerton Lumber Company complaint against the Grand Trunk for stop-over charges at Sarnia tunnel. If the principle involved in the Sarnia case is similar to the Cartier case, then this judgment

will also apply to the Sarnia case.

Order, dated the 21st January, 1909, issued, directing that the charge of one cent per 100 pounds imposed by the Canadian Pacific Railway Company at Cartier, Ontario, on western grain and grain products in carloads, consigned to Cartier 'for orders' under supplement No. 13, effective September 1, 1908, to the company's tariff C. R. C. No. E. 678, and still in force by supplement No. 15 to the same tariff; and by the Grand Trunk Railway Company at Sarnia tunnel, or grain and grain products, in carloads, originating in western Canada, destined to points in eastern Canada, and routed via Chicago, Chicago junctions, or Milwaukee to Sarnia tunnel, Ontario, 'for orders,' under supplement No. 3 to the company's tariff C. R. C. No. E. 1101, be disallowed, and a 'stop-over' charge of twenty-five (25) cents per car a day for the first forty-eight hours, and the car service toll thereafter, substituted therefor.

Provision was also made that the order become effective not later than the 15th

February, 1909.

Re Complaint Wallaceburg Sugar Company, Limited, of Wallaceburg, Ontario.

This was an application by the Wallaceburg Sugar Company for an order establishing what is generally known as an average demurrage plan. The facts are contained in the judgment of the Assistant Chief Commissioner.

Judgment, Assistant Chief Commissioner Scott, February 4, 1909, concurred by

by Chief Commissioner Mabee, 8 Can. Ry. Cas., 332:-

The average demurrage plan, which the applicant seeks to have established, may be described as the giving of credit of free time by a railway company for use of a freight car to a consignee, when the amount of time he takes to unload the car is less than the amount of time allowed to do so by the car service rules; which credit, or spare time, is set off against excess time, for the use of other cars for which the railway company now charge the consignee demurrage.

At the hearing of this case, it was urged by the applicant that as the average system existed in the state of Michigan where some of its competitors were, that it should be adopted in Canada, at least in so far as the sugar refiners were concerned. It was also stated that the Michigan refiners were able to purchase their raw material in Canada, but the Canadian refiners were denied the privilege of purchasing in Michigan; that the American manufacturer was protected by a duty of \$1.77 per hundred pounds, while the protection granted the Canadian manufacturer was but \$3 cents, and that therefore some special consideration should be granted the applicant. I cannot see how the fairness or the justice of the system upon which charges for car service in Canada are made, is affected by these conditions which surround the sugar refiners of this country or why, because such conditions exist, a radical change in the system should be made.

Mr. Gordon, the general manager of the Wallaceburg Company, told us that while they can regulate the number of cars of beets ordered per day from the farmers, they cannot control the numbers of cars per day which the railway companies may

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deliver, and that as a result they are sometimes 'swamped.' He said that on an average, they unloaded 22 cars per day during the past year, but have unloaded as many as 90 cars in a day. About 60 per cent of the beets consumed at the refinery are hauled by rail; the haulage of the other 40 per cent being equally divided between water transports and teams.

That the company is capable of handling a fair number of cars within the time allotted by the Canadian car service rules, is quite apparent from the statement submitted with its application, dated November 11, 1908. It shows that during a certain period 1,051 cars were unloaded, and that the average time per car was 31½ hours. Of this number of cars, 855 were not held longer than the 48 hours free time allowed for unloading under car service rules. This proves that, under ordinary circumstances, 48 hours is sufficient time to be allowed for unloading a car of beets.

If special circumstances occur, for which the consignee is not responsible, which prevents him from unloading the cars delivered within the allowed free time, the car service rules provide that demurrage shall not be charged for necessary additional time. For instance, allowance of extra time is made when cars are tendered to the consignee under conditions for which the railway company is responsible in numbers beyond his ascertained reasonable ability to unload, or where the weather is inclement and unsuitable for unloading. These rules are interpreted, not by the railway company interested, but by the Canadian car service bureau, whose manager, Mr. Duval, stated under oath that the rules are interpreted most liberally to the consignee, and that the object of the bureau was to secure the quick release of cars, rather than the collection of demurrage for the railways.

This can be well understood even from the railway point of view, because while the car is held the company can only get \$1 per day for it, whereas the earning capa-

city of a freight car in service is about three times that amount.

The average system suggested, in my opinion is not justifiable under the contractual relations which exist between the consignor or consignee (as the case may be) and the railway company. The contract or carriage is, that the railway company will carry goods to the point where they are to be delivered to the consignee, who in turn is to unload and release the car with all reasonable despatch. For more certainty and uniformity of practice, rules have been adopted, which say in effect that, 'reasonable despatch' for unloading shall not, in the case under consideration, exceed 48 hours. If a man exceeds this reasonable time in unloading, he is penalized by a charge of \$1 per day for the extra time he may hold the car. Such a provision is in the public interest, because it makes a consignee prompt in releasing cars consigned to him and thus increases the supply of available cars for the shipping public.

In my opinion, the average system might have the effect of making a consignee dilatory about unloading so long as he had free time to his credit, and if he had not free time to his credit the circumstances would be the same as they are under the pre-

sent rules.

The Canadian Car Service Rules have only been in force since March 1, 1906, and it has taken some time to get the public to understand them. They may be defective in some details and require to be amended, but I think they are founded on sound principles which should not be departed from.

The uncontradicted evidence of Mr. Duval, of the Car Service Bureau, to the effect that cars are being released more quickly by consignees under these rules than

was done formerly, proves that the desired result is being accomplished.

The intention is that, under the Car Service Rules, each car shall be dealt with by itself and without reference to the movements of other cars. This insures equal treatment of the smaller shipper or consignee with the larger one. But, if the average plan were in force, I can well see that an injustice would be done the smaller dealer by giving an advantage or preference to the dealer who had a large number of cars to unload. Suppose, a dealer with a large capacity for storage, received fifty

cars of merchandise, which under the rules he had two days to unload, and unloaded them all the first day. He would then have fifty days to his credit. The next day, he and a small competitor each received one car. The small competitor would have to unload in two days or be penalized, while the other could hold his car for fifty days free time, which might prove to be of very material advantage. It may be said that this is an extreme case. It doubtless is, but it shows how the average demurrage plan might work out unless there were limitations upon it. Mr. Gordon suggested, that the plan might be adopted for those in his line of business only. I do not think it would be advisable at this early date to start making exceptions to the general principles laid down in the Car Service Order, which has not yet been in effect for three years. These principles are, in my opinion sound, and should not be interfered with.

If the applicant cannot get redress under the rules from the Car Service Bureau, he may apply to this Board and his complaint will be heard. I am, therefore, of opinion that this application should be dismissed.

Order, dated February 8, 1909, dismissing application, issued.

The Anchor Elevator and Warhousing Company, Limited, and The Northern Elevator Company, Limited, v. the Canadian Pacific Railway Company.

The Anchor Elevator and Warehousing Company, Limited, and the Northern Elevator Company, Limited, both of Winnipeg, complained against the excessive charges made by the Canadian Pacific Railway Company for switching 'in transitu' grain from the St. Boniface transfer track to the complaints' elevators on the line of the Canadian Pacific Railway Company at Winnipeg and return to the same transfer track for redelivery to the Canadian Northern Railway Company.

The complaint was heard at the sittings of the Board held in Winnipeg, February

6, 1909.

The facts are fully set forth in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, March 31, 1909. (9 Can. Ray. Cas. 175.) The elevators of the applicants are located upon the lines of the Canadian Pacific Railway Company at Winnipeg, and their complaints allege excessive charges made by that company for switching services rendered to the Canadian Northern Railway Company for the movement of cars arriving by the latter line at the St. Boniface transfer track, to the applicants' elevators some three miles distant. The complaints arise with reference to traffic originating at points upon the lines of the Canadian Northern and destined to Fort William or Port Arthur, and which takes the through rate, but is required by applicants for delivery at their elevators in transit upon the stop-over privilege of 1 cent per 100 pounds.

Prior to the general interswitching order of July 5, 1908, the charge made by the Canadian Pacific Railway Company for the services in question was \$5 per car, and since that order the charge has been 1 cent per 100 pounds, in and out, so while the applicants formerly paid \$10 they now pay \$12 upon a 60,000 pound car.

The applicants are under the impression that the Canadian Northern Railway Company should be required to absorb some portion of this toll, and that the order of

July 5 applied to the class of service here in question.

When the provisions of that order were being considered, there was no intention that it should apply, except at terminals, and it was never intended to have application to movements required to enable milling in transit upon a through rate. The initial carrier becomes entitled to the extra 1 cent per 100 lbs. above the through rate for the services performed upon its own line, delay in releasing its cars and the like, afterward receiving the grain or product for transmission to its destination at the balance of the through rate. The 1 cent was regarded as a reasonable toll for these privileges to the shippers, and it would not be fair to require the carrier to absorb a portion of a switching service performed by an intermediate carrier that might not only dissipate the 1 cent per 100 lbs. but also the balance of the through rate.

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In the case in hand, the Canadian Northern is required to carry the grain in question, or its product, on to its destination, after being cleaned or ground at Winnipeg, at the balance of the through rate, and it does not seem reasonable that the 1 cent per 100 lbs. it receives for the stop-over privilege it grants should be encroached upon for the purpose of assisting in the payment of a switching charge made by the Canadian Pacific Railway Company for the convenience of the applicants, and rendered necessary by reason of the elevators not being on the lines of the Canadian Northern; at any rate it was not present to the mind of the Board that the order of July 5 should apply to such a situation. Winnipeg is not the terminal point to which the grain in question is shipped. It is an intermediate point only. The terminal or point of destination is the lake port to which the shipment moves upon a through rate.

The interswitching order provides 20 cents per ton as a reasonable toll with \$3 minimum and \$8 maximum. These figures were not established as being aplicable to the class of service at an intermediate point in connection with traffic that is not joint, but were fixed at what might as all round be regarded reasonable when applied to all carriers performing switching services in order to make delivery at terminal points, and the Board is of opinion that tolls for services performed by an intermediate carrier to enable the shipper to enjoy stop-over privileges must be determined as reasonable or otherwise quite apart from the provisions of the interswitching order.

The Canadian Pacific Railway was represented by counsel at the hearing, and the Board had the advantage of hearing the views of its representatives. No evidence was

given of the cost of the service in question, or otherwise.

The Canadian Pacific tariff of 1904 provides for a charge of \$3 for the service in question. Subsequent tariffs fix the toll at 1 cent per 100 lbs., minimum of \$5, and this latter is the sum that was charged prior to the order of July 5. The provisions of that order not being applicable to this service, the charge should not have been made upon the basis provided for in it, but the company should have continued the tolls exacted before its issue. The \$5 charge may be regarded as reasonable and tariffs should be filed accordingly. Refunds in excess of the \$5 already paid cannot be directed, as strictly speaking the companies charged the tolls called for by their tariff, although why they were not imposed before the making of the interswitching order did not appear.

The Canadian Pacific Railway Company should be added as a party respondent. An order, directing that on grain carried via Winnipeg at the lawfully published and filed through rate, with the privilege of stopping in transitu for the purpose of manufacture, storage, or treatment, on the tracks of another railway company within its yard limits at Winnipeg, and on which the additional 'stop-over' charge, duly published and filed (if any be made), does not exceed one cent per 100 pounds, the further additional tolls collectable by the company on whose tracks the industry or warehouse is situated, for switching the said grain from the point of interchange at Winnipeg or St. Boniface to the proper unloading tracks, and for reswitching the said grain, or the product thereof, back to the said point of interchange, shall not exceed five dollars (\$5) per car load, regardless of weight, in each direction; the said tolls to become effective at Winnipeg not later than the 17th day of May next, and to be shown in the grain tariff which provide for 'stoppage in transitu' at Winnipeg for the purposes herein indicated, as well as in the tariffs of interswitching tolls,—issued April 20, 1909.

John McKenzie, J. H. Scobell and Rideau Lumber Co. v. Grand Trunk Railway.

John McKenzie, of Ormsby; J. A. Scobell, of Kingston; the Rideau Lumber Company of Ottawa, and others, complained that the freight rates charged by railway companies on telegraph, telephone and trolley poles were unjustly discriminatory with respect to the rates charged on lumber and other forest products.

Chief Commissioner Mabee, in delivering the judgment of the Board (March 25, 1969), 8 Can. Ry. Cas. 339, said: 'The impression I formed at the hearing was that, although there was some extra risk in the carriage of poles, yet that no reason existed why they could not be safely loaded if proper care were exercised. I think an order should issue embodying the recommendations of the Chief Traffic Officer.'

Mr. Hardwell, Chief Traffic Officer of the Board, reported as follows:

'Prior to the issue of the order of the Board dated July 30, 1904, Scobell v. Kingston and Pembroke Railway Company, telegraph poles were not rated in the Canadian freight classification, but were specified for carriage by special contract only. By that order wooden telegraph, telephone and trolley poles were added to the list of commodities which are included in the Canadian classification under the heading of "lumber." The classification now reads as follows:—

Under the classification, the minimum carload weight for 10th class traffic is 30,000 lbs. per car of not over 36 feet 6 inches inside or platform length, and that is the minimum charged for short poles on single cars; on long poles Rule 1 (c) provides that long poles requiring two or more cars for carriage are charged the 10th class minimum of 30,000 lbs. for the first car, and two-thirds of the classification minimum, or 20,000 lbs., for each additional car over which the poles extend.

That order did not mean that the companies were to charge 10th class rates and none other on poles, any more than on lumber and other forest products which are generally carried at commodity rates; the intention was to abolish the special contract privilege as tending to variation and discrimination. Whether or not, as a result of that order, taken in connection with the remark of the Chief Commissioner in the judgment that "the second ground of complaint that the rates upon telegraph poles were excessive in that they were higher than the rates on ordinary lumber, the Board was not satisfied that this matter of complaint had been fully and sufficiently argued," the companies, in the following November, issued new tariffs on forest products, in which the ordinary 10th class rates, under the Canadian classification, were substituted for the special mileage scale which had previously been in force. That old mileage scale, applicable, by the way, between the stations of one company only, made the rates on telegraph, telephone and trolley poles 20 per cent higher than the rates on common lumber; also, under that scale, the minimum weights for long poles requiring two or more cars were 30,000 lbs. on the first car, or the same as for single cars, and 20,000 lbs. for each additional car, so that the carload minimum weights then were practically the same as they are now.'

It was stated at the hearing, by Superintendent Donaldson, of the Grand Trunk, that on his division (the old Canada Atlantic and O.A. & P.S.) the pole shipments numbered probably 1,500 cars a year, and that about 85 per cent were short poles carried on single cars. It also appeared from the evidence that the risks of transportation which the companies considered cutitled them to higher rates on poles than on lumber pertained to the long poles rather than to the short ones. These risks, however, seemed to be attributable very largely to the lack of inspection and the non-observance of the rules of the Master Car Builders' Association governing the loading of lumber, logs, poles, &c., on open cars, known as the "M.C.B." rules, No. 30 of which reads as follows:—

'All material carried on two or three ears must always be examined by a competent inspector before the cars are moved from the loading point. If an inspector is not stationed at the loading point, the agent must give notice to the proper authority when the cars are loaded, so that proper inspection may be arranged for. The object of such inspection is to see that these regulations have been complied with.'

The M.C.B. rules give detailed instructions as to the loading of logs, poles, &c., the size of stakes, tie wires, &c., and are accompanied by explanatory diagrams, and

if these rules are strictly complied with, there would seem to be no reason why telegraph poles, under ordinary conditions, should not be safely carried. Similar risks are incurred with respect to improperly staked lumber, and the evidence seems to me to prove that the difficulties complained of should be preventable by rigid inspection rather than by the imposition of higher rates. Whether the rate be low or high, the risk exists—possibly the higher the rate the greater the risk, as shippers would probably be inclined to greater carelessness on the theory that they were paying the companies well for any extra duties thrown upon them.

It was also stated, as a reason for the higher rates, that empty cars had often to be hauled considerable distances for loads, whereas box cars may be immediately available for lumber shipments; but this same empty movement of flat cars is frequently necessary in the case of lumber and machinery shipments, racked cars for

bark, flats for logs or square timber, &c.

As regards the practice elsewhere; the Canadian Pacific carries both long and short poles on its main and branch lines in British Columbia, at the same rate as charged for lumber, but the minimum carload weights are not so favourable as in the east. These minimums are somewhat variable, but in most cases the long poles are carried at a minimum of 30,000 pounds for each car used. It is true that the rates in British Columbia are greater than in eastern Canada, but so also is the cost of haulage.

As the companies do not file their local tariffs with this Commission, I have not the means of knowing what the local rates of the companies operating in the United States may be, except in the case of the Michigan Central, whose local commodity tariff on lumber and forest products, G. F. D. No. 7576, effective July 7, 1908, I have before me. This tariff applies between all stations on the Mackinaw division and branches north of Bay City, Mich., and it applies on telegraph and telephone poles, as well as on lumber and the other forest products which are usually carried at lumber rates. The minimum weight is in accordance with the official classification, which provides a minimum of 34,000 pounds for single cars, and only 50 per cent (or 17,000 pounds) for each additional car. The rates also are lower than charged by the same company between its stations in Canada, and by the other Canadian companies. I have examined a number of joint tariffs on forest products between two or more companies within the United States, and these cover telegraph poles also.

In my opinion, taking into consideration the fact that lumber rates are applied on short timber, logs, ties, fence posts, and the like; the evidence and the practice elsewhere; the rates charged on short poles in eastern Canada are unjustly discrimmatory with respect to the rates charged on other forest products loaded on single cars, and that the companies in eastern Canada should be required to carry wooden telegraph, telephone, electric light, and trolley poles, on single cars, at the same local and joint rates as lumber, when not subject to uncontrollable competition; or, in the words of the order of the Board in the case of Gillies Bros. and the Rideau Lumber Co., dated August 1, 1906, that the tolls 'shall not be higher than the tolls provided in the special (local and joint) tariffs of the companies to apply on common lumber; except that it shall not be obligatory on the companies to charge thereon such tolls as may be made necessary by the competition of carriers not subject to the Railway Act when such competitive tolls are lower than the lowest special tariff of tolls between the same points on common lumber issued under ordinary transportation and trade conditions.' I think, also, that the phraseology of that order should apply with respect to shipments of poles from points in Canada to points in the United States between which joint rail rates on general traffic are, or may be, made by the Canadian railway companies with the concurrence of their United States connections.

As regards poles too long for a single car and requiring more than one car for their carriage, I believe the companies are reasonably entitled to higher rates than for single cars, and I would recommend that the scale used by the companies themselves

prior to November, 1904, be prescribed, namely, 20 per cent higher than for single car, the minimum weights to be in accordance with rule 1 (c) of the Canadian classification, and in the computation of the additional rate the fractions to be disposed of as follows, namely: .25 and under, nil; .26 to .75=\frac{1}{4} cent; .76 and over—one cent; the rates in no case to exceed the 10th class rates between the same points.

Order, dated March 25, based upon the traffic officer's report, issued accordingly.

Winnipeg Jobbers' Association v. Canadian Pacific, Canadian Northern and Grand Trunk Pacific Railway Companies.—Winnipeg Rate Case.

The Winnipeg Jobbers' Association applied to the Board for an order directing the Canadian Pacific Railway Company to restore the traders' tariffs previously existing in western Canada, from Winnipeg, as a distributing centre (giving the Winnipeg traders the benefit of the balance of the through rate on reshipments) instead of the new tariffs recently put in force by the railway company.

Upon a complaint by the Portage la Prairie board of trade, the Board had held that this system of traders' tariffs was illegal, as being unjust discrimination and undue preference in favour of particular persons and between different localities, and the charging of higher tolls for a shorter than for a longer distance where the shorter distance is included in the longer.

The railway company complying with the view taken by the Board, had substituted the tariffs complained of by the applicants.

The application was heard at the sittings of the Board held in Winnipeg on the 16th and 17th September, 1908.

The facts are fully stated in the judgments of the Board:-

September 17, 1908.—Chief Commissioner Mabee, 8 Can. Ry. Cas., 175:—The main branch of this case has been very fully and completely presented, and so far as the legal questions involved are concerned. I propose to deal with them now.

This matter grows out of a complaint made by the Portage la Prairie board of trade. I do not regard it as being a continuation of that matter, but I should have thought that perhaps it had better be regarded as consequent upon the order made by the board upon the complaint of the Portage la Prairie board of trade. That matter was fully considered by the Board, and the late Chief Commissioner gave his reasons in writing. It is said no formal order issued, but the railway company has attempted to comply with the view taken by the Board. The Railway Act of 1903 brought about this complaint. I do not think it has been stated how long the then existing system had been on foot, but that is immaterial. For the purpose, I presume, of establishing Winnipeg as a distributing centre, or at least assisting in that the railway companies—first the Canadian Pacific Railway Company—adopted this system of giving to Winnipeg traders or wholesalers, the benefit of the balance of the through rate on reshipments. That was confined to certain persons, who, I presume, were selected by the company or by some other body, and trade was carried on under these traders' tariffs.

A complaint was brought against this system by the Portage la Prairie board of trade, and the contention was raised that this system was discrimination as against localities and discrimination as between individuals. The Board, in its judgment, pronounced that system to be illegal, and ordered the railway company—or the railway company consented—I think the late Chief Commissioner says—to file tariffs with the view of eliminating the objectionable feature. Those tariffs having been filed—the Winnipeg interests being hard hit by them, it is contended—applied to the Board to withhold its consent to their going into effect. Those tariffs may be excessive; I do not know whether they are or not, because there is no evidence given

upon the point. It is said by counsel for the applicants that the Board is bound to find that they are excessive, because they have the effect of increasing the rates in existence under the tariffs that were held to be illegal, because discriminatory.

Now, I do not in any way disapprove of the proposition advanced by Mr. Henderson-and in support of which he cited cases-that where a rate that has been in effect with the approval of a railway company, and apparently to their satisfaction, is raised by another tariff, it is incumbent, other things being equal, upon the railway company to show why the rate should be increased. The cases cited support that principle, and it appeals to one as being reasonable. A toll has been established upon which it is presumed a reasonable profit arose to the carrier, and if, without any change in the conditions, the carrier makes up his mind that he will increase the toll, it is only reasonable the carrier should show why the toll should be increased. But that is not the present case. In this case this traffic was being carried under tariffs that gave the Winnipeg dealer upon reshipment to certain persons the balance of the through rate. That was declared to be, upon this complaint illegal, because it was preferential and discriminatory in favour of Winnipeg. I do not set that tariff out of mind for the purposes of comparison, simply because it was declared to be illegal. I set it out of mind, because it never was-so far as reshipments are concerned-regarded by the parties, either the railway company or the shippers, as a local tariff. It was not a local tariff; it was the balance of the through rate, and I am not aware of any case in which a court has looked to the balance of a through rate as being a reasonable sum to establish as a local rate. We have got no evidence, it seems to me, which would enable us to presume one way or the other with reference to that old rate.

In addition to that—and increasing the difficulties of the position contended for by counsel for the applicants—during the same period that the Winnipeg merchant enjoyed the benefit of the balance of the through rate, there were side by side with that, local tariffs in existence, and which people not favoured under the traders' tariffs were compelled to use. It is said now that the new tariffs which have been filed do not raise the rates that were in existence under the old local tariffs and which the general public were compelled to pay. That being so, it seems to me it is idle to argue that the Board, under the authorities that have been cited, is compelled to adopt the old balances of through rates as reasonable local rates under the new tariffs. Mr. Henderson practically admits that there is no other evidence than the presumption that should be drawn from the circumstances he relies on. Taking the view I do, it is quite clear then that there is nothing in this case upon which the Board can put its finger and say: This is an excessive rate. It may be excessive. I do not know as to that; there is no evidence that it is, and the Board cannot act without evidence.

Then, two other branches of the case present themselves, and one is with reference to the granting of commodity rates out of Winnipeg. I understand it is argued to-day or was yesterday for the first time, that that should be granted. It may have been contended for earlier, but I do not know how that is. Mr. Chrysler takes the position that the Board cannot order the railway company to grant every locality and every place a commodity rate. As to that, I am rather inclined to the view that his contention is right. I do not finally dispose of it at the moment, but it seems to me off-hand that it is the railway companies that have the right to frame their tariff. The Board does not frame the tariff, and the public does not frame the tariff; the statute gives the railway company the right to frame its tariffs. And while the statute gives certain control over the tolls to the Board of Railway Commissioners, it does not by any means put the Board in the position of being able to in all cases control the carrier in the fixing of his tolls. I am inclined to the view that the carrier has the right under the statute to name the localities as to which commodity rates may be granted, but as to that, I do not express any conclusive opinion. The matter presenting itself in this way, I only indicate in the meantime what my unconsidered view of it is, so

that the question as to the granting of a commodity rate may be regarded as not being disposed of, but reserved for consideration along with the second branch of this application, and which I now shall briefly advert to.

Mr. Hardwell suggested yesterday that the Ontario town tariffs might be taken as a basis for local tariffs applicable to the western provinces. I do not know to what extent he had previously had an opportunity of considering that question; I do not know yet whether these could be taken as the basis and made applicable to this part of the Dominion. I do not understand that the railway companies would have any serious objection to that being done, provided their revenue was not seriously disturbed. I do not know whether, in order to get reasonable local tariffs throughout the western provinces, these Ontario tariffs could be built upon, and standardized as Mr. Hardwell suggests, climinating the features I mentioned which Mr. MacInnes referred to, and taking into consideration the other surrounding conditions, trade conditions of every kind, population, geographical situation and so on. That is a matter that will require very much more careful consideration than it has been possible for my brother commissioners or myself to give it since the proposition was first raised by Mr. Hardwell. It is a matter that should also be fully and very carefully considered by the railway traffic experts, and by the business interests that would be affected by the disturbance of a system that has grown up in the western provinces, and which is different, as was stated, from the system that has been applicable to the other sections of the Dominion. As to whether that should or should not be done, I do not now decide. It is a matter, as I have said, that will require very careful consideration and perhaps discussion.

In the meantime, the conclusion is that it is impossible to grant this application, and by any sort of order bring about the system that was ordered by the Board to be discontinued upon the application of the Portage la Prairie Board of Trade.

There is no evidence upon which we can reduce these tariffs that have been filed, to the same sums that were paid by the favoured few under the old traders' tariff. There is no evidence upon which we can reduce, by  $12\frac{1}{2}$  per cent, as was requested, or by any other percentage, the tolls for the carriage of this traffic.

The case, therefore, in my view, resolves itself into two questions: First, as to whether it is possible under the statute to compel commodity rates or commodity tariffs; and second, whether it would benefit the public to standarize the Ontario tariffs and endcayour to make them applicable to western tariffs.

The main application must fail.

These other two questions have grown out of it.

We think it wise that the situation should be dealt with now that it has arisen. We think we should consider whether it is advisable to adopt the suggestions made by Mr. Hardwell, and further consider whether the Board has jurisdiction to order commodity rates in the manner asked for. It is only right and proper that the Board should observe the facts that have been given in evidence, and deal with the situation, although it was not covered by the original application. So that, while we are refusing the application as framed, we are reserving the two points, viz.: The advisability or the possibility of applying the Ontario town tariffs, standardized and made suitable to the differing conditions, and the possibility of granting the request made for the commodity rates.

October 24, 1907. Hon. A. C. Killam, Chief Commissioner, 8 Can. Ry. Cas. 180—This is a complaint of the Board of Trade of the town of Portage la Prairie, in Manitoba, against a series of special freight tariffs of the Canadian Pacific Railway Company, expressed as 'To be used on reshipments by Winnipeg wholesale houses only to traders doing business at or tributary to stations specified herein.' The grounds of objection to the tariffs are that these tariffs are illegal inasmuch as they are discrimintory as between different shippers and different consignees, and also as between different communities.

Evidence was taken in the matter before me alone at Winnipeg, under a special order of the Board. Notice of the taking of this evidence was given to the Winnipeg Board of Trade, that those representing the commercial interests of Winnipeg affected by or interested in the tariffs might have an opportunity of taking part in the proceedings and of taking any action which they might desire in support of the tariffs objected to; and the president, the secretary, and two other members of the Winnipeg Board of Trade attended.

The evidence given before me showed that no persons, outside of those whose names appeared upon a certain list of wholesale merchants doing business in Winnipeg, could ship goods under the rates mentioned in these tariffs, and that the company had no tariff giving similar rates to other persons or classes, and that the rates, also, were limited to shipments, to consignees whose names appeared in certain lists of traders furnished to the railway company's agents at the different points respectively. The evidence further showed that shipments made by or to others than the parties named in these respective lists were governed generally by the rates in the ordinary mileage tariffs of the company, which were considerably higher than the rates in the tariffs objected to. The evidence further showed that there was no tariff of a similar description for shipments by similar classes of persons from Portage la Prairie, but that such shipments were governed by the ordinary mileage tariffs under which the rates were higher for proportionate distances. It further showed that, in some instances, the rates from Winnipeg under the tariffs objected to, were lower than those charged from Portage la Prairie to points westward therefrom, although the goods were carried over the same routes from Portage la Prairie in addition to the distance from Winnipeg to Portage la Prairie. The evidence also showed that, in many cases, the rates from Winnipeg to Portage la Prairie under these tariffs were much less for the same classes of goods than those from Portage la Prairie to Winnipeg.

Opportunity was given, both to the railway company and the Winnipeg Board of Trade, to discuss the subject and to offer any remarks or arguments which they might desire to make in regard to the complaint.

While counsel for the railway company did, to some extent, contend that the tariffs were justified by the conditions existing, when they were originally framed, no real argument in support of them was made. The gentlemen of the Board of Trade were informed that if, after further consideration and taking legal advice, they desired to offer anything in support of the tariffs, it would be considered by the Board. They did state that, as these tariffs had been established for a considerable length of time and business had been transacted under them, it would be unfair and would cause too much disturbance in business to have them suddenly abrogated. All this occurred some two months ago, and no communication has since been received from the Winnipeg Board of Trade.

While refusing at the time to express an opinion upon the subject, I warned the parties that it would be advisable that they should prepare for a change. Ample opportunity has now been given for the purpose, and I have been informed by the Assistant Freight Traffic Manager of the railroad company that the company is prepared to substitute by the 15th November next new tariffs which would not be open to the objections put forward by this complaint.

In my opinion the objections to the tariffs are well founded; they appear to me to be contrary to the provisions of the Railway Act prohibiting undue or unreasonable preferences in favour of particular persons and unjust discriminations between different localities and the charging of higher tolls for a shorter than for a longer distance where the shorter distance is included in the longer, and which require that all tolls shall always, under substantially similar circumstances and conditions in respect of traffic of the same description, &c., be charged equally to all persons.

In my opinion the parties interested should be notified that the Board considers that these tariffs are contrary to the provisions of the Railway Act and that they

will be disallowed, and that the railway company should, not later than the 15th day of November next, file and put in force other traiffs in lieu of those complained of.

I think it advisable that the Board should not, in this instance, determine the rates to be substituted, as much delay would be involved in making the necessary inquiries; but that it will be sufficient to disallow these tariffs, allowing the company to substitute new ones, which may be made the subject of complaint if found to be unjust to any interests.

Winnipeg Jobbers' Association v. Canadian Pacific Railway Company.—Kootenay Rate Case.

The Winnipeg Jobbers' Association applied to the Board for an order directing the railway company to restore the former Winnipeg westbound rates to the Kootenay district.

After the judgment of the Board in the Vancouver eastbound v. Winnipeg westbound rate case, reported in the third report of the Board at pages 133 et seq., the Canadian Pacific Railway Company removed the discrimination there found to exist between localities, by raising the Winnipeg westbound rates.

The Winnipeg Jobbers' Association applied for an order directing the railway company to restore the former Winnipeg westbound rates to the Kootenay district. The application was heard at Winnipeg on the 16th and 17th September, 1908.

Held, that the application must fail, there being no evidence that these rates were excessive.

Judgment, Chief Commissioner Mabee, September 17, 1908:—8 Can. Ry. Cas. 173. We do not think, Mr. Chrysler, that it is necessary to trouble you in connection with the Kootenay branch of this matter.

Mr. Henderson has very properly admitted that in view of the finding of the Board in connection with the Vancouver eastbound rates v. Winnipeg westbound rates, he is not able to further press the complaint.

It is quite apparent that in that proceeding, in which the Winnipeg interests were represented, an attempt was made to attack the then existing Vancouver-Nelson rates, and evidence was given by the railway companies justifying the 85 cent toll. It seems to have been carefully investigated, as the judgment shows, later on by Mr. Hardwell, who reported that the figures submitted by the railway company were substantially accurate and correct.

The late Chief Commissioner, in a very carefully considered opinion, deals with the various features, including the one I have adverted to, and the conclusion was arrived at that it was impossible for the Board to declare that the eastern tolls out of Vancouver were excessive. The determination of the Board further in that matter was, that the complaint of the Vancouver interests against the western rates out of Winnipeg was well founded; discrimination was found to exist, and the railway company was ordered to file a tariff that would remove that discrimination.

Now, Mr. Henderson very properly and candidly admits, if he is not able to successfully attack the westbound toll out of Manitoba, that the only way the railway company could comply with the order of the Board and remove the discrimination that was found to exist was by raising the westbound rates from Winnipeg. That the railway company has done, and no evidence has been given that these rates are excessive. I do not say whether they are or are not excessive, but I do say that no evidence has been adduced to that effect.

Counsel has practically admitted that he cannot hope to succeed upon the application as it stands, but he has asked to have it further enlarged to be dealt with later on. My brother Commissioners and I are both of the opinion that the better way to dispose of the matter is to now dismiss the application, giving leave to the applicant, if he so chooses, to file a new application in accordance with the rules of

procedure of the Board, in which he must fully detail and set forth whatever grievances he thinks he has and that the Board has power to remedy. The former application was merely a verbal one, taken up I have no doubt in Winnipeg by the late Chief Commissioner as a matter of convenience. With the leave to the applicant, which I have referred to, this present application may be considered refused.

## Malkin & Sons v. Grand Trunk Railway Company.

Malkin & Sons complained that higher rates were charged by the Grand Trunk Railway Company from a point on a branch line for a shorter distance than from points on the main line to the same point, thereby constituting unjust discrimination between different localities within the provisions of section 315 of the Railway Act.

The application was heard at Toronto on May 20, 1908. The facts are fully set forth in the judgment of Mr. Commissioner McLean, concurred in by the Chief Commissioner Mabee, Mr. Commissioner Mills dissenting, holding that unjust discrimination had been shown.

Judgment, Mr. Commissioner McLean, November 28, 1908 (8 Can. Ry. Cas., 183):—In this case it was complained that the Grand Trunk charged higher rates on tan bark from Sprucedale than from Burk's Falls and Sundridge; these three stations all being on the lines of the Grand Trunk Railway. Sprucedale is eleven miles west of Scotia Junction on what was formerly known as the Canada Atlantic Railway, a line which is now controlled by the Grand Trunk by stock ownership. Burk's Falls and Sundridge are 10 and 21 miles, respectively, north of Scotia Junction on the main line of the Grand Trunk Railway.

The essential points of the complaint may be indicated by a consideration of the distances and rates involved in the shipments to one of the points consuming tan bark:—

To Berlin.	Miles. Special commo		
From Burk's Falls	 201		cents.
"Sundridge	 212	S	46
" Sprucedale	 202	10	"

It is alleged that this is proof of an unjust discrimination against Sprucedale.

It was shown in evidence that from all points within a zone extending from Kearney, a short distance east of Scotia Junction to Depot Harbour, a distance of some 58 miles, there was a group rate on tan bark. For example, all points within this group paid 10 cents per 100 pounds in carload shipments to Berlin. The applicant Malkin, stated in evidence (vol. 62, p. 3734) that what he especially objected to was this grouping. Counsel for the applicant also urged that Sprucedale should be given a lower rate than the further distance points included in the same group.

It was contended by the respondents that while the Grand Trunk Railway controls and operates what was formerly the Canada Atlantic Railway, the latter company still retains its legal identity, and that substantially the same relations should exist between the two companies at present, in respect of the division of the through rates, as existed before the unification of control and management took place. This is not material as an answer to an allegation of discrimination.

It is established that there has been a material reduction of rates. When the Canada Atlantic was operated as a separate railway, the rate on tan bark from Sprneedale to Berlin, to take one of the points affected, was 11 cents; when the Grand Trunk obtained control of this line in 1905 the rate was reduced to 10 cents, and the rate was further reduced on March 7, 1908, to 9 cents, a reduction of approximately 18 per cent, in the period in question.

The central point in the complaint is one of group rates complicated by consideration of main line and branch line traffic. Group rates of necessity result in a certain amount of discrimination; so long as the discrimination is not undue, such rates are not unlawful. Desel-Boettcher Co. v. Kansas City Southern Railway Company, 12 I. C. Rep., p. 222.

So far as the complaint regarding the Kearney-Depot Harbour group is concerned, this was met by the issue of a special freight tariff (Sup. 13 to C. R. C. No. E-517) which broke up this group and gave Sprucedale the advantage of its proximity to the junction point.

While under existing tariff conditions the Sprucedale rate is 9 cents, and the Burk's Falls rate 8 cents, the difference in rate is not conclusive as regards the question of discrimination.

Counsel for the applicant holds (see evidence, vol. 62, p. 3730) that this is a discrimination which is forbidden under subsection 4, of section 315, which states that: 'No toll shall be charged which unjustly discriminates between different localities.'

In the application of section 415, subsections 1 and 5 afford certain tests which are to be used by the Board as criteria of discrimination. These are inequality of tolls in respect of any or all of the following conditions:—

1. Under substantially similar circumstances and conditions.

2. In respect of all traffic of the same description.

3. In respect of all traffic of the same description carried on or upon the like kind of cars.

4. Passing over the same portion of the line of railway.

5. Like description of goods carried under substantially similar circumstances and conditions in the same direction, over the same line, a greater charge made for a shorter than for a longer distance, the shorter being included in the longer.

The tests which are applicable to the facts of the case are the first and fourth.

(1) Substantially similar circumstances and conditions.

The traffic concerned originates on a branch line. The Board has recognized that branch line freight rates may be on a higher basis than main line freight rates to shorter distance points, so long as the rates are not unreasonably or disproportionably higher. Almonte Knitting Company v. Canadian Pacific and Michigan Central Railway Companies. 3 Can. Ry. Cas. 441.

Inferentially it is justifiable to apply the same principle in respect of traffic originating on a branch line. This establishes an initial dissimilarity of circumstances.

While not holding that the entire cost of the upkeep of a particular branch line, division or other portion of a railway must in every case come from the receipts of such portion, it must at the same time be recognized that each ton or passenger moving over such portion must, if the traffic is light, contribute a proportionately higher amount per unit to such upkeep than in the case of a portion of line where the traffic density is greater. The lighter traffic on what was known as the Canada Atlantic is a material fact.

(2) Traffic passing over the same portion of the line of railway.

It is apparent that in so far as the passing of the commodities over the 'same portion' of line is concerned there is an initial dissimilarity of circumstances which does not disappear until the junction point is reached.

It does not appear that the difference in rates now existing as between Sprucedale and Burk's Falls brings the complaint within the provisions of section 315 of the Railway Act, and judgment should therefore be given against the applicant.

Chief Commissioner Mabee.—I agree.

December 7, 1908.—Mr. Commissioner Mills (dissenting).—Having to dissent from the judgment in this case, I wish to state briefly my reasons for doing so.

Regarding branch lines of railway, it is alleged in this judgment that, unless in exceptional instances, 'it must be recognized that each ton or passenger moving over such portion (that is, over a branch line) must, if the traffic is light, contribute a proportionately higher amount per unit to such upkeep (the upkeep of the branch line) than in the case of a portion of the line where the traffic density is greater, 'each ton or passenger must contribute a proportionately higher amount'; and then, on this ground alone, it is held not to be unjust, in other words, that it is fair and reasonable, to charge a considerably higher rate on traffic which originates on a branch line, than is charged on the like traffic when it originates on a main line, in the same locality, and is carried the same distance—even a greater distance—to the same destination, the former being carried 16-17 and the later 17-17 of the total distance (202 miles) over the main line.

Now, referring to the above dictum regarding branch line traffic, I might ask whether it is right to assume that branch lines which, owing to lighter traffic or other causes, show less direct profit than the main line (perhaps not much over the cost of operation and maintenance) do not make a reasonable return to the company, and conclude that as a consequence the traffic (every ton of freight and every passenger) moving on such branch line 'must' be made to pay higher rates than are paid for like traffic on the main line? Is it not a fact that the capital invested in branch lines is generally much less per mile than that invested in the main line—less expensive bridges, comparatively inferior roadbeds with sharper curves made to save expense, lighter rails, less expensive stations, lighter engines and less valuable passenger cars? Is it not also a fact that the service on branch lines is nearly always less frequent, less regular and worth less than that on the main line? Branch lines figured alone may not make a very good showing, but they may nevertheless pay well as feeders to the main line; and without such feeders the profits on many main lines would be greatly reduced.

If this doctrine regarding the traffic on branch lines is sound, it follows that the Board ought to rescind or vary the order of the late Chief Commissioner fixing the passenger fares to be charged by our railway companies at three cents per mile on all lines, including every branch line, operated in any part of the Dominion between Calgary and the Atlantic ocean; and the said companies should at once be authorized to issue higher and different tariffs, both freight and passenger, for many, perhaps most, of their branch lines, varying them from time to time, so that they shall be inversely proportional to the traffic on each branch compared with that on the main line.

The main line of the Grand Trunk Railway runs from Montreal to Toronto and ca west to Sarnia; and many branches run off from it in different directions, among which are a portion of what was known as the Canada Atlantic, extending from Coteau on the main line, a distance of 339 miles, to Depot Harbour, and the branch running from Toronto, north a distance of 227 miles, to North Bay. The latter branch crosses the former at Scotia Junction; and, in the immediate vicinity of the said junction, there are three places from which tan bark is shipped to, say, Berlin, Ont., namely, Sprucedale, on the Canada Atlantic branch 202 miles from Berlin; Burk's Falls, on the North Bay branch 201 miles from Berlin; and Sundridge, on the North Bay branch 212 miles from Berlin—all in a group; and, in making rates under the group system, the fundamental point is that all shippers in the same group shall, regardless of distances, be charged the same rate to common markets, in order that, so far as freight charges are concerned, no one in the group will be at a disadvantage in the markets to which they all ship.

In this case, the rate on tan bark from Sprucedale to Berlin is 9 cents per 100 pounds, while that from Burk's Falls and from Sundridge to Berlin is 8 cents per 100 pounds; that is, a shipper at Sprucedale is charged 12½ per cent more on a carload of tan bark shipped to Berlin, than a shipper at Burk's Falls is charged on a carload of

the same commodity, shipped by the same railway, the same distance, to the same destination, and 12½ per cent more than is charged on a like shipment from Sundridge, ten miles farther, to the same destination. This is an undoubted discrimination against Sprucedale; and in the judgment of my colleaguess it is admitted to be a discrimination; but it is held not to be unjust—in other words, it is justified and approved—simply and solely on the ground that traffic from Sprucedale originates on a branch line and is carried eleven miles out of 202 miles on a branch line, while traffic from Burk's Falls and from Sundridge originates on and is carried all the way on a so-called main line (the North Bay branch); therefore, it is held to be just, fair, and reasonable to charge Sprucedale 12½ per cent more for a given service—in spite of the practice of the company at Allandale, on the same line, in dealing with traffic from the Collingwood and Penetanguishene branches, and at a large number of other junction points where there is no extra charge on traffic from branch lines, even when the said traffic is carried for long distances over branch lines.

Speaking for myself, I can only say, in the language of the Chief Traffic Officer of the Board, that 'I am unable to see any exceptional conditions to justify a higher rate from Sprucedale' than from Burk's Falls and Sundridge. Hence I cannot concur in the judgment of Mr. Commissioner McLean, which is based upon what appears to me to be a strained interpretation of two phrases in section 315 of the Railway Act. The judgment was a surprise to me; and, if followed in subsequent judgments, it will undoubtedly benefit persons who live near main lines of railway, and result in serious injury to those who have to travel and do most of their shipping on branch lines.

I say nothing about the reasonableness or unreasonableness of the rates in themselves—9 cents per 100 pounds, from one of the places in question, and 8 cents per 100 pounds from the other two places; 8 cents or 8½ cents might be or might not be a fair and reasonable rate from the three places. The evidence on the point is very meagre. Hence I do not feel warranted in expressing an opinion; but my judgment is that a discrimination of 12½ per cent against Sprucedale—because it has to ship eleven miles out 202 miles, or a little less than one-seventeenth of the total distance to destination, over a branch line—is unjust; and that the railway company should be required to cease and desist from charging persons who ship from Sprucedale a higher rate than it charges persons who ship from Burk's Falls or Sundridge, the same or a greater distance, to the same destination.

The Grand Trunk Railway Company v. United Counties Railway Company.

The facts of the case are as follows:-

Counsel for the Grand Trunk claimed that the increased cost to that company of carrying on its business occasioned by the crossing should be borne by the junior company under the agreement. The contention of counsel on behalf of the United Counties Railway Company was that the Grand Trunk was the senior road only so far as the track existing at the time of the order of the Railway Committee of the Privy Council of March 21, 1893, was concerned; that, although the Grand Trunk, under its charter, had the right to build additional tracks, yet if another company is incorporated in the meantime and actually builds its railway and crosses the only track then in existence, and then some years later the senior company constructs additional tracks, the company which was the junior road at the time of the first order was made for a crossing, should not have to bear the expense of protecting the additional tracks laid by the Grand Trunk.

April 22, 1908, Mabee, Chief Commissioner, 7 Can. Ry. Cas 294:—In view of the statutes that have been cited (and indeed Senator Beique admits it), the Grand Trunk at the point in question is the senior road. The facts quite justify the admission. The original incorporation of the ancestor of the Grand Trunk at the point in question

in 1845, the agreement of 1853, and the Act incorporating the original road with the Grand Trunk in December, 1854, the introduction in that Act of the Railway Clauses Consolidation Act, and the section of the Railway Act referred to giving the railway company the right to lay one or more tracks, the road having been constructed, all make the Grand Trunk the senior road, at any rate down to the date of the agreement of 15th April, 1893, with the United Counties Railway (which was the predecessor of the Quebec, Montreal and Southern Railway) so that there is no manner of doubt that as to the single track the Grand Trunk was the senior road.

I am not able to follow the argument of Senator Beique that there can be seniority as to one of these tracks and not as to the other, and the ruling is that the Grand Trunk is senior not only to the track already constructed, but as to the intended double

Canadian Northern Railway Company v. Canadian Pacific Railway Company.

This was an application by the Canadian Northern Railway Company for an order for the crossing by its Hartney-Regina branch over the Wolseley-Reston branch of the Canadian Pacific Railway Company, asking at the same time that the order of the Board approving the location of the latter branch, be varied. The only question argued was as to which of these branches was the senior road.

The plans of the Hartney-Regina branch of the Canadian Northern Railway were approved by the Board on the 17th June, 1904, and registered on July 26, 1904. The plans of the Wolseley-Reston branch of the Canadian Pacific Railway Company were approved by the Minister of Railways and Canals on February 24, 1905, and registered on April 5, 1905. The approval of the Board was granted on July 18, 1905, and the

plans again registered on October 3, 1905.

The contention of the Canadian Northern was that the prior approval and registration of plans of the Hartney-Regina branch made the road senior to the Wolseley-Reston branch of the Canadian Pacific Railway Company. Construction work upon these two branches commenced at about the same time, but the Wolseley-Reston branch at the point of crossing in question was built first and that road was in operation when the construction work on the Hartney-Regina branch reached the crossing. Canadian Pacific had some years prior to the sanction of the plans of the Wolseley-Reston branch, obtained a patent covering the land at the point of crossing, and that company was the owner of the land at the point in question long prior to the approval of the plans.

May 14, 1908, Mabee, Chief Commissioner, 7 Can. Ry. Cas. 297:-I do not think that the mere approval by the Board of the plans filed with it necessarily gives seniority to the plans first approved. Section 159 of the Railway Act defines the effect of approval or sanction, which it is said shall be deemed to be merely approval of the location of the railway and the grades and curves thereof, as shown in the plan, profile, and book of reference, but not to have relieved the company from otherwise complying with the Act; and in granting sanction or approval, the Board is bound by the general location as approved by the Minister of Railways, and may only sanction a deviation of not more than one mile from any point on the general location as approved by the

Minister.

It seems to me that the railway that is in actual occupation, with an existing work upon the ground, with the ownership of the fee at the point of crossing, has much stronger claims to seniority than the railway which has merely obtained a prior sanction of its plans; and I have no hesitation in holding that the Wolseley-Reston branch of the Canadian Pacific Railway Company is, at the point in question, senior to the Hartney-Regina branch of the Canadian Northern Railway Company; and the terms and conditions of the crossing order must be based upon such seniority.

Grand Trunk Pacific Railway Company v. Canadian Pacific Railway Company.

This was an application by the Grand Trunk Pacific Railway Company, under section 227 of the Railway Act, for leave to cross the track of the Canadian Pacific Railway Company (Pheasant Hills branch), in township 29, in the province of Saskatchewan.

The applicant company claimed to be senior to the Canadian Pacific Railway Company at the point of crossing. The crossing had been constructed and paid for ty the applicant company and the point in issue was as to the cost of construction and maintenance.

The evidence disclosed that the Canadian Pacific Railway was prior to the applicant company both in the sanction and location of its line of railway, as well as construction work upon the ground, but after this application was made to the Board, the applicant company obtained from the Crown a patent covering the land at the crossing, and the contention of counsel on its behalf was that by reason of owning this land it was in a position to cross the line of the Canadian Pacific Railway free from burden.

Judgment, May 14, 1908, Mabee, Chief Commissioner (7 Can. Ry. Cas. 299):-I do not think this to be the fact. 44 Vict., chap. 1, contains the contract entered into between the government and the Canadian Pacific Railway Company. Paragraph 14 of the contract gives the company authority to construct, equip, maintain, and work branch lines of railway from any point or points along their main line to any point or points within the territory of the Dominion, and before commencing any such branch, provision is made for deposit of a map or plan of such branch in the Department of Railways. The government was bound under the contract to grant to the company the lands required for the roadbed of such branches, and for the stations. station grounds, buildings, workshops, yards, and other appurtenances requisite for the efficient construction and working of such branches, in so far as such lands were vested in the government. Paragraph 10 of the contract made provision that the government should grant to the company the lands required for the roadbed of the railway and its stations; this, I presume, applying to the main line. Then, in pursuance of this contract, the branch in question was constructed; thus, in my view, entitling the railway company to obtain a grant of the lands required for the road-

By 3 Edward VII., chap. 7, being the Act respecting the construction of the National Transcontinental Railway, the agreement forming the schedule to that Act is ratified and declared binding upon His Majesty; and under section 46 of the contract the government of Canada binds itself to procure to be granted to the Grand Trunk Pacific Railway Company, in so far as the same are vested in His Majesty in right of the Dominion of Canada, such lands as may be required for the right of way of the western division, and for all stations, station grounds, &c.

At the time this application was made, the Grand Trunk Pacific Railway Company had not acquired title to the land at the point in question; but since the application a grant has been obtained pursuant to the provisions of the contract above referred to.

It does not appear why the grant was made to the Grand Trunk Pacific Railway Company in the face of the statutory contract entered into under the provision of 44 Vic.; and I am of the opinion that the Canadian Pacific Railway Company, having constructed by virtue of the authority of that statute, became entitled to a grant covering its roadbed, and that, for the purposes of the application of the Railway Act and the disposition of the question of seniority as between these railway companies at the point in question, the production of the Crown grant by the Grand Trunk Pacific Railway Company should not be allowed to have the effect of displacing or

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curtailing the rights which the Canadian Pacific Railway Company obtained under

prior legislation and acted upon by placing its railway upon the ground.

I am clearly of the opinion that the Canadian Pacific Railway Company is senior to the Grand Trunk Pacific Railway Company at the point in question, and the order must contain terms based upon that company being so senior.

## New v. Toronto, Hamilton and Buffalo Railway Company.

This was an application by Henry New, of Hamilton, under sections 252 and 253 of the Railway Act, for an order directing the Toronto, Hamilton and Buffalo Railway Company to provide and construct a suitable crossing where its railway abuts the land of the applicant in the township of Barton, county of Wentworth.

By the construction of the T. H. & B. Railway, applicant was deprived of access to a travelled road except by passing over the land of his sons and crossing a number of railway tracks, and the object of the application was to obtain access to the said road by a crossing over the railway, for the purpose of more conveniently carrying on his manufacturing business, but not in any way for farm purposes or as a farm cross-

ing.

Judgment, Chief Commissioner Mabee, October 30, 1908, 8 Can. Ry. Cas. 50:—I think under the circumstances of this case and the land-locked position of the applicant's lands, it is not unreasonable to allow him a crossing of the nature of a farm crossing over the lands of the railway company. The company objected that the crossing, not being intended for farm purposes, could not be ordered by the Board. I do not think the Act should be construed in such a narrow manner. So to construe it would produce great injustice and hardship in many cases. The parties did not produce the conveyances affecting the lands of the applicant or of his predecessors in title, or of the railway company's right of way at the point in question; and we are in the dark as to terms and conditions therein, if any.

There seems to be no greater danger, indeed less, in allowing the applicant to cross at or near where he desires, than to require him to obtain access to Trolley street over the lands of his sons, if he were able so to do, and as to which there is no evidence.

I do not think it needful to refer to the cases cited by counsel, as I have come to the conclusion that the Board may as a matter of discretion grant the crossing asked for.

It may be that this crossing can be located at a point less inconvenient to the railway company than that demanded by the applicant, and the Board's engineer will inspect the premises and locate the crossing upon the ground.

All expense connected with the construction of the crossing will be borne by the applicant.

The company asks that it should be idemnified by the applicant for all damage they may be put to by reason of accidents at this proposed crossing. I do not think this reasonable, as damages might arise through the grossest kind of negligence of its employees, and it would be manifestly unfair that such should be visited upon the applicant. When the engineer inspects the premises, he may make inquiries as to the hours that the line of railway is mostly used, and if he finds it possible to limit the hours that the applicant may use the crossing, in order that possibility of accidents may be minimized, he may report to the Board his conclusions, and before the order issues, those (if any) will receive due consideration. The engineer will also report as to such protection, if any, as he deems necessary.

Order, directing the railway company, at the expense of the applicant, to provide and construct at once a crossing in the nature of a farm crossing at a point about ninety feet east of the frog on the site of the present crossing, as shown on the plan filed; and directing the applicant to put up and maintain a sign at the gates leading

to the Hamilton Pressed Brick Company's Works, warning people to look out for trains and to close the gates, issued December 2, 1908.

Re the Application of Charles Slade for a farm crossing over the Canda Southern Railway, on the Southwest Quarter of the south half of lot 12, concession 8, township of Raleigh, Kent county, Ontario.

Charles Slade, of North Buxton, Ontario, applied to the Board, under sections 252 and 253 of the Railway Act, for an order directing the Michigan Central Railroad Company to provide and construct a suitable farm crossing on the south half of lot 12, concession 8, township of Raleigh.

At the hearing the railroad company consented to provide a suitable crossing upon the boundary line between Charles and Fred Slade's farms, in the said township of

Raleigh.

The facts of the case are fully set forth in the dissenting judgment of Mr. Com-

missioner Mills.

The judgment of Chief Commissioner Mabee, October 21, 1908, concurred in by Mr. Commissioner McLean, was to the effect that the offer of the railway company was fair, and that the crossing should be put on the boundary line.

Judgment, Mr. Commissioner Mills, dissenting, November 5, 1908:-

It is not long since the applicant got possession of the farm in question. It came to him by will, being half a 100-acre farm formerly owned and worked by his father Robert Slade, from whom the railway company purchased its right of way. Since Charles Slade obtained possession of his fifty acres, he has been using a crossing on his brother Fred's farm, which lies immediately east; but Charles Slade's buildings are near the side of his farm farthest distant from his brother's farm, and therefore the use of the crossing on his brother's farm is a great inconvenience to him and a constant annoyance to his brother.

Under the above circumstances, Charles Slade applied to the railway company for a crossing over the railway on his own farm; and the railway company refused to grant his application, on the ground that he had no legal right to a crossing.

Hence his application to the Board of Railway Commissioners.

At the hearing the railway company again alleged that Charles Slade had no legal right to a crossing, but admitted that he needed one, and offered to remove the crossing on Fred. Slade's farm to the boundary line between Charles and Fred. Slade's farms, and let Charles Slade use it in common with his brother. This Charles Slade strongly objected to on the ground of very great inconvenience to him; but the opinion of the Chief Commissioner, then expressed, was that Charles Slade's farm, being only a part of his late father's farm, he, Charles Slade, had no legal right to a crossing offered by the railway company; the company to put in and maintain the gates and planking and Charles Slade to do and maintain the grading necessary for the said crossing.

Now, in reference to this opinion I may say that, after careful reading and study of sections 252 and 253 of the Railway Act, I have to confess my inability to see that a farmer's legal right to a crossing over a railway is to be determined, or is in any way affected, by the manner in which he obtains his land, whether by grant from the Crown, by purchase from a private vendor, by inheritance, or by the will of a testator.

The language of section 252 seems to me very plain and specific, that 'every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the railway for farm purposes.' Also section 253, 'The Board may, upon the application of any landowner, order the company to provide and construct a suitable farm crossing across the railway, wherever in any case the Board deems it necessary for the proper enjoyment of his land on either side of the railway, and safe in the public interest'; and subsection 2, 'The Board may

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order and direct how, when and where, and by whom, and upon what terms and conditions such farm crossing shall be constructed and maintained.'

Neither in these sections nor anywhere else in the Act do I find a word authorizing the Board to say that an applicant has no legal right to a farm crossing, simply because his land came under the provisions of his father's will. The land in question undoubtedly is a farm, owned and worked as a farm, and cannot be so worked, unless the owner gets a crossing over the railway at some point; for, as I stated above, 29 acres of his farm are north of the railway, while his buildings, orchard, farm lane and 19 acres are south of the railway, the buildings being on the side furthest distant from his brother Fred's farm, on which there is a satisfactory crossing.

It is admitted on all hands that the applicant requires a crossing over the railway; and it is provided in section 252 of the Railway Act not only that such a crossing shall be provided, but that it shall be 'convenient and proper for the crossing of the railway for farm purposes.' How, then, can it be maintained that he (Charles Slade) has no legal right to a farm crossing over the railway, and on what ground is it ordered that he must either do without a crossing or accept the extremely inconvenient crossing offered by the railway company?

The distance to be travelled by Charles Slade in going to work on, or in driving live stock to the 29 acres lying north of the railway is as follows:—

From the barn to highway on the south	`	744 462
Length of each trip in return		1,768 1,768 3,536

This, in a word, means a trip of about two-thirds of a mile every time he goes to and from work on the north side of the railway, and two-thirds of a mile every time cattle are driven to and from the north 29 acres of the farm, for pasture, water, milking, or any other purpose—which certainly will result in great inconvenience, constant annoyance and a serious loss of time.

In view of these facts, I cannot avoid the conclusion that by forcing the applicant, Charles Slade, to accept a farm crossing over the Michigan Central Railway, away at one side of his farm,-at the side farthest distant from its orchard and farm buildings,—on the boundary line between his farm and that of his brother Fred Slade, or be completely cut off from access to the northern 29 acres of his 48-acre farm, the Board is doing Charles Slade an irreparable injury,—putting him to great and permanent inconvenience, requiring him to do a large amount of unnecessary travelling from day to day, and compelling him constantly to incur very serious loss of timeall without benefit to the railway company, the travelling public or any individual; for, by the order referred to, the railway company will have to remove the present rightangle crossing which is on Fred Slade's farm, and construct a more expensive and dangerous acute-angle crossing, slanting over its tracks on the boundary line between Fred and Charles Slade's farms, furnishing a pair of separate but contiguous gates for each farm; Fred Slade will have to make a short lane from his present crossing to the boundary line between his farm and that of his brother Charles; and the risk to the railway company, to trainmen, and to persons who use the railway will, in my opinion, be greater than it would have been if Fred. Slade's right-angle crossing had been left undisturbed in its present position and Charles Slade had been given a right-angle crossing where he wants it,- in line with his farm lane, running from the highway past his buildings, north, towards the railway.

I have stated that, in my opinion, the order in question involves, not only greater expense to the railway company, but greater risk of accidents, with the consequent results to all concerned, than the granting of Charles Slade's application would have involved; and my reasons for making the statement are as follows:-

1st. Precisely the same number of persons, animals and vehicles will pass over the railway tracks at the joint crossing as would have passed over them if Fred. Slade's crossing had been left intact, and a separate, convenient crossing had been given to the applicant, Charles Slade. The traffic is neither increased nor diminished by the substitution of a joint crossing for two separate crossings, one on each farm.

2nd. Inasmuch as, under the order, the brothers will each have a pair of gates under his own control at the joint crossing,-the same as they would have had at two separate crossings,—the danger which may arise from gates being left open, will be precisely the same as, no more and on less than, it would have been with separate

crossings, one on each farm.

3rd. It is generally conceded that there is greater risk to life and property when a given amount of traffic is concentrated and carried over a railway by a crossing on a single street or highway, than when it is distributed and carried over on two or more streets or highways, a smaller amount on each. The same must be true in the case of farm crossings—an increase in danger from concentration of traffic at a single cross-

4th. An acute-angle crossing, slanting over the tracks of a railway, such as that ordered in this case, is admittedly much more dangerous than a right-angle crossing, such as Fred. Slade now uses, and as should, I think, have been given to the applicant,

Charles Slade.

Dissent and grounds therefor in brief:-

Therefore, I have most respectfully to dissent from the judgment of the Chief

Commissioner, concurred in by Mr. Commissioner McLean.

First, on the ground that the order provides, not for a 'suitable' but for a very inconvenient crossing,—and hence is, I think, clearly at variance with the letter and intention of section 252 of the Railway Act, which says, without qualification, that 'Every company shall make crossings for persons across whose lands the railway is carried, convenient and proper for the crossing of the raliway for farm purposes,' not any kind of crossings which the Board may think proper to order, but crossings which are convenient and proper for the crossing of the railway for farm purposes.' Board may direct 'where......such farm crossing shall be constructed and maintained' (Section 253); but notice again that the language is 'such farm crossing' that is, the kind of farm crossing provided for in the preceding section—a farm crossing 'convenient and proper for the crossing of the railway for farm purposes.' The crossing provided by the order in question will, I presume, be 'proper' as regards the matter of construction, although it will be an acute-angle crossing, constructed obliquely over the railway; but, on account of its location, it will be strikingly and distressingly inconvenient, and therefore, I maintain, at variance with the Act as quoted above.

Second, on the ground that, without benefiting any party or interest, the said order will, not only deprive the applicant, Charles Slade, of the proper enjoyment of his farm on the north side of the railway, but will do some injury to Fred. Slade, and will result in more expense to the railway company and greater danger to trainmen and to the travelling public than would have resulted from simply granting Charles Slade's application for a crossing, say a right-angle crossing, on his farm.

My judgment is that Charles Slade's application for a farm crossing, say a rightangle crossing, over the railway at the point indicated by him (693 feet from the boundary line of his brother's farm, measured along the right of way of the railway company) should be granted; the railway company to put in and maintain the grad-

ing required for a suitable crossing.

Order, dated 14th January, 1909, directing that the crossing be constructed on the boundary line between the farms of Charles and Fred. Slade, as aforesaid; and requir-

ing that the crossing be provided with separate gates for entrance into each of the fifty acres, issued in accordance with the judgment of the Chief Commissioner and Mr. Commissioner McLean.

## City of Victoria v. Esquimalt and Nanaimo Railway Company.

This was an application by the city for an order to review, rescind, or vary order of the Board dated October 8, 1907, and for an order, under section 238 of the Railway Act, directing the railway company to submit to the Board a plan and profile of the railway at the place or point where its main line of railway crosses the land known as the old Esquimalt road, in Victoria west; and also for an order, under section 237 of the Act, for leave to construct a level crossing for vehicular traffic, and to remove existing fences across the said highway.

The application was heard at the sittings of the Board held in Victoria, February

27, 1909.

The facts are contained in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, March 16, 1909:-

The old Esquimalt road was for many years prior to the construction of the Esquimalt and Nanaimo Railway a public highway leading from the city of Victoria to Esquimalt. At or prior to the construction of the railway, a new highway was established leading to Esquimalt, but the old road was never closed and has ever since remained and still is a public highway, and is a public street within the limits of the city of Victoria.

In the construction of the railway the grade fell much below the street level, on one side four or five feet; no public crossing was provided and fences were erected along the sides of the right of way, thus closing the street for vehicular traffic. This was done without any apparent authority, but was acquiesced in by the city authori-

ties and the public.

On October 4, 1907, the railway company applied for leave to maintain, in its then condition, a stile for foot passengers only at this crossing, and the city of Victoria applied for a public crossing. The Board, by an order dated October 8, 1907.

granted the application of the railway company and refused that of the city.

On January 30, 1909, the city applied to review, rescind, or vary the order of October 8, 1907, and the case was heard at Victoria on February 27, 1909. The Board had an opportunity of viewing the locality in question and of hearing the views of the engineers for the city and the railway company, and of counsel representing the city, as well as the railway company and certain landowners who were affected by the street being closed.

Conditions have greatly changed of late years in that portion of the city, and the reasonable convenience of the public clearly requires the street to be opened for public travel. The railway company has had the convenience of having the street closed at this point for many years; but this closing can only be regarded as temporary and subject at any time to alteration at the will of the city council, if that course seemed reasonable. The crossing will by no means be a safe one for the public, but it is their right to have it opened. The city could have required that when the railway was constructed, and such right still exists. As a term, however, of opening the crossing, the city should require all the standing trees on the lot adjacent to the crossing to be cut down, so a clear view may be had of the railway towards the city. It should also make arrangements to prevent any building or buildings being erected on the vacant lot across the street from that upon which the trees stand, so the view will not be obstructed and trains coming around the curve be prevented from being seen. The railway company must do the necessary grading and planking for the crossing; the city will have to maintain the crossing when constructed.

Upon the city furnishing evidence by affidavit that the trees have been removed, and that binding arrangements have been made that buildings will not be erected on the vacant lot, the formal order may issue.

Mr. Commissioner McLean, March 26, 1909:-

I agree, but am of the opinion that the following should be added: 'Near the southeast corner of the proposed crossing there are, as shown on the plan on file with the Board, two buildings near the right of way, the one which is most remote being within 100 feet of the right of way. This obstructs the view of those driving up the old Esquimalt road (shown on the plan as Wilson street), towards the proposed crossing. The railway company should, at its own expense, arrange to have these two buildings moved to such a distance from the right of way as will, in the opinion of an engineer of the Board, give a reasonably good view of the curved portion of the track to those who are approaching it from the city.'

## Stiles v. Canadian Pacific Railway Company.

The applicant applied to the Board, under sections 252 and 253 of the Railway Act, for an order directing the Canadian Pacific Railway Company, to construct and provide a suitable farm crossing. It was alleged that the present undercrossing was too small to enable the applicant to carry on properly his farming operations, and he applied to have it enlarged.

The application was heard at Toronto on January 27, 1909.

Counsel for the applicant at the hearing contended that the applicant was entitled to ordinary facilities to enable him to farm his land; that the only passage across the railway was an undercrossing which was too narrow; that, apart from any crossing he might be entitled to under a contract with the railway company, the Board had a right under the Act to direct the company to provide and construct a proper and suitable crossing.

Judgment, Chief Commissioner Mabee, January 27, 1909, 8 Can. Ry. Cas. 190:—If we were dealing with this matter under the plan Mr. Moss has just referred to, and giving a crossing where one had not previously been in existence, it might be reasonable to provide a crossing 14 feet in width, and possibly 14 feet in height, if the cost of constructing such a subway was not prohibitive, bearing in mind the value of the property. But that is not this case. We have a case here of a railway company, in 1889, entering into a contract to construct and maintain an undercrossing. That crossing was completed 12 feet by 12 feet, and the man used it for eighteen years, and so far as the railway company was concerned no complaints were made to it that it was not perfectly satisfactory. It would be entirely unreasonable, it seems to me, to disturb the order of things which were apparently satisfactory to the man with whom the contract was made. Under the circumstances we think the contract was fulfilled by the construction of the crossing, and the contract as fulfilled in that way was satisfactory to the then owner of the property, and the present owner of course can take no higher position than his predecessor in title.

Under these circumstances we think the application must be refused, but an order may go requiring the railway company to enlarge this to a 12-foot crossing, by 12 feet in height, and to continue the maintenance of it as the contract calls for.

Essex Terminal Railway Company v. Windsor, Essex and Lake Shore Rapid Railway Company.

On August 12, 1905, the township of Sandwich West passed a by-law authorizing the W. E. &c., Ry. Co. to construct its line along a named highway in the municipality, but the powers and privileges conferred were not to take effect unless a formal acceptance thereof should be filed within thirty days from the passing of the by-law. Such

acceptance was filed on September 12, 1905. This was too late, and on July 20, 1907, the council of Sandwich West and that of Sandwich East respectively passed by-laws

containing the necessary authority.

In April, 1906, the location of the line of the E. T. Ry. Co., was approved by the Board. In June, 1906, the Board made an order allowing the W. E. &c., Ry. Co. to cross the line of the Canadian Pacific Railway. In March, 1907, another order respecting said crossing was made and also an order approving the location of the W. E. Ry. Co., the municipal consent being obtained three months later.

The E. T. Ry. Co. applied to the Board to have the orders of June, 1906, and March, 1907, rescinded and for an order requiring the W. E. Ry. Co. to remove its track from the highway at the point where the applicant proposed to cross it to discontinue its construction at such point or, in the alternative for an order allowing it to cross the line of the W. E. Ry. Co. on said highway. The applicants claimed to be the senior road and that the W. E. Ry. Co. had never obtained the requisite authority for locating its line. On a case stated to the Supreme Court by the Board.

Held, 7 Can. Ry. Cas. 109 and 8 Can. Ry. Cas. 1, that the Board had power to refuse to set aside the said orders; that the by-laws passed in July, 1907, were sufficient to legalize the construction of the W. E. Ry. Co.'s line on said highway; and that the Board can now lawfully authorize the latter company to maintain and operate its rail-

way thereon.

Held, further, that leave of the Board is necessary to enable the E. T. Ry. Co to

lay its tracks across the railway of the W. E. Ry. Co., on said highway.

Held also, that the Board, in exercise of its discretion has power by order to authorize the maintenance and operation of the W. E. Ry. Co., along said highway and to give leave to the E. T. Ry. Co. to cross it and the line of the Canadian Pacific Railway near the present crossing and to apportion the cost of maintaining such crossing equally between the two companies instead of imposing two-thirds thereof upon the E. T. Ry. Co., as was done by a former order not acted upon; and to order that if the E. T. Ry. Co. finds it necessary in its own interest to have the points of crossing differently placed, it should bear the expense of removing the line of the W. E. Ry. Co., to the new point of crossing.

Order, dated March 26, 1909, issued accordingly.

1. Refusing to rescind orders of June, 1906, and March, 1907.

2. Authorizing the Windsor, Essex and Lake Shore Rapid Railway Company to maintain and operate its railway along the Gravel Road, in the township of Sandwich West: and

3. Directing that the cost of maintaining and operating the crossing of the Canadian Pacific Railway Company's tracks and the crossing of the tracks of the Windsor, Essex and Lake Shore Rapid Railway Company by the Essex Terminal Railway Company, and of the protective appliances to be installed at the said crossings, 'be divided equally between the Windsor, Essex and Lake Shore Rapid Railway Company and the applicant company; Provided, however, that if the applicant company shall find it necessary, in its own interests, to have the point of crossing or crossings, differently placed, it shall bear the expense of removing the railway of the Windsor, Essex and Lake Shore Railway Company to the new point of crossing.'

## Re Lord's Day Act and Grand Trunk Railway Company.

This was an application by the Grand Trunk Railway Company for an order, under subsection (x) of section 12 of the Lord's Day Act, R.S.C., chap. 153, permitting it to do certain work on the Lord's Day in order to prevent undue delay to traffic.

The facts of the case are fully set out in the judgment of the Chief Commissioner. Judgment, Chief Commissioner Mabee, October 17, 1908 (8 Can. Ry. Cas. 23):—
This application is made by the Grand Trunk Railway Company under subsection (x) of section 12 of the Act respecting the Lord's Day.

Section 12 provides that notwithstanding the other provisions of the Act, any person may on the Lord's Day do any work of necessity or mercy. Then in following clauses a variety of matters are declared to be included in the expression 'work of necessity or mercy.'

Subsection (h) is as follows: 'The continuance to their destination of trains and

vessels in transit when the Lord's Day begins.'

(k) 'Work before six o'clock in the forenoon and after eight in the afternoon of

yard crews in handling cars in railway yards.'

(l) . . . . 'loading or unloading before 7 o'clock in the morning or ofter 8 c'clock in the afternoon any grain, coal or ore carrying vessel, after the 15th September.'

(x)' Any work which the Board of Railway Commissioners for Canada, having regard to the object of this Act, and with the object of preventing undue delay deems necessary in connection with the freight traffic of any railway.'

What the railway company asks is as follows:-

'The Grand Trunk Railway Company of Canada hereby applies to the Board for an order under subsection (x) of section 3 of the Lord's Day Act, 6 Edward VII.,

chap. 27, as follows:-

- '1. Permitting the said company, by its servants, workmen, and agents, in order to prevent undue delay to traffic, to do on any Sunday, in the province of Ontario, work incidental to the continuance to their destination of cars in transit at the beginning of each Sunday, notwithstanding that the said cars forming part of the train so in transit may not have a common destination, but may require to be switched, shunted, or otherwise dealt with for the purpose of being sent on to their several destinations.
- '2. Permitting the said company to do, in the province of Ontario, such work upon any Sunday as may be necessary for the purpose of furnishing to shippers of live stock, a continuous railway service without which such persons would be unduly hampered and delayed in their said business.

'3. Permitting the said company to do, in the province of Ontario, such work upon any Sunday as may be necessary for the purpose of furnishing to and from lake ports, a continuous railway service for carrying grain from elevators and vessels, and without which service such traffic would be unduly delayed.

'4. Permitting, in the province of Ontario, the unloading of grain from vessels at lake ports, and the loading of grain into cars at such ports, and without which ser-

vice such traffic would be unduly delayed.'

This whole subject received most careful consideration by parliament, and the Act, as it stands, is the result of compromises made by those holding divergent views upon the subject-matter of the legislation, and any encroachment upon its prohibitions

can be permitted only for the gravest and plainest reasons.

The Board's jurisdiction arises only in connection with the movement of freight traffic; and as to that it is limited to such classes of work as it deems necessary to permit with the object of preventing 'undue delay'; and in exercising jurisdiction, the Board is bound to have regard to the object of the Act. Of course the object of the Act is well known, and with its general intention of providing for a day of rest in every week all must be in entire sympathy; and in dealing with the application, this must be kept steadily in view.

Parliament dealt very exhaustively with this vexed subject, and the statute was the result of much discussion and contention a very large section of the community looks with a jealous eye upon the Act, and will regard with much concern any order that may be made enlarging its provisions and extending exceptions to its prohibitions. However, in the view I take, the railway companies cannot, under the Act, or any order this Board may make be left in any way masters of the situation, and may be called upon to justify any movement of freight that the order, I think them entitled

to, may cover. In other words, the burden will be upon them to satisfy the court that the particular movement was necessary to prevent 'undue delay,' which in each individual case must be a question for the tribunal before which a prosecution may be launched. So, although parliament has conferred certain powers upon this Board, the result of the section is, I think, that those who interest themselves in the enforcement of the Act may call the companies to account for anything done by them as a result of this application, and so control may be retained and no abuse made of privileges granted by the Board, even if such should be attempted.

Perhaps the most serious feature of this application is that referring to the grain trade. The development of this traffic has likewise received the most careful attention in parliament, and millions of public and private money have been invested in its development-in the deepening and improvement of harbours, the enlargement of ships, the construction of canals, elevators and lighthouses, the enlargement and extension of railway terminals, eliminating curves and lowering gradients-much of which has been compulsory by reason of the keen competition of the American carriers. Along the American lines there are no Lord's Day laws to interfere with or temporarily check the flow. A continual struggle for this carrying trade exists between the routes through Ontario and those through American channels. There may be some extremists who would prefer that this trade through Ontario gateways should be crippled rather than permit it to continue upon the Lord's Day; but I am mistaken in my estimate of the Christian people of the province if there is not a very large majority that would make reasonable concessions to avoid undue interference with this traffic were they satisfied of the existence of the facts that made such course reasonable.

Now, under the Act as it stands, trains and vessels in transit when the Lord's Day begins, carrying grain, may continue to their destination; and after September 15 in each year grain vessels may be loaded or unloaded before 7 a.m. or after 8 p.m. upon the Lord's Day; but it is said that this carrying trade cannot be retained

for Canadian carriers if these limitations are to be strictly observed.

Turning now to the evidence given upon the hearing, Mr. Tiffin, superintendent of the northern division of the Grand Trunk Railway, has under his control the ports of Midland, Collingwood and Meaford; he says that in order to take care of the grain and by prompt movement protect the Canadian route, it is absolutely necessary to move the empty cars upon the Lord's Day, to release the vessels; that these latter must be loaded promptly, that they may return for other loads, and that if this is not done the vessel-owners will carry to American ports where they obtain a continuous service; that this would mean to the vessel owner a trip or two more in the season than to Canadian ports. The time of arrival of these vessels cannot be fixed, owing to weather and other conditions, and that he has seen on Sundays two vessels at Meaford, four at Collingwood, and six or eight at Midland, all waiting to be unloaded. This grain all passes through the elevators, and only one vessel can unload at a time at each elevator. The cars for this grain will have to come to the ports empty; and when the elevator is full, the empties are required to receive the grain through the elevator from the ship, or unloading must stop. This grain comes from Port Arthur, Duluth, Chicago and Fort William, and Mr. Tiffin says that at times they have been unable to handle this traffic even by working seven days a week; and that to prevent undue delay, after September 15 and for two months after the opening of navigation in the spring, it is necessary to haul the empty cars in train-load lots through to the lake ports on the Lord's Day, load from the elevator, and start them on to their destination.

Mr. Donaldson, superintendent in charge of Depot Harbour, states that in years of good crops the railway has more grain to handle through that port than can be cared for by working seven days a week; that there are 'tramp' vessels bringing grain to Depot Harbour that would go to American ports if they were impeded in

unloading; their arrival cannot be timed, owing to fog, congested condition in the Sault canal, and stormy weather; and that 14,000,000 bushels have been handled through Depot Harbour in one season. This is booked from Chicago, Milwaukee, Duluth, Fort William and Port Arthur, for sailings from Montreal by various steamships, in which space has been taken; and during the rush season it is absolutely necessary, in order to handle this traffic and preserve it over that route, to make movements upon the Lord's Day that are prohibited by the Act. A large amount of package freight from the New England states, New York and Boston, also from Chicago and Milwaukee, passes through Depot Harbour. This is on the upper deck of the vessels and the grain below. The package freight has to be removed before the grain can be got at, and all this increases the difficulty connected with the unloading of grain vessels at the week end.

Mr. Donaldson says the competitive routes with his are those that run to Galveston, rail and ocean to Europe, and the lake ports to Buffalo and Toledo and other elevator points; the grain going via Buffalo continues whether Sunday intervenes or not; if that coming via the Canadian ports is held up for a day, a very serious handi-

cap is put upon the Canadian carrier as against his American competitor.

Mr. W. G. Brownlee, Manager of Transportation of the Grand Trunk Railway says that if they are prevented from taking empty cars to the lake ports on Sunday this season, his road will lose the carrying of 5,000,000 bushels of grain. While the mere money loss to a corporation not allowed to work its employees on the Sabbath may be of no moment, it seems to me the pecuniary loss to the Grand Trunk by not being able to carry this grain is not the only thing for consideration. If it were, I should regard the evidence as of little value. If this grain cannot be carried by Canadian lines it will go through American channels, and others will benefit at the expense of the country whose every effort has been put forth to acquire and hold this carrying trade; and so, instead of merely the Grand Trunk interests being involved, it is the larger question of the commerce of the country being at stake, and while I am not at all of the opinion that this is a reason for making a week-day of the Sabbath, I do think that some modification of the Act may be made so that this traffic may be retained, and yet that the minimum of Sunday work be permitted. The railways carrying grain from Georgian Bay ports are in competition not only with the American railways but also experience the keenest competition from the all-water routes, not only in the movement of eastbound grain but in the westbound traffic. Depression in lake traffic has diverted many vessels from the upper lake carrying trade to the longer routes to St. Lawrence points or through to Montreal. The movement of this year's crop will tax to the utmost the capacity of the rail carriers from Georgian Bay points, and to place themselves in a position to compete with some degree of success with other routes, and obtain a share of this carrying trade, special tariffs were filed by them with the Board, to become effective September 4, reducing the wheat rate to 5 cents per bushel from Georgian Bay points to Montreal. It is manifest from the conditions above indicated and others that exist, that some degree of freedom, consistent with reason, should be extended to the rail carrier from Georgian Bay points; others beside those who stand for strict Sabbath observance in Ontario are concerned in this matter. Freight rates to ocean ports are of vital interest to the western farmer, and any barrier along the route reflects upon the price obtainable by him for his wheat.

Again, Ontario is a mere link in the route to the seaboard, and under the Act, as it stands, vessels and trains in transit through Ontario, when the Lord's Day begins, may continue to their destination. Grain vessels may continue loading or unloading up to seven o'clock in the morning, and may again resume after eight o'clock in the evening, after September 15, upon the Lord's Day. It is sworn and not contradicted that the grain carrying trade cannot be carried on if stopped between 7 a.m. and 8 p.m. (except where vessels and trains are in transit). It does not seem reasonable, in

view of the vast interests involved both to the carrier and to the whole country, that this traffic should be destroyed by undue delay.

The railway company asks permission to furnish to shippers of live stock a continuous service, without which such persons would be unduly hampered in their business; but upon this branch no evidence was given by any live stock shippers, and the facts given upon the hearing do not justify the Board in interfering with existing conditions.

The next request is that in order to prevent undue delay to traffic certain shunting be permitted on the Lord's Day. Subsection (h) of section 12 gives leave to continue to their destination 'trains and vessels in transit when the Lord's Day begins, and work incidental thereto.' The interpretation clause of the Act does not define the word 'train.' Subsection 32 of section 2 of the Railway Act defines 'train' as in-

cluding any engine, locomotive, or other rolling stock.

The applicants allege that great delay and loss will ensue if they are prohibited from continuing to their destination individual cars that may be in transit when the Lord's Day begins, and perform the work incidental thereto. Let a concrete case serve as an illustration; twenty cars of cattle leave Palmerston on Saturday evening, fifteen for Montreal for export by steamer sailing on Monday, five cars for Toronto, where the train arrived at, say, three o'clock on Sunday morning. What was the destination of this 'train'? It is contended the railway employees cannot leave the five cars for Toronto when the train arrives there and carry the other fifteen to Montreal, but must either hold the whole train at that point or take the five Toronto cars on to Montreal. To leave the five cars means breaking up the train, and this, it is said, cannot be done. It may be said that the Toronto cars should not have been attached to the train and so the difficulty was caused by those responsible for making up the train. Perhaps had another freight train been leaving Palmerston for Toronto to which the five Toronto cattle cars might have been attached, 'undue delay' in getting those cars to Toronto might have been avoided by not mixing the Toronto and Montreal cars; but suppose the Toronto cattle had to be there for Monday morning and no other train that could carry them was leaving Palmerston on Saturday night, it is manifest these cattle must be taken by special train, making a prohibitive freight rate, or not reach Toronto for Monday morning.

I do not think any harm will follow or any encroachment be made upon the spirit or object of the Lord's Day Act by giving the company liberty to leave the five Toronto cars at their destination and continue to Montreal with the other fifteen cars. Suppose this case actually occurred and the company was prosecuted, it would still have to establish that the whole movement was necessary in order to avoid 'undue delay,' not only dropping the Toronto cars at that point but the making up of the train in

this manner at the starting point.

Illustrations might be multiplied, many of which would show how this privilege might be abused by the railways in bringing to, say, Mimico upon various trains from different points, cars destined to Montreal, and there sorting out the latter and making up an entirely new train. If this is attempted the courts must say whether it was necessary to prevent 'undue delay,' and so I think full control is retained and prosecutions will be effective in preventing abuse of privileges granted by this Board, and care exercised by those responsible for the operation of railways, will prevent the public sense from being offended by unnecessary movement of freight trains on the Lord's Day.

I therefore think that an order may issue permitting the Grand Trunk Railway Company, its servants, workmen, agents, or officers, in order to prevent undue delay

(1) Unload grain from vessels at lake ports in Ontario and load grain into cars at such ports between September 15 in any year and June 1 in the year following, upon the Lord's Day.

(2 Between the said dates do such work as may be necessary for the purpose of furnishing to and from such lake ports in Ontario a continuous railway service for carrying grain from elevators and vessels upon the Lord's Day.

(3) Perform all work necessary upon the Lord's Day for the delivery to their several destinations of freight cars that were in transit when the Lord's Day began.

If it was found that attempts are made to abuse the provisions of this order, the

Board will cancel it in whole or in part.

Other railways carrying grain from Ontario lake ports are, of course, entitled to

the like privileges.

It may not be uninteresting to note that in a report made to the Board on the 9th of June, 1908, by one of its officials in dealing with the question as to whether the Grand Trunk Railway had, during the previous year furnished adequate and suitable accommodation for the carrying, unloading and delivery of traffic offered for carriage upon its lines, the following paragraph appears:—

'The effect upon the power of the company to receive, carry and deliver traffic without delay, in compliance with the provisions of the Lord's Day Act, will, in my opinion, mean a loss of 21 per cent per week, or, in other words, the company would

move only 79 per cent of its capacity during the week.'

Order, dated 28th October, 1908, issued accordingly.

# Bell Telephone Company v. Windsor, Essex and Lake Shore Rapid Railway Company.

The Bell Telephone Company applied to the Board, under sections 237 and 238 of the Railway Act, for an order directing the Windsor, Essex and Lake Shore Rapid Railway Company to bear and pay the cost of certain changes in the construction of the lines of the applicant company and of certain protective devices rendered necessary by reason of the construction and operation of the railway. The case was heard at Chatham on October 20, 1908.

Judgment, Chief Commissioner Mabee, October 20, 1908 (8 Can. Ry. Cas. 28):— We are all of one mind on this application, and there is no reason why it should

not be disposed of now.

The contentiton advanced by the Bell Telephone Company is in effect that where a dangerous situation is brought about, like the one disclosed by the evidence, the company imperilled may, without the leave of the Board, or without making any application to the Board, take in its own hands the remedying of the danger, the removal of the danger, and make whatever expenditure it deems reasonable, and later on apply to the Board for an order for payment against the railway company.

It does not seem to me that any reading of section 237 gives the Board authority to make such an order. This section was intended to apply and does apply clearly to a situation rendered dangerous. There, upon an application made to the Board, the Board may take such measures as, under the circumstances, appear to the Board the best adapted to remove or diminish the danger arising or likely to arise. It seems to me the whole object of the section was to place under the jurisdiction of the Board authority to deal with the danger. The Board itself was to exercise its jurisdiction in the ordering of such protective measures as it might deem expedient.

Then section 238 simply carries that a step further, and gives the Board authority to do the like things, although the railway has been located. Section 237 applies to

the situation where the application is made for leave to locate or approve.

Now, it seems to me it would be opening the door far too wide to delegate, or for the Board to assume it had the right to delegate to the parties themselves, to decide what protection should be provided, when the statute itself says the Board shall exercise that jurisdiction.

Then counsel asked leave to amend, and that his case should be treated as if he were applying now for an order for protection, and that the Board should adopt the

protection that has been decided upon by the applicants, and order compensation. We think at this stage, notwithstanding our power to make almost any sort of an amendment, that it would hardly be proper to make such an amendment as that. And, even if we did, it would still open up the same difficulty, and we would still be confronted with the same situation, namely, that the company itself has made the changes, and the case would be left pretty much as it is upon the present record.

So far as the merits are concerned, I am personally entirely with the applicants. Of course we have not heard all the evidence that Mr. Wilson had at hand, but it seems to me quite impossible to deny that the Bell Telephone Company have been put to expense by reason of the location of this danger beneath their wires. I think what they did was entirely reasonable. They were acting, as has been reported in the Naylor case, and were simply following out what the engineer of the Board recommended in that case. Whether they would be in fairness entitled to all they claim, is quite another matter, but the merits are not before us, and only incidentally do I refer to it in the way that I have. It comes back to the jurisdiction of the Board, and I am quite clear, and in that view my colleagues join with me, that section 237 does not authorize the Board to make an order of the kind asked for.

The application will be dismissed, but under the circumstances, without any costs.

Order, October 20, 1908, dismissing the application, accordingly.

Winnipeg Jobbers and Shippers' Association v. Canadian Pacific, Canadian Northern and Grand Trunk Railway Companies.

This was an application by the Winnipeg Jobbers' and Shippers' Association, through Mr. Carpenter, manager of its transportation department, to the Board, for an order directing the railway companies,—

(a) 'Where the traffic warrants it, to erect a freight shed, and appoint a per-

manent agent in charge of the business at such station;'

(b) 'Not to reduce any regular station with an agent in charge to a flag station without an agent;'

(c) 'Not to close any regular or flag station without the approval of the Board of Railway Commissioners.'

The applicants objected also to the terms of the 'Release of responsibility' which the shipper of freight to a flag station is required to sign.

The matter was referred to the Chief Traffic Officer and reported upon by him and his operating assistant. Copies of the Chief Traffic Officer's report were sent to the railway companies concerned and written arguments were submitted by them.

The railway companies, first, questioned the jurisdiction of the Board to make such an order as applied for; and, second, that on the merits no general or blanket order providing for the erection and maintenance of stations should be made.

The facts are contained in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, November 2, 1908, 8 Can. Ry. Cas. 151:—
This matter seems to have been first brought to the attention of the Board at a meeting in Winnipeg in September, 1906, by the board of trade of that city, and in February, 1907, a formal complaint was lodged by the applicants.

Several matters were involved in the complainants' petition, and amongst others

they ask that the railway companies be ordered to,-

(1) Where the traffic warrants it, erect a freight shed and appoint a permanent agent in charge of the business at that station.

(2) Not reduce any regular station with an agent in charge to a flag station without an agent.

(3) Not to close any regular or flag station without the approval of this Board. All the railway companies have taken exception to the jurisdiction of the Board to deal with these matters.

Section 284, subsection (a) provides that the railway company, according to its powers, shall: 'furnish at the place of starting and at the junction of the railway with other railways and at all stopping places established for such purpose, adequate and suitable accommodation for the receiving and loading of all traffic offered for carriage upon the railway.'

Subsection 3 empowers the Board to order such accommodation to be furnished,

having regard to all proper interests.

Section 258 provides: 'Every station of the company shall be erected, operated and maintained with good and sufficient accommodation and facilities for traffic.'

'2. Before the company proceeds to erect any new station upon its railway, the

location of such station shall be approved of by the Board.'

'3. In the case of any railway, whether subject to the legislative authority of the parliament of Canada or not, subsidized in money or in land, after the 18th day of July, 1900, under the authority of an Act of the parliament of Canada, the payment and acceptance of such subsidy shall be taken to be subject to the covenant or condition, whether expressed or not in any agreement relating to such subsidy, that the company, for the time being owning or operating such railway, shall, when thereto directed by order of the Board, maintain and operate stations, with such accommodation or facilities in connection therewith as are defined by the Board, at such points on the railway as are designated in such order.'

It is argued, first, that because the above subsection 3 deals specially with rail-ways subsidized after July 18, 1900, the fair construction of the whole Act is that the powers conferred upon the Board by this subsection do not exist as to railways not so subsidized. I do not think this contention well grounded. This section, I think, was intended to extend the jurisdiction of the Board, as to the matters covered by it, to railways not subject to the legislative authority of the parliament of Canada, that is to railways incorporated under provincial statutes, and which had not been declared to be works for the general advantage of Canada; without this subsection, the power of the Board would not extend to such railways, whether subsidized either before or after July 18, 1909.

The second objection is that subsection (a) of 284 only requires the railway companies to furnish accommodation at stopping places established for the purpose of 'receiving and loading traffic,' the contention being that 'flag stations' were used for delivering or unloading, and not for 'receiving and loading.'

I do not know that the expression 'flag station' appears in the statute, but of course it has a well known meaning.

Subsection (b) of 284 imposes upon the railway companies the duty of furnishing 'adequate' and suitable accommodation for 'the carrying, unloading and delivering of all such traffic.' Section 30, subsection (g) provides that the Board may make orders 'with respect to rolling stock, apparatus, cattle guards, appliances, signals, methods, devices, structures and works, to be used upon the railway, so as to provide means for

the due protection of property, the employees of the company, and the public.'

It seems to me perfectly clear that under these sections the railway company

It seems to me perfectly clear that under these sections the railway companies are obliged to provide suitable accommodation for unloading and delivering traffic, and if they omit so to provide then the Board has power so to order, and in doing so may require the companies to erect and maintain platforms or freight sheds, or any other 'structures or works' that might be deemed reasonably proper for the protection of property or the public. The statute seems to confer ample power upon the Board to deal with the subject matter of this application.

With respect to the first ground of the complaint, the companies all express their willingness to establish permanent agents 'where the traffic warrants it.' The difficulty is in saying when the traffic warrants such a step. Hitherto this and the other matters involved have been left entirely to the good judgment of those in charge of the management and operation of the railways, and they quite naturally object to interference; but

if I am correct in my interpretation of the statute, it is clear that parliament has placed these matters under the control of the Board, and has imposed upon it the duty of saying when the time has arrived for the appointment of permanent agents, if that is thought by the Board to be part of furnishing suitable and adequate accommodation for the delivery of traffic. It is also stated by the chief traffic officer that in practice the companies receive freight in carload lots at these stopping points, as well as butter, cheese and eggs, in which event they would be required under subsection (a) to furnish suitable accommodation for such receiving.

The applicants submit a list of thirty flag stations upon the Canadian Pacific Railway and forty-six upon the Canadian Northern, doubtless now there are many more upon the Grand Trunk Pacific; this matter has been standing so long since originally brought before the Board that the conditions have greatly changed and it is impossible to deal with these stations or stopping places by name and the matter must

be disposed of upon general lines.

I have read the evidence and fully considered all the arguments that appear upon the file. I feel myself handicapped by reason of not having been upon the Board during the progress of the proceedings, but am compelled to make the best disposition of the complaint that I am able and deem fair to all concerned. The operating assistant to the chief traffic officer, in October, 1907, dealt with the details of establishing accommodation at stopping places, and later on the chief traffic officer, on November 15, 1907, reported to the Board as then constituted, in some respects agreeing and in others differing from the opinion of the operating assistant; both of these reports I have carefully considered, and while I hesitate to set my judgment up against those of far greater experience in these matters, I am unable to say that I agree with either in all respects.

It must be kept steadily in view that it is almost always in the interest of the railway companies to convenience the public as far as possible. Flag stations are established at points for the convenience of those living at inconvenient distances from the regular stations; and if this Board required unreasonable expenditures to be made by the railway companies at once upon the establishing of a flag station, I fear that a large section of the public might be seriously inconvenienced by the omission to establish such stopping places; it may be that some relief might be had by application to the Board, but I am of opinion that great difficulty would be experienced (assuming there is jurisdiction but as to which I do not decide) in determining when or where a new stopping place should be established without the experience afforded by the receipts and travel to and from an experimental stopping point. For those reasons, I am of opinion that the companies should not be required to establish a heated and lighted station building with a caretaker in charge at these flag stopping points as recommended by the chief traffic officer. On the other hand, I think their practices in the past open to serious comment in omitting to provide any sort of platform for people to alight or stand upon, no sort of shed or shelter of any description to place freight in when discharged at these points, and in leaving goods upon the ground exposed to the elements. It seems to me that some middle course should be adopted that will provide some reasonable accommodation and protection to the public, and at the same time not operate as too great a burden upon the railway companies.

I think it not unreasonable that the companies should, at all stopping places known as flag stations, erect a suitable shelter or waiting-room which could be used for both freight and passengers; it should be provided with a door and windows. I would not require a caretaker to be kept, nor would it be reasonable to require this building always to be kept heated and lighted. There should be some sort of platforms and proper approaches. If the railway companies are willing to accept the foregoing views, the Board will hear them as to the size of buildings and platforms to be provided. If they desire to appeal from the holding that the Board has jurisdiction, we will delay until such appeal is disposed of before settling these details.

Dealing next with the question of appointing permanent agents at flag stations, as I have said, I think the Board has jurisdiction so to order if it deems necessary to furnish to the public adequate and suitable accommodation for unloading and delivering traffic, or for receiving and loading of traffic, and in this view I am confirmed by the late Chief Commissioner in a memorandum of October 11, 1907, in which he says that the Act requires 'the railway company to provide reasonable and proper facilities for receiving, carrying and delivering traffic, and that while the point has never been decided, it may well be argued that the Board has power to require a company to place and keep an agent at a particular station where, in view of the amount of business to be done and other circumstances this would seem to be a reasonable and proper facility to be afforded.'

The question is what amount of traffic warrants the appointment of a permanent I think the Minnesota law not an unreasonable one in this respect. a total freight and passenger earning of \$15,000 requires the appointment of a permanent agent; and I agree with the recommendation of the operating assistant upon this point and I think the companies should be required to appoint and maintain permanent agents at stations where the total freight and passenger earnings amount to \$15,000 for the year, and at points where the business consists principally of shipping grain, where such shipments amount to at least 50,000 bushels, agents should be appointed and maintained at such points during the grain shipping season; and at points of shipment where a telegraph operator is located for the handling of trains, such operator should while he remains at such point, be provided with the necessary equipment to enable him to take care of all traffic at such point. It does appear to be necessary at this moment to consider the request that the companies be prohibited from reducing a regular station to a stopping point without any agent, or from closing any regular or flag station without the approval of the Board. It is not to be assumed that such step would be taken without good reason, and I think such cases should be left to be dealt with individually when they arise, assuming there is jurisdiction, as to which I express no opinion.

Strong objections are made, and I think with good reason, to the form of release required for traffic for delivery at flag stations; but I refrain from dealing with this matter at it is now under consideration by the joint committee assembled, pursuant to the request of the Board made in the circular of April last, and will be dealt with by the Board when considering the standard form of shipping bill.

## Dignam v. Bell Telephone Company.

This was an application by J. S. Dignam, of Toronto, under the provisions of the Railway Act for an order directing the Bell Telephone Company to furnish him with a copy of the latest official telephone directory for Western Ontario and the United States.

The application was heard at the November sittings of the Board, 1908, in the city of Toronto.

The facts are fully set out in the judgment of the Chief Commissioner.

Judgment, Chief Commissioner Mabee, November 13, 1908, 8 Can. Ry. Cas. 200:—We are all of the opinion that this is not a matter that falls within the statute conferring jurisdiction upon this Board.

It appears that the applicant has a contract with the telephone company, and ordinarily that contract would be looked at for the purpose of ascertaining the rights that he might have in connection with the use of his telephone, the price to be paid, the service and facilities to be afforded, and so on. It is admitted that in this contract on foot between the applicant and the telephone company, there is no provision under which the applicant has any right as against the company to be supplied with directories either in or outside the city. It also appears that it is the telephone company's practice to furnish the city subscribers with city directories, but that it is not the

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gractice to supply to city subscribers directories covering the subscribers outside the city.

The reasons advanced by Mr. Dunstan appeal to one as being founded upon common sense too. It seems that in western Ontario the towns are grouped, and one directory is issued, copies of those are circulated among all subscribers in western Ontario. The same thing applies to central Ontario, eastern Ontario, Quebec, and the city of Montreal.

There is nothing in the contract, nor is there anything in the statute, requiring the telephone company to furnish subscribers in Toronto with lists of subscribers either in eastern, western, or central Ontario.

So that there is no basis upon which the Board could found an order, even if there were jurisdiction so to do, because it does not seem reasonable that the company should be required to furnish city subscribers with these outside directories, thereby entailing upon the company the necessity of calling them all in every six months, or in the event of leaving them out, having their service locked up by errors arising by reason of these directories becoming obsolete, changes in subscribers, new ones coming in and old ones going out.

Then with reference to the ground of complaint advanced by Mr. Dignam, of some one in the telephone office, messenger, or some person of that sort, bringing him one directory, and promising to bring another. It does not seem to me that is a matter the Board could deal with at all. I say nothing with reference to the branch of the case about the directory being withheld on account of the alleged user of Captain Melville's telephone by the applicant. If the applicant had a right to get the western Ontario directory, the telephone company would have no right to withhold it by reason of the applicant having used some one else's telephone. It would be open to the telephone company to take such steps as they might see fit in some other form, but it is sufficient to dispose of this case by simply saying that, in the first place, there is no jurisdiction; in the second place, even if there had been jurisdiction, it does not appeal to us that subscribers in certain districts would be entitled to directories printed for and furnished to subscribers in other districts.

Order, dismissing the application, issued November 25, 1908.

Bay of Quinté Railway Company v. Kingston and Pembroke Railway Company.

The Bay of Quinté Railway Company applied to the Board, under section 364 of the Railway Act, and under any other section applicable to the circumstances of the case, for an order directing the Kingston and Pembroke Railway Company to ascertain and settle the compensation payable by the applicant company to the respondent company in respect of the running rights possessed by the applicant company over a portion of the respondent company's railway.

By an agreement between the companies, ratified by Act of parliament, such

compensation in case of dispute was to be settled by arbitration.

The question was whether the Board had jurisdiction to entertain the application. Counsel for the applicant company contended that jurisdiction was given the Board under sections 30 (h) and 176 of the Railway Act. The contention of counsel for the respondent company was that the Board had not jurisdiction, as the agreement was not one to which the sections of the Railway Act applied, but that it was obtained by sanction of an Act of parliament, and being a special Act, came within the provisions of section 3 of the Railway Act and that, when the special Act conflicts with the general Act, the provisions of the special Act override the latter when relating to the same subject-matter.

Judgment, Chief Commissioner Mabee, January 12, 1909 (8 Can. Ry. Cas., 202):—
The position of the matter is not very complicated. The two railways make an agreement and part of the agreement is that compensation, in the event of dispute, is

to be adjusted by a tribunal of their own selection. That being the agreement in perpetuity, they go to parliament and get it ratified. The statute confirming the agreement states that the agreement shall be regarded as re-enacted in each section. Now, it seems to me that parliament has by that special Act stated the tribunal that shall settle the difficulty between these two companies in the event of them not being able to settle it themselves, and that the effect of the special Act is just the same as if there had been an independent and separate section in the Act stating that in the event of difficulties arising between the two companies regarding compensation to be paid to one by the other, such difficulty should be settled by a board of arbitration, one to be selected by each, and an umpire by the two. If that is the proper view of it, I should fancy it could hardly be contended that that would not be a provison that the Railway Act could not override, because of section 3 in the Act, which distinctly states that where the provisions of the Railway Act conflict with any provisions in any special Act, the provisions of the special Act shall override the provisions of the general Act. So that it seems to me perfectly apparent that parliament has provided, by reason of the agreement between these two companies, the tribunal to settle their difficulties, and that the Railway Board has no jurisdiction. It seems to me, further, even if that were not the strict legal view of it, that where two companies have entered into an agreement as to how their difficulties shall be settled, the Railway Board should ask them to abide by the agreement and settle it as they agreed to settle it. The Board is not supposed to intervene for the purpose of destroying agreements between parties. If there had been no agreement, and the parties were at large, then they could not come here, but having provided by their agreement how they should adjust their difficulties, it seems to me that even if the view regarding the special Act that I have enunciated were not correct, it would not be a wise thing for the Board to assume jurisdiction in such cases. We know of many agreements on foot between railway companies regarding leased lines, and so on, where arbitrators fix the compensation. I do not think it would be proper for the Board to intervene and take away the tribunal to which the parties agreed to go, and assume jurisdiction ourselves. We are all agreed that in this case there is no jurisdiction.

Order, dated January 12, 1909, dismissing the application, issued accordingly.

#### The London Fence, Limited, v. the Canadian Northern Railway Co.

The London Fence, Limited, of Portage la Prairie, complained that the railway company persisted in blocking Broadway street, in Portage la Prairie, with their trains, to the great detriment of the complainants; and applied for an order directing the company to keep the street open, so as to give them free ingress and egress to their factory; and asked that provision be made in the order for the construction of sewers and water mains under the tracks and electrical power lines over the tracks of the railway company.

The matter was heard at the sittings of the Board held by Chief Commissioner Mabee and Mr. Commissioner McLean in Winnipeg, March 10, 1909, and the facts are set out in the judgment of the Chief Commissioner.

Judgment, March 31, 1909:-

We both think in this case it is clearly shown there was an arrangement made between the late manager of the fence company and the representative of the railway, whereby the 30-foot right of way, the closed portion of Broadway on the north side of the Canadian Northern tracks, out to Main street, as shown on this plan, should be provided. It seems that the agreement was acted upon by the railway company. Some obstructions were removed, and since that time the fence company have been using the right of way as arranged out to Main street.

Complaint is made that the arrangement was not submitted to the board of directors by the then manager, and ratified by them, but that is not anything that

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the railway company had any control over, it was a matter entirely within the authority of the then manager to enter into this arrangement. It was entered into, I have no doubt, in good faith. The railway company carried out their portion of it. And we have got to see, as far as we are able, that agreements are lived up to, not only by private individuals, but also by the railway companies, if they enter into them. That this arrangement afterwards proved unsatisfactory to the new management is no reason why a further burden should be imposed upon the railway company.

We think that the agreement should be carried out. This roadway may be declared to be a right of way and granted by the railway company to the fence company, if the city of Portage la Prairie will not accept it as a highway, accept dedication of it, and agree to maintain it. Then it may continue to be an easement granted

by the railway company as a right of way to this London fence company.

In addition to that, the railway consents, if the city of Portage la Prairie will extend their water main to the north along the tracks of the railway, so that a hydrant may be located at a more convenient point to the fence company, to pay that expense. That, of course, is not anything we can order, because we cannot order the city of Portage la Prairie to supply water or extend the main; but if the fence company can arrange with the city to extend the main across the street and locate the hydrant so that they may save that one-quarter per cent of insurance, then upon Mr. Clark's undertaking, whatever expense the city may be put to in connection with that, will be reimbursed.

The matter stands; the applicants to endeavour to make the arrangements referred to in the judgment.

## The City of Toronto and Canadian Pacific Railway and Grand Trunk Railway— The Viaduct Case.

The Corporation of the city of Toronto applied to the Board, under sections 237 and 238 of the Railway Act, for an order directing the Grand Trunk Railway Company of Canada and the Canadian Pacific Railway Company or one or other of them, to carry certain streets, named in the application of the city of Toronto, under and over their tracks. The application involved a direction to the railway companies to change or raise, as might be found necessary, the approaches over their tracks at certain other streets named.

The railway companies questioned the jurisdiction of the Board under the sec-

tions named to make the directions applied for.

The Board held that it had jurisdiction over the subject matter of the application, and that it would continue the hearing at once or await the result of an appeal from its decision to the Supreme Court of Canada, if that course was decided upon.

Judgment, Chief Commissioner Mabee, June 8, 1908, on question of jurisdiction: Objection is taken to the jurisdiction of the Board to order the elevation of the

railway company's tracks along the Toronto waterfront.

The argument in supporting the objection is based upon two grounds, the first of which is that the Railway Act does not in express terms confer upon the Board the power to accomplish grade separation by the elevation of the railway's tracks, that this can be accomplished only by carrying the highway over or under the railway, and that the approval of the plans and construction of the road in accordance therewith, gives under the various sections of the Act, the railway company the right to continue operating at the grade provided therein.

The second objection is based upon section 3 of the Act and will be dealt with

more fully later on.

Sections 237 and 238 are those mentioned in the application as being the ones upon which it is contended there is jurisdiction.

The railway tracks are along the Esplanade, and that is a street or highway; under section 237 if the company applies for leave to construct the railway along a highway it must file a plan and profile with the Board showing the portion of the highway affected and upon that application the Board is expressly empowered to make provision for the protection, safety and convenience of the public, and has authority to require all such measures to be taken, as under the circumstances appear to the Board best adapted to remove or diminish the danger or obstruction arising or likely to arise from the construction of the railway along the highway.

Now, if this were an application of the companies for leave to locate and construct their lines along the Esplanade I think it is perfectly clear that the Board could impose as a term of granting such leave that the track should be elevated or carried

upon a viaduct.

Section 238 provides that where the railway is already constructed along a highway the Board may order the company to submit to it a plan and profile of such portion of the railway and upon such submission may make any order in respect thereof as is provided for in section 237; so if I am right in holding that the Board has power upon an original location to require elevation of tracks, it seems to me clear it has the like power notwithstanding the railway is already constructed along the highway.

Section 30 provides that 'the Board may make orders with respect to the structures and works to be used upon the railway so as to provide means for the

due protection of the public.'

I do not stop to answer the argument of counsel that the result of holding that the Board had the power contended for would be to hold that it might order an elevated road from Montreal to Windsor or Sarnia or both; it is sufficient to say that I think there is jurisdiction to order elevation of tracks along the Esplanade because the tracks there are located along a highway, the first objection must be overruled. The second objection presents greater difficulty.

Section 3 of the Railway Act is as follows:—

This Act shall, subject to the provisions thereof, be construed as incorporate with the Special Act, and unless otherwise expressly provided in the Act where the provisions of this Act and of any special Act passed by the parliament of Canada, relate to the same subject matter, the provisions of the special Act shall, in so far as is necessary to give effect to such special Act be taken to override the provisions of this Act.'

Now is there a 'special Act' in existence, relating to 'the same subject-matter' as that dealt with in sections 237 and 238, viz., protection, safety and convenience of the public; if there is then it is said that the provisions of the special Act override

those of the general Act.

On July 26, 1892, the city, the Grand Trunk Railway Company and the Canadian Pacific Railway Company, the latter representing also the Toronto, Grey and Bruce Railway Company, the Ontario and Quebec Railway Company and all its other leased lines entered into what is called the 'Esplanade Tri-partite Agreement' in which appear most elaborate provisions relating to the rights of the railway companies upon the Esplanade and for the construction of the Union Station. I deal with only a few of its provisions:—

Paragraph 4 provided for the erection of private overhead bridges.

5. The city agreed to prevent the public crossing the tracks on the Esplanade between Yonge and York streets, except at Bay street, and the Grand Trunk Railway waived its contention that it was not liable to contribute to the cost of making or protecting level crossings at Church, Yonge and Bay streets.

7. Provided for the construction of the York street bridge and declared it to be

a public highway.

9. Provided for deviating York street, closing a portion of it and the Esplanade.

10. The Grand Trunk agreed to construct the John street bridge.

11. Provision was made for closing Esplanade from York street to Brock and portions of Simcoe, Peter and John streets.

15. The railway companies agreed to pay \$15,000 to the city for conveyance of the

portions of streets agreed to be so closed.

17. The city consented to the Grand Trunk Railway obtaining a patent from the Crown of the prolongation of Peter street and the companies consented to the city obtaining a patent of the prolongation of Simcoe and York streets, all to the old windmill line.

By 56 Vic., cap. 48 (Dom.) all the works to be done in order to give effect to this agreement were declared to be works for the general advantage of Canada and it (the

agreement) was declared to be in force and binding on the parties thereto.

The first question for consideration is whether this agreement and the Act declaring it to be in force and binding, from a 'special Act' within the meaning of section 3 above quoted. Section 2, subsection 28, provides that 'special Act' shall include any Act which is enacted with special reference to such railway; is the 56 Vic., cap. 48, enacted with special reference to the railways in question here? After much reflection I am of opinion that it is not. So far as I am aware there is no direct authority upon the point, but it seems to me, reading the whole of subsection 28 that the fair meaning of the words 'with special reference to such railway' is with respect to the 'construction or operation' of the railway dealt with earlier in the same clause, and that an Act merely declaring an agreement to be in force is not necessarily an Act dealing with the construction or operation of the railway merely because some of the many clauses of the agreement deal with the matters above indicated. The Act does not purport to embody the agreement or make it form part thereof, and the present Chief Justice of Ontario has said that an agreement though ratified by an Act of the legislature still remains a private contract.

(Kingston v. Cataraqui Electric Ry. Co., 25 A.R., at p. 468). It appears to me that if this Tri-partite Agreement still remains a private contract it cannot be regarded as a special Act for the wide and far-reaching purposes for which that argument is

advanced.

It may also be the fact that there is no conflict between the subject-matter of the Tri-partite Agreement upon the points under consideration, with the clauses of the general Act sought to be invoked, both the agreement and the clauses of the general Act deal with public protection, safety and convenience and because the agreement, let us say, provides for an overhead bridge at a given point, probably the better view would be that there would be no conflict, within the meaning of this particular legislation between that provision and a clause in the general Act empowering the Board to order a subway, both being means of crossing the railway line, and both being for the safety and convenience of the public and the railway, the overhead bridge or subway being mere incidents, the main feature of the legislation being public safety in the operation of the railway.

The early history of the water front and the growth of the foothold of the railways there was elaborately argued before the Board. I have read the arguments since the hearing, and am of the opinion that there is nothing in all that has been said or advanced to take away the authority of parliament to confer upon this Board authority and jurisdiction to deal with the subject matter of this application, and that such authority has been conferred, and in saying this I am not overlooking the authorities under which the railway titles upon the Esplanade from time to time developed. They hold title and have acquired rights to operate upon the level from agreements made with the city by virtue of orders in council, report of the old Board of Railway Commissioners, which went out of existence in 1868, and legislative enactment pre-confederation, and provincial and federal since 1867.

The history of the matter shows that the proposal now made by the city is entirely opposed to contracts and compacts made by it with the railways from time

to time. Prior to 1892, when the agreement of July 26 was entered into, there had been suggestions for a viaduct, this agreement entirely excluded that proposition.

On April 22, 1905, the city entered into an agreement with the Grand Trunk which, by an Act of the Ontario legislature of the same year was declared valid and binding, for the construction by the railway company of a new union passenger station and yards, this agreement is based entirely upon the operation of the railway tracks upon the level, it provides for the city closing certain streets, a foot bridge from Front street to Lake over the tracks, changes and repairs to York street bridge, and many other provisions, entirely inconsistent with track elevation as now proposed. Upon this agreement the Grand Trunk has acted, and in good faith expended enormous sums of money. Application for the order for the construction of the Yonge street bridge was made by the city, the validity of the order has since been upheld by the Court of Appeal, it is still held by the city—and under it the railways are required to construct a bridge over the tracks. I mention these matters because it was strongly argued that the city had estopped itself from making the present application, that the policy adopted, the contracts entered into, the work done and money expended by both city and railways upon the lines of protection by overhead bridges upon the well known legal doctrine of estoppel prevented the city departing from that mode of grade separation and making application now for an entirely different system. I am of opinion that this argument would be entitled in a court of law to prevail, and that the course taken by the city in the past would absolutely prevent this application from succeeding, but this Board is not a court of law, and no doctrine of estoppel is applicable or binding. The paramount object of the sections under consideration, that which overshadows all and before which everything must give way, is the protection, safety and convenience of the public in the matter of grade separation, and no town or city council by any sort of municipal mismanagement, folly or ignorance can estop itself or prevent the Board taking any step or making any order, otherwise within its jurisdiction, for the protection, safety and convenience of the public.

The question of whether the separation of grade along the water front is to be accomplished by viaduct or overhead bridges is not now being considered; it is that of jurisdiction only, if after all the evidence has been given, every interest considered, and all sides heard, the Board deems the interests of the public require a departure from the policy adopted by the city upon this matter it has it in its power to entirely protect the railway interests, and doubtless will have full regard to all expenditures made by the railways upon the faith of contracts with the city, so that no injustice will be done to, or loss fall upon the railways by reason of variation of plans made, structures or buildings erected, lands purchased or money expended, which would be of no avail consequent upon a changed policy.

Of course, it will not be regarded from the foregoing that any change is contemplated by the Board; that matter has in no way been considered by the Board, and is not ripe for discussion, and these observations are made with the view of indicating how full redress may be had against the city, if there be ground for the same, other than by disputing the Board's jurisdiction to intervene upon behalf of the public.

All that is now being decided is that the Board has jurisdiction over the subject matter of this application, and has authority to order grade separation along the Esplanade either by overhead bridges or viaduet, by depression of tracks or highways in whole or in part as may be deemed the most advantageous in the interest of the public and in the operation of the railways.

I have given full consideration to the argument that there are no streets running to the waterfront. The Court of Appeal has held the contrary as to Yonge street and I have no doubt most, if not all the other passages to the water are highways within ss. 11 of section 2 of the Act where a highway is declared to include any way of public communication.

The Board will continue the hearing of this matter at once if the parties so desire, or await the result of an appeal from this opinion to the Supreme Court if that course is decided upon.

The facts are fully set forth in the judgment of the Chief Commissioner.

Chief Commissioner Mabee, December 30, 1908.

This matter comes up upon the application of the railway companies for approval of plans for a new Union Station at Toronto. This, of course, involves what the elevation of the station shall be, as well as that of the railway tracks that enter it. The railway plans provide for rail level some four feet above the present elevation of the tracks; the station plans provide for a subway for passengers to pass under certain lines to reach the southerly tracks, and as part of the contemplated work the railway companies produce bridge plans and propose carrying Bay and Yonge streets over the tracks to the water front, and suggest that, as the traffic demands it, the streets east of Yonge should be dealt with in the same manner. It is admitted by the representatives of the railways that the time has arrived when grade separation at Bay and Yonge streets must be provided for. They do not admit the necessity for this at the present time, east of Yonge street. The one broad question for determination as this matter now stands is whether this separation of grade shall be accomplished by the city streets being carried over the lines of railway tracks, or whether the latter shall be carried over the streets, and owing to the physical formation of the city water front, either proposition presents the gravest engineering and financial difficulties.

The Railway Act provides that every bridge under which a railway passes shall be so constructed as to afford an open and clear headway of at least seven feet between the top of the highest freight car used on the railway and the lowest beams of the bridge which are over the space occupied by the passing car, and, except by leave of this Board, as to bridges constructed since February 1, 1904, the space between the rail level and such lowest beams shall in no case be less than 22 feet, six inches. This, of course, is to provide head room for those whose duties require them to be on the tops of freight cars.

The railways propose a bridge at Bay street with only about 19 feet clearance with 4.90 per cent grade at the north end and 4.50 per cent grade at the south end. At Yonge street 19 feet clearance and grades of 3.75 per cent and 4.50 per cent respectively. At Church street 20 feet clearance and grades of 3.25 and 4.90; Jarvis, 19 feet 6 inches clearance and grades of 3.25 and 4.50; Sherbourne, 18 feet 6 inches clearance and grades of 2.90 and 4.20; and Berkley, 19 feet clearance and grades of 3.70 and 4.50.

Bay street would necessarily be a point that a large amount of traffic would pass over. These plans, even with this bridge having  $3\frac{1}{2}$  feet less clearance than called for by the statute, has nearly a 5 per cent grade going south and  $4\frac{1}{2}$  per cent going north.

It does not seem to be possible to adopt the bridge system and obtain grades over the bridges that would be practicable, unless this Board takes the responsibility of permitting structures of less head room than the law provides for.

It was said the rule requiring men to go on the tops of freight cars in the Toronto yards could be abolished; different rules for different terminals would only lead to confusion. The Board's accident inspectors are being continually called upon to investigate accidents caused by lack of head room under bridges, and lack of lateral space along the sides of engines and trains. Our officials have been steadily endeavouring to eliminate these sources of danger, and it is entirely out of the qestion that we should sanction the erection of overhead bridges from York street east, of a character different from that which the law calls for. There are now too many of these structures in various parts of the country, and instead of sanctioning more, it is the plain duty of the Board to endeavour to get rid of those that now exist.

The grade over the bridges is of paramount importance to the future of Toronto. Nothing can prevent the development of harbour traffic, and in years to come a haul-

age over long bridges on 5 per cent grades would impose a tax upon traffic arriving and departing by the water route that should not be permitted. Only a few years ago it was thought by all concerned that in the construction of York street bridge much had been accomplished; to-day about the only question that the railways and the city agree upon is that this bridge must be pulled down. I am free to confess that when I embarked upon this inquiry, I thought the erection of bridges the proper solution of the problem, but the more it is thought out, keeping steadily in view the permanent welfare of a large and rapidly developing city, I am driven to the belief that, if bridges are erected this year, ten years hence would see them all torn down.

Now, if these terminals are to continue on the water front and the streets cannot conveniently be carried over the railway tracks, it is apparent that the latter must be carried over the streets, if grade separation is to be accomplished. Two plans were submitted showing how this could be done, one upon behalf of the city, and one by the Board of Trade. These plans came in for much criticism by the engineers called upon behalf of the railways, and by whose evidence I was much impressed; but the true situation is that neither of these plans were submitted with the idea that they were complete in all details, and it is not contended that very many matters must be considered and be provided for that did not enter into the calculations of those propounding these two plans; indeed it could not have been expected that the Board would order a work of this character to be undertaken by the railways upon either of these plans. I do not consider that any plans are before us, other than for the purposes of illustration, and all that we can now decide is as to the manner that this separation of grade is to be accomplished, and we hold that it cannot satisfactorily be done by overhead bridges. I have adverted to the financial aspect of this matter; the time has not yet arrived to say whether the cost of carrying the railway tracks over the streets is prohibitive, or if not, how the cost is to be apportioned. This must depend upon the plan that is finally decided to be the best for all concerned, and must, of course, have regard to the reasonable operation of trains and the handling of traffic. How the railways would prefer that their tracks should be carried over the streets. the Board does not know. So far they have been contending that the policy of carrying the streets over the tracks should continue. I do not hesitate to say that when it is known that the tracks must go over the streets, the railways can prepare plans of a work that will improve upon those now before us as to convenience in the movement of traffic, and still retain the essential features contended for by those opposed to bridges.

Upon the evidence now before us, I am of the opinion that it is impossible to deal intelligently with the financial side of this question or to fairly divide the expense of the work. The cost of constructing a given number of steel bridges can be estimated with reasonable accuracy, but when their erection involves damages to adjacent lands, filling in the water front, re-arranging or extending the slips and wharfs where large industries exist and carry on their business, building a new street far out in the waters of the bay, it is out of the question to estimate what compensation courts or arbitrators would grant to those whose lands or business were injured. Again, the cost of construction of retaining walls and filling for a viaduct, with the necessary steel work, can be arrived at with reasonable accuracy, but the consequential damages arising, or that might arise, to adjacent properties, by reason of depriving industries of spurs, if that were necessary, possibly doing away with team tracks, narrowing the Esplanade, and other claims for damages that doubtless would be made, cannot now be foretold. About the only matter that is perfectly clear is that either mode of grade separation will prove enormously expensive.

The railway companies should be required to file with the Board, within two months, and at the same time furnish copies to the city, plans, profiles and estimates for the works necessary to separate the grade of the railway from the streets from York to Cherry streets, inclusive, except such as may have been closed. These plans

must make provision that no surface tracks of any kind shall cross York, Bay, Yonge or Church streets and provision must be made for a fourteen foot headway at all the streets at present street level, station plans to be amended to suit the changed elevation of the tracks. I say nothing at present as to the elevation and industrial spurs or yards, as these are matters that should primarily be left to those who are responsible for the operation of the railways, and the handling of traffic at reasonable rates, a full consideration of these matters can be had when the plans are developed.

Nothing upon the subject has so far been said, but should it be thought desirable by the railway interests to deal with the whole situation through the medium of a terminal company, then the latter may file plans instead of, or for, the railways.

The situation at and east of York street only is now being dealt with; that west of York, and from Bathurst to west of the Humber, is to be spoken to at Ottawa on January 12.

My brother commissioners are of the opinion that the matter should be finally disposed of now, and the cost apportioned, so the order will issue in acordance with the views of the majority.

Judgment of Assistant Chief Commissioner Scott, concurred in by Mr. Commissioner Mills, December 24, 1908.

The Board has had the question of the elimination of grade crossings along the water front at Toronto before it for some time. After the unfortunate fire which occurred in Toronto in 1904 when most of the industries south of Front street to the railway tracks from York to Yonge streets were destroyed, the Grand Trunk Railway Company applied to the Board and obtained authority to take the territory mentioned for the purposes of a new Union Station.

After considerable delay on account of litigation the property for the new station was acquired and an application was made to the Board for the approval of the station plans. These plans, however, could not be approved until the question of what grade the tracks should be on was determined.

The grade crossings at Yonge and Bay streets have been a source of very great danger and much annoyance on account of delays caused by the blocking of the crossings by passing trains, not only to the citizens of Toronto who visit the island and the water front during the summer months, but also the large passenger and freight traffic which goes to and from Toronto by boat during the months of water navigation. This danger and source of annoyance also exists at other grade crossings but not in as aggravated a form. Different methods have been suggested as to what would be the best solution of a situation which is generally recognized to be an intolerable one.

In November, 1907, a plan was submitted to the Board by the Toronto Board of Trade of a viaduct upon which four running tracks were carried at a height which would permit of the passage of vehicular traffic including trolley cars under these tracks on the different streets which run to the water front. This plan showed the commercial sidings and team loading tracks of the railways remaining at street grade.

A formal application was made to the Board some months later by the Municipal Council of the city of Toronto, for an order compelling the railways to raise all their tracks including commercial sidings and team loading tracks to a sufficient elevation to permit of free passage on the highways under the tracks as in the Board of Trade plan.

At the recent sitting of the Board in Toronto this viaduct scheme was strongly opposed by the railways on the grounds of excessive expense and the inconvenience it would cause to the railways and the shipping interests.

As an alternative proposition the railways suggested that bridges be built carrying the highways over the railway tracks. Such structures to be erected at the different streets leading to the water front as and when they became necessary in each particular case—the railways admitting that bridges should at once be built at Yonge and Bay streets. I think that as the railways will have to pay the major portion of the

expense of any scheme for the elimination of grade crossings at Toronto and in other ways have a very large interest in the method, whatever it may be, that is to be adopted to bring about this desired result, their scheme should receive our most serious consideration and their suggestions followed if it is not incompatible with the best interests of all concerned.

I have come to the conclusion, however, that in this case the plan of carrying the highways over the railways by bridges should not be adopted for any of the streets east of John street. Bridges at Bay, Yonge and the streets east of Yonge would not only prove excessively expensive because of the great quantity of filling that would have to be done in the Bay and the undoubtedly very great, but at present inestimable land damages at both their north and south ends which would have to be paid, but would be most injurious to the commercial industries along the water front and be inconvenient to every one having to use them.

The Railway Act requires bridges over railways to have a clearance of twentytwo feet six inches from the top of the rail to the bridge, but gives the Board power under special circumstances to reduce this space. It seems to me that if there ever are cases where the Board would be justified in departing from the principle adopted by parliament that bridges should be high enough to permit a man to stand on top of a box car and pass under the bridge with safety the Esplanade railway yard with the tremendous freight traffic both east and west is not one of such cases. If bridges were decided upon they would therefore have to have a clearance of 22 feet 6 inches; but the railways showed a clearance of from eighteen feet six inches to twenty feet on the bridge plans they submitted. Their idea in suggesting low bridges was, of course, to prevent the bridges extending too far north and south. But, even with a clearance of eighteen feet six inches, they had to show grades of about 4 per cent on the ramps to keep the bridges from crossing Front street on the north and extending some distance out in the bay on the south. In addition to the objection to the bridges on the ground of inability to have proper clearance or head room the grades on the ramps would be too steep. It was clearly established in evidence before us, that for satisfactory teaming the approaches to the bridges should not have a grade exceeding 3 per cent. As already indicated, such a grade could not be arranged.

I am, therefore, of the opinon that as grade separation for the streets east of John street cannot best be brought about by carrying the highways over the railways, that the other method, that of carrying the railways over the highways by viaduct, which to my mind will prove neither excessively expensive or inconvenient, should be adopted. I do not, however, concur in the city's suggestion that the commercial sidings and team loading tracks should be elevated. These might well be left on the street level within certain bounds to be used by moving cars or locomotives only between specified hours of the night. If the city's idea of elevated switches, team loading tracks and a roadway for vehicles were carried out, very great damage would be done to prominent commercial establishments and considerable inconvenience and loss of business would be experienced by a number of industrial concerns; and all for no purpose which could not be obtained in another way at practically no expense.

If four running tracks were elevated on a viaduct of a width of about 53 feet there would still be ample room on each side to take care of the commercial sidings and the team delivery tracks if the adjacent city property were utilized for the purpose. But a right of way should, of course, be maintained for teaming on Esplanade street and south of the viaduct for ingress and egress to all property on the water front. But as the chief evils to be cured are the grade crossings at Yonge and Bay streets, which are subject to be used by large numbers of people at all hours of the night and day, particularly during the summer months, I would prohibit the existence of any tracks across either of these streets at grade, and therefore all commercial tracks leading from the east would have to stop east of the east side of Yonge street. With regard to the limited use which might be made of these tracks I would suggest,

subject to further argument which might be addressed to the Board on this point, that cars or locomotives be not permitted to be moved on them except during the hours between 7 p.m. and 6 a.m., with the exception in the case of fruit or perishable merchandise which might be spotted on such tracks during the day if special precautions were taken to prevent accidents to persons using the street openings through

In addition to Yonge and Bay streets, I think York street, which should be produced to the water front at grade through a subway under the running tracks and the elevated station tracks, ought to be absolutely free from all grade crossings, as it would be much used not only by a large number of pedestrians but also by heavy teams from the Canadian Pacific Railway freight yard. I would therefore stop all tracks at grade from the west at the west side of York street. The John street bridge will have to be raised to give 22 feet 6 inches clear over the viaduct tracks and bridges over all tracks with the same clearance built at Spadina avenue and Bathurst street. The highway crossings on the Grand Trunk from Bathurst street to the Humber river are to be dealt with at a meeting of the Board in January next, but as all parties are agreed that the proper solution for the elimination of grade crossings on this line as far as the Sunnyside Crossing is the depression of the tracks from Bathurst street west, that matter need not interfere with the final determination of the question at present under consideration.

Having decided upon a viaduct, it follows, of course, that the new station must be elevated to the same grade as the viaduct. The location and details of the station are, I understand, generally satisfactory, but the best method of ingress and egress for vehicular traffic to and from the station could not be settled until the elevation

of the tracks was determined.

The street openings in the viaduct should have fourteen feet clear head room and be of the full width of the street. The details of the plans and the general layout of the ground should be left to the railways to suggest when they submit plans for the approval of the Board.

I do not think the Board should now determine at what precise point the eastern end of the viaduct should be. It is sufficient, I think, for the Board to inform the railways at this juncture that Cherry street must be crossed overhead with a clearance of 14 feet. I say nothing at the moment as to the disposition of the Eastern avenue and Queen street crossings, east of the Don, as the Grand Trunk Railway have filed plans with the Board showing a line from the Don to Port Union following the lake shore, which would eliminate the Scarborough Heights grade. If this plan is gone on with and the new line constructed, the line over Eastern avenue and Queen street would doubtless be abandoned. The railway does not now run on Mill street, but if the construction of a viaduct would require the use of Mill street for railway purposes it should be so used, provided a right of way for vehicles was preserved on this highway.

I think the railways should be ordered to submit to the Board, within, say, sixty days from the date of the order, plans of a viaduct and bridges along the water front as far west as Bathurst street on the lines indicated. Copies of the plans should, of course, be sent to the city and then the Board should hold a sitting in Toronto, if necessary, when the details of the plan might be discussed, and if the Board is satisfied with them they could be finally approved and the railways ordered to commence construction.

Perhaps the most difficult point to determine in all this question is what is the fair and reasonable proportion of the cost of this work which should be contributed by the city of Toronto. We have had evidence of what has been done in other cities, but it has been of little assistance to us because circumstances differ so much in different cities. My own view is that as the proposed viaduct is going to prove such a benefit to Toronto that the city's contribution towards it should be substan-

tial. We must also bear in mind that the railways were permitted, if not induced by the city, to come into Toronto on the Esplanade level, and have spent very large sums of money in supplying terminals for Toronto. The railways will, of course, receive some benefits from a viaduct, such as being permitted to enter and leave the city at a much higher rate of speed than at present and be relieved of the constant danger of accidents at grade crossings, but these advantages will not be commensurate with the cost of elevating their tracks. I therefore think that Toronto should contribute one-third to the cost of a four-track viaduct, excluding the cost of tracks, ties and ballast, and one-third of the cost of the substructure necessary to elevate all tracks at the proposed new station.

It does not appear to me that land damages outside of those which may be suffered by the railways will be very great. If there are any such damages I think they should be settled by the city and the railways contribute two-thirds of the amount. With regard to damages suffered by the railways, I think they should be entirely paid by themselves. This will merely amount to an adjustment between the railways of each one's interests and losses in connection with the carrying out of the whole station and viaduct scheme. If the railways cannot adjust their difficulties between themselves the Board will do it for them as best it can at a later date.

The city will have to permit the laying of tracks or the construction of parts of the viaduct on city streets. I would not allow the city any compensation in such

With regard to the bridges at John, Spadina and Bathurst streets, the city should pay one-third of their cost and be responsible for the maintenance of the sidewalks and roadway on them.

The entire cost of maintenance of the viaduct should be borne by the railways, but the city should maintain the roadway and sidewalks at street openings. Before an order is issued carrying out the board's decision in this matter, draft copies of such order should be sent to all parties interested and they should be given an opportunity to speak to it. Owing to the fact that the parties were so far apart in their respective submissions to the Board and as we were not favoured with argument at our recent sittings, there may be some matters of detail in the proposed order which might be changed or some points covered which may have been omitted.

# McDougall and Secord v. Canadian Pacific Railway.

The applicants applied, under sections 26, 30 and 158 of the Railway Act, and such other provisions of the Act as were applicable, for an order declaring that the plan, profile and book of reference deposited by the Canadian Pacific Railway Company, as lessee of the Calgary and Edmonton Railway Company, in the Land Titles Office for the North Alberta Land Registration District, was not in accordance with the provisions of the Act, and that so far as the same affected certain lands named of the Hudson Bay Company's reserve, should be cancelled and annulled.

The application was heard at Edmonton on the 19th February, 1909, and at the conclusion of the hearing Chief Commissioner Mabee delivered the following oral judgment, which sufficiently sets forth the facts:-

This application brings up an important question of law, and if counsel for the railway company is right about it, it may as well be disposed of at once, so that if

the view we take is erroneous we can be put right without delay.

This application affects lots 125 to 144 in block 10, and lots 41, 91 and 92 in block 9 of the Hudson Bay reserve. Now, in reference to the first series of lots in block 10, it seems before this application was launched bona fide steps were taken in order to ascertain the value of the property, so that the railway company might obtain title from the owners. Those proceedings were on foot, and it does not apear to us to be

a wise thing for us to interfere with those proceedings, and with respect to the lots in block 10, the application must be refused.

The situation is quite different with respect to the three lots in block 9. This plan has been registered upon these lots now since, I think it was said, 1906.

Mr. NEWELL.—The 26th of May, 1905.

Hon. Mr. Maree.—1905 it is said; and since February or thereabouts in 1907 apparently no steps have been taken to negotiate with the owners of these three lots and fix the price that should be paid by the railway company upon taking title from the owners.

I do not know why steps were not taken to arbitrate with respect to the land in block 9 at the same time as proceedings were taken with respect to the lots in block 10. However, the fact is that no steps have been taken, and that during the past four years a cloud has rested upon these lands by the registration of this plan.

Now, the statute limits the compensation to be fixed in the event of the parties being unable to agree, and confines the arbitrators upon arbitration to the value of the

land at the date of the registration of the plan.

It is contended by counsel for the railway company that under the statute authorizing the construction of the railway company, the railway company has a right to register plans upon the lands of private individuals, tie them up during the whole life of the charter without taking any steps to acquire title, and when steps are taken, then the land-owner is limited in compensation to the value of the lands at the date of the filing of the plans.

I do not understand that to be the law. If it is, the sooner it is found out to be

the law the better for all concerned.

I think that under the Railway Act, where the Board has granted an order permitting registration, or approving of the plan, thereby permitting it to be registered, that there is clear authority under the amended section 29 of the Act of last year, which gives the Board power to review, rescind, change, alter or vary any order made by it.

Now, there was an order made by this Board approving of the location of this line through these three lots. It seems to me, if the language of the section means anything, it means that this Board may review that order, may rescind it, may change it, or may alter and vary it, and the conclusion we come to is that it will do equity between these parties to vary that order by rescinding the portion of it which located or approved of the line of location through these lots, 41, 91 and 92; and that will be the order of the Board.

If, on the other hand, the railway company is willing to let the compensation proceedings go ahead upon the basis of the present value, if that course is agreed to, no order need issue. If, however, that course is not agreed to, an order will go varying the former order by cancelling the location through these lots I have indicated.

Counsel for the railway company applied for leave to appeal to the Supreme Court

of Canada from the judgment of the Board.

Held, by Chief Commissioner, that the question involved was one of jurisdiction, and that application for leave to appeal must therefore be obtained from a judge of the Supreme Court of Canada.

## Complaint James Richardson & Sons.

The complainants, grain and commission merchants of Kingston, Ontario, complained to the Board that the railway companies unjustly discriminated against Kingston and in favour of Lake Huron and Georgian Bay ports, on shipments on western grain to points in Quebec and the maritime provinces, and applied for an order directing the said companies to file rates from Kingston and points in Quebec to the

maritime provinces similar to those which the said companies had established from Georgian Bay and Lake Huron ports.

The application was heard at Ottawa.

Judgment, Mr. Commissioner Mills, concurred in by Chief Commissioner Mabee and Assistant Chief Commissioner Scott, January 13, 1909:—

I think Mr. Richardson should be placed upon the same basis as other shippers of grain, &c., to the maritime provinces, that the rate charged to him should be such that he will be at no disadvantage at the various points at which grain, &c., is sold in the maritime provinces, that is, that the boat rate from Fort William to Kingston plus the rail rate from Kingston to various points in the maritime provinces should amount to the same sum as the boat rate from Fort William to Georgian Bay ports plus the rail rate from the said ports to the same points in the said provinces.

I think it is in the interests of the development of trade at various points in the country that Mr. Richardson and others like him east of Georgian Bay ports, unless very far east, should not be given any advantage nor be placed at any disadvantage in shipping from Fort William via Kingston elevators to points in the maritime provinces as compared with persons shipping from Fort William via Georgian Bay ele-

vators to the same points in the maritime provinces.

The order of the Board, dated January 13, 1909, directed that the rates charged from Kingston by the Grand Trunk Railway Company, the Canadian Pacific and the Kingston and Pembroke Railway Companies on western grain arriving at Kingston by vessel and destined to points in Quebec and the maritime provinces, be made on the basis of seven cents per 100 pounds from Kingston to Montreal; and that the proportional or 'arbitrary' rates from Montreal to the said points in Quebec and the maritime provinces, be added to the said rate of 7 cents per 100 pounds from Kingston to Montreal, do not exceed the proportional or 'arbitrary' rates from Montreal in force concurrently on western grain transferred at Lake Huron ports.

The order further directed that the rate fixed by this order should become effec-

tive not later than February 18, 1909.

# Thrift vs. New Westminster Southern Railway Company.

This matter was heard at the sittings of the Board held at Vancouver, February 25, 1909.

The facts are fully set forth in the judgment of the Chief Commissioner.

Chief Commissioner Mabee, March 15, 1909.

The New Westminster Southern was incorporated by an Act of the British Columbia Legislature, and has never been declared to be a work 'for the general advantage of Canada,' and objection was therefore taken that this railway is not under the control of, or within the jurisdiction of the Board of Railway Commissioners.

The road is operated by the Great Northern Railway. It was not shown that the New Westminster Southern had any rolling stock or equipment, or, so far as its operation was concerned, that it was in any way a separate concern from the Great Northern. The trains of the latter road between Seattle and Vancouver pass over the line of the New Westminster Southern, and it is the connecting link between the line of the Great Northern, in the State of Washington and Vancouver.

The Great Northern Railway, in so far as it operates in Canada, is subject to the jurisdiction of the Board. The New Westminster Southern connects with the former railway, and so falls within section 8 with respect to through traffic and all matters appertaining thereto. Subsection 21 of section 2 defines 'railway' as meaning any

railway which the company has authority to construct or operate.

The situation, then, is that a railway company subject to the jurisdiction of the Board, is operating this provincial road, and the applicant asks that certain facilities shall be provided by the railway company at Hazelmere, in the province of

British Columbia. The request is that a platform be established so that passengers may disembark with safety from the Great Northern trains, and some small station building be provided as a means of shelter for travellers.

These are matters appertaining to through traffic upon this railway, and I am of opinion that to that extent the railway is under the jurisdiction of the Board. I think it also only reasonable that proper facilities should be provided at Hazelmere for the safety and convenience of the public using the trains of the Great Northern Railway. The station need not be an expensive affair, but the Great Northern Railway Company, I think, should provide a suitable platform and a building of moderate expense that may be used by travellers as a shelter, and also for the temporary storage of freight. The Great Northern Railway Company, whose counsel opposed the application, will be added parties.

The formal issue of the order may be delayed for 30 days if the Great Northern Railway Company desires to apply for leave to appeal upon the question of jurisdiction. If no appeal is taken, one of the Board's engineers may define the size of the platform and location, and size of the shelter as well as the location.

## Re Interlockers.

Chief Commissioner Mabee: The senior roads complain that under the practice heretofore in force, an unfair burden is placed upon them when leave is granted to a junior road to cross their right of way and tracks. The senior road is in possession of the field, and although it is necessary in the public interest that under proper conditions and at proper points, junior roads should have the privilege of crossing, yet it strikes one at the outset that such privilege should not carry with it any burdens upon the senior company, other than those absolutely necessary as incidental to the crossing. Where an interlocking plant is established, an additional man is required to operate it, and the practice has been for the senior company to appoint this man. This imposes upon the senior company some additional risk that cannot be avoided; there must be at times delays in operation; the crossing itself is an added peril, carrying with it dangers of collision and loss to the senior company, that it would not be subject to had the crossing not been permitted; but hitherto in most instances, I think in all cases where the Board has made crossing orders, the man in charge of the interlocker has been regarded as the employee of the senior company only, in which event if, through his carelessness or negligence, damages arose to the property or employees of the junior company recovery could be had against the senior company. This seems absurd. The senior company may resist to the utmost the application to cross; this may be forced upon it; then a careful and skilful man may be selected to operate the interlocker, but through some fault or lapse of his, a train on the junior road is derailed, and the senior company is held for all the damage. The injustice of the situation is apparent. Before the establishment of this Board, the companies were fairer than that to one another, and agreements were provided where the junior company recognized that it was unreasonable to impose upon the senior company the liabilities above pointed out.

When this application came up, I thought the electric railway companies should be notified; this was done, and their views were placed on record. The situation as to these roads is, I think, quite different from that of the steam roads. In most instances, where they cross steam railways, these crossings are upon public highways where neither company owns its right of way, but as to which each has an easement only; differences as to result in the event of collisions and many other matters that occur to one, make it necessary to eliminate all electric roads from the consideration of this application, and the conclusions arrived at will have an application to the steam roads only. It is quite impossible to say how matters would work out upon the whole if left as they now are; the older roads are continually building new lines,

which are junior to other trunk and branch lines, and I suppose all the roads have both senior and junior crossings at various places, but if the loss did in the end even up, it would be by accident only, and this is a risk that should not be permitted to continue.

The senior company, while appointing the man to operate the plant, recognizes the interest of the junior company in the selection, and the latter company should have the right to require his dismissal for cause.

It was suggested upon the argument that the junior company should be given the right to operate the plant; this, of course, would not be reasonable and would be an unjust interference with the property and franchise rights of the senior company.

In some existing agreements, the signalman or operator of the interlocker is called a 'joint employee.' Now if an accident happens upon the junior road, owing to the negligence of this signalman, and he is not a fellow servant of the trainman upon the junior road, it is likely their damages against the senior company would be measured in a different scale than if the signalman were a joint employee of both companies. These damages should be borne by the senior company, but should be thrown back upon the junior company, so this anomalous position would be the result. The junior company is paying all the expense of installing and operating a plant to protect its patrons, property and employees; the man in charge causes damage to the latter in permitting two trains to collide, and the junior company is compelled to compensate upon a common law basis, while if this same crossing is sanctioned by the Board without the installation of an interlocker, the employees of the junior road injured in a collision at the crossing might, in some cases, be without redress.

This signalmen, although selected by the senior company, is always paid by the junior company; he is performing services for both. Sometimes the greater services are rendered to the junior company; the latter can, under certain circumstances, call for his dismissal; why do not all these elements establish a joint service. The whole situation is an artificial one, arising through terms and conditions imposed by the Board in the interest of the safety of the public, the employees, and the preservation of the property of the railway companies. The senior company is forced, by the necessities of the junior company, to engage this extra man, and if it exercises care in the selection, it seems to me it discharges its duty to the junior company and should not be liable to the latter company for the negligence of the man engaged; it has in addition to bear its chance of loss by reason of the negligence of this man, forced upon it by the junior road. The senior company probably, in most instances, has the most at stake at new crossings, so the engagement of the signalman is left in good hands. The junior company should not be placed in a position where it might be held for greater damages because it is called upon to provide protection, than it would were it at liberty to cross without protection. Again, the junior company should not be subjected to liability upon a higher scale, because it is prevented from selecting the man it has to pay for operating the protective plant it has been compelled to install.

I think from every point of view, in fairness to both roads, this signalman should be regarded as a 'joint employee' of each, and that where one steam road applies for leave to cross another at grade, permission for such crossing should be given, where an interlocker is required to be installed, only upon condition that the companies place in charge of the interlocker a competent joint signalman, who shall be the joint employee of both companies, selected by the senior company and liable to dismissal for cause upon complaint or objection by the junior company, and that then each company shall be liable for all the loss or damage suffered or sustained on its own lines by its patrons or employees, or to its property, caused by the negligence of the joint signalman, and in no event shall the companies, as between themselves, be liable for any loss or damage of any nature or kind whatsoever happening upon the line or lines of the other, and caused by or arising from the negligence of such signalman.

It was understood that the conclusions arrived at in this matter should apply to all 20c-20

interlockers ordered or established since October 1 last, but, of course, as to any in existence before that time, or as to those covered by agreements between the companies themselves, and continuing upon foot, these conditions will have no application.

If the interested parties desire to speak to the settlement of a permanent and settled form of conditions to go in these orders in the future, it may be taken up at the next meeting. It might be well to embody the conditions that appear in, I think two, former orders regarding interlockers, with those above indicated, so the whole interlocker provisions may appear in each order as it issues.

March 30, 1909.

# Re Canadian Northern Railway and Don Valley Lands.

Argued 22nd April, 1908. Judgment 28th April, 1908.

Chief Commissioner Mabee.—My brother Commissioners heard this application before I became a member of the Board and were of the opinion, in so far as the facts were concerned, that the application should be granted. Some of the land-owners, however, raised the objection that the proceedings did not fall within the provisions of section 178 of the Act.

Subsection 4 provides that 'the Board may, in its discretion, and upon such terms and conditions as the Board deems expedient, authorize in writing the taking, for the said purposes, of the whole or any portion of the lands applied for.' This section is much wider than section 139 of the Railway Act, 1903, which did not contain the words relating to the diversion of a highway, or the substitution of one highway for another, nor was it clear that under subsection 2 of section 186, a highway could be expropriated and closed up.

The necessity for the railway taking the particular lands in question for the purposes set forth in the application has been sworn to by the engineer, as required by subsection 3 of section 178. At the hearing oral evidence was given to the same effect, and the Board's engineer has reported that, in his opinion, such necessity exists.

Objection was taken by Mr. Osler for some of the persons interested that the railway was endeavouring to expropriate these lands that it might convey them to the city of Toronto in substitution for certain lands the city was selling to the railway company, but a perusal of the agreement entered into between the railway company and the city shows that the lands the company is asking authority to take are to be used as a public highway in lieu of certain streets running through the lands covered by the agreement for sale entered into between the city and the railway company; and my brother Commissioners have found as a fact that the lands covered by this application are required that the highway or highways in question may be diverted. Objection was also taken that the railway company intended locating a railway yard upon the lands hitherto acquired by it and those it was purchasing from the city; but I do not think, upon this application, the Board has any power to prevent the location of a yard at the point in question, the only matter for determination being whether the lands applied for are necessary for the diversion of these highways. If they are, the section covers the application. Some of the landowners admitted they could not successfully oppose the application. It is true subsection 4 makes it discretionary with the Board. This discretion has been exercised by my brother Commissioners in favour of the applicant.

The railway company is not, however, necessarily entitled to locate the diverted or substituted highways as laid out upon the plan filed. The landowners are entitled to a voice in the new location, and if by reason of a change in such location the company is unable to obtain a conveyance of the lands covered by its agreement with the city, it necessarily follows that this application fails.

In the meantime the Board's engineer will, after conference with the interested parties, direct where these diverted or substituted highways shall run. Then, if the city is still willing to carry out its agreement, the company may have authority to take the lands necessary for the new highways, but full compensation must be paid to all landowners whose property is taken, not only for the value of the lands so taken, but also damages (if any) to the rest of the lands which may be injuriously affected by the location of a railway yard at the point in question, and generally by reason of the exercise of the powers conferred upon the company. If in the result the railway company takes lands from the owners affected for the purpose sought, the arbitrators may, in fixing compensation or in determining the costs of the arbitration, have regard to the landowners' cost of this application, and in the event of the railway company not acquiring the lands applied for, or any other lands from the owners affected by this application, then it should pay the landowners' cost of this application; in the latter event to be fixed by the secretary of the Board.

Judgment of Chief Commissioner Mabee, concurred in by Deputy Chief Com-

missioner Bernier and Commissioner Mills.

# Re Bell Telephone and Windsor Hotel Agreement.

The only object in submitting this agreement for the purpose of obtaining the approval of the Board is that, for the term covered by the contract, the Bell Telephone Company may be lawfully entitled to exact the tolls provided for in the contract.

The result of the Board's unqualified approval would be, no matter how the situation might change in future years, that the telephone company would be entitled to enforce payment of the 10 per cent rate, as the contract provides, during the period of ten years.

By judgment of the Board, dated November 23, 1907, the contract was approved

of subject to the following conditions:-

1. That the charge of ten cents for each connection had over any telephone thereby leased with the Montreal exchange subscribers of the telephone company should be subject to alteration at any time by the Board.

2. That any extension of the term of the agreement after the expiration of ten

years should be subject to the approval of the Board.

This disposition of the matter was not satisfactory to the telephone company,

and a hearing was afterwards had, at which much evidence was given.

I have gone over this testimony, and I am clearly of the opinion that the disposition of the matter made by the Board in November last was correct and proper. I see no reason why an unqualified approval of the contract should be given; and the order approving the contract should include the above conditions.

Ottawa, May 13, 1908.

## APPENDIX E.

# INFORMAL COMPLAINTS FILED WITH THE BOARD DURING THE YEAR ENDING MARCH 31, 1909.

608. Condition of the road-bed of the Caraquet Railway between Chatham and Shippigan, New Brunswick.

609. Blocking of farm crossing one mile south of Thornhill, Ontario, by Grand

Trunk Railway trains being left standing on the track.

610. Train service furnished by Grand Trunk Railway Company in the Cayuga, Ontario, district.

- 611. Unreasonable delay by the Canadian Pacific Railway Company in the handling of live stock in Alberta, and discrimination in the matter of personal transportation.
- 612. Refusal of the Grand Trunk Railway Company and Wabash Railroad Company to issue passenger tickets to travel over portions of the Grand Trunk Railway line operated by both companies which are available on either company's trains.
- 613. Discrimination by the Canadian Northern Railway in favour of the city of Winnipeg, Manitoba, on shipments to points on the Regina branch of the Canadian Northern Railway via Regina through Brandon to Winnipeg, Manitoba.

614. Unprotected condition of the Grand Trunk Railway Company's crossing

directly east of Grand Trunk station, Bowmanville, Ontario.

- 615. Excessive express charged by the Canadian Northern Express Company on a return 'C. O. D.' shipment from North Battleford, Saskatchewan, to Toronto, 'Ontario.
- 616. Delay in settlement by Canadian Pacific Railway Company for loss of carlead of apples wrecked en route from Drumbo, Ontario, to Regina, Saskatchewan.
- 617. Excessive freight rates charged on cedar poles as compared with rates on lumber from Coe Hill to Toronto, Ontario.
- 618. Flooding of farm near Waterloo, Ontario, owing to the construction of the Guelph and Goderich Railway, and poor drainage provided.

619. Proposed increase in freight rates on ore shipments via Algoma Central and

Hudson Bay Railway.

620. Advance in freight rates on timber and forest products by Grand Trunk Railway Company, contained in tariff 'C. F. 83,' 'C. R. C. No. E 1210,' issued at Montreal, Quebec, April 15, 1908, effective May 1, 1908.

621. Refusal of Canadian Pacific Railway Company to do certain work along

right of way near Labelle, Quebec.

622. Delayed rebates by railways on ocean freight traffic.

623. Excessive freight rates charged by the Atlantic and Lake Superior Railway to and from Maria East, Quebec.

624. Excessive freight charges by Grand Trunk Railway Company on three cars

of spruce lumber shipped from Whitney, Ontario, to Toronto, Ontario.

- 625. Loss of cattle on Canadian Pacific Railway near Ouimet, Ontario, and refusal of railway company to make settlement therefor, and to fence the right of way.
  - 626. Rates and facilities of express companies on shipments of milk and cream. 627. Condition of trestle at the mouth of Stewart's brook, on the Atlantic and
- Lake Superior Railway at Ouimet, Ontario.

628. Excessive charge of Bell Telephone Company for long distance calls between

Montreal and Quebec city, Quebec.

629. Condition of roadbed on the Midland Railway, Manitoba, between Portage la Prairie and the United States boundary.

630. Excessive freight rates charged by the Grand Trunk Railway Company on a

small touring car from Washington, D.C., to Toronto, Ontario.

- 631. Loss in transit via Canadian Northern Railway of moveable parts belonging to a log hauling engine shipped from Eau Claire, Wis., to Prince Albert, Saskatchewan.
- 632. Alleged unhealthy and unsanitary condition of railway stations in general, affecting the health of telegraph operators and employees within the stations.
- 633. Unsatisfactory train service on Canadian Pacific Railway to and from Macoun, Saskatchewan.
- 634. Refusal of the Midland Railway Company of Manitoba to pay wages to men on construction work.
- 635. Delay in the transportation of freight shipments from Gananoque, Ontario, to Yarmouth, Nova Scotia.
- 636. Failure on part of Canadian Pacific Railway Company to fence right of way at quarter section, ½ lot 6, concession 3, township of Dorion, near Ouimet, Ontario.
- 637. Increasd freight rates on lumber shipments from Brule lake, Ontario, to Ottawa, Ontario.
- 639. Overcharge on shipment of binder and harrow from point in the United States to Drinkwater, Saskatchewan.
- 639. Excessive telephone rates charged by Bell Telephone on calls between Braeside. Ontario, and Malloch's Mill, Ontario.
- 640. Freight rates on cattle via Grand Trunk Railway Company from Black Rock, Ontario, to Lindsay, Ontario.
- 641. Failure of the Canadian Pacific Railway Company to fence right of way of west half lot 2, concession 4, and east half lot 2, concession 5, township of Dorion, Ouimet, Ontario.
- 642. Loss of eighty cords of wood near Campbellville, Ontario, from ignition by spark from passing engine of railway.
- 643. Freight rates on the Orford, Mountain and Canadian Pacific Railways on lumber and grain shipments, to and from Kingsbury, Quebec.
- 644. Failure of Canadian Pacific Railway Company to fence right of way at southwest quarter No. 13, range 8, west 1st meridian, township 8, Rathwell, Manitoba, causing damage to crops by cattle entering farm property.
- 645. Inadequate settlement by Canadian Pacific Railway Company for right of way, Wolseley-Reston branch, northeast quarter section No. 32, township 13, range 7, west of 2nd meridian.
  - 646. Loss of trunk delivered to Dominion Transport Co., Toronto, June 22, 1907.
- 647. Use of stamp by railways at Montreal, Quebec, on bills of lading for cheese shipments. 'Owner's risk of weather. Some boxes broken.'
- 648. Condition of drainage on right of way of Canadian Pacific Railway at South Gower, Ontario.
- 649. Freight rates on salt from Kincardine, Ontario, on Michigan Central Railway to Lake Erie and Detroit River Railroad points.
  - 650. Carriage of lumber shipments via Ontario, Belmont and Northern Railway.
- 651. Condition of drainage along right of way of Canadian Pacific Railway near Crookston, Ontario.
- 652. Overcharge on carload of oats via Canadian Pacific Railway to Westport, Ontario.
- 653. Train service and shipping facilities on Grand Trunk and Wabash Railroads at Middlemiss, London and St. Thomas, Ontario.
- 654. Excessive charges of Dominion Express Company on a box shipped from Birnie, Manitoba, to Strasburg, Saskatchewan.

655. Loss of one hundred acres of hay, one hundred and fifty fence posts at Cowley, Alberta, by fire started by passing engine of the Canadian Pacific Railway Company.

656. Excessive freight rates on coal charged by Canadian Northern Railway from

Tabor, Alberta to Dalmeny, Saskatchewan.

657. Condition of approaches leading to tracks of Toronto, Hamilton and Buffalo Railway that cross concessions in township of Oakland, Ontario.

658. Width of road-bed and size of ditches provided in cuts in the Grand Trunk

Pacific Railway in the province of Saskatchewan.

659. Freight rates on carbide and products from Shawinigan Falls to Sherbrooke, Quebec, and Sault Ste. Marie, Ontario.

660. Excessive switching charges of railways at Thorold, Ontario.

661. Unprotected state of the Canadian Northern Railway running through property in the vicinity of Makaroff, Manitoba.

662. Non-fencing of right of way of Canadian Northern Railway at the northeast

quarter section 10-28-30, west of 1st meridian, near Togo, Saskatchewan.
663. Improper stock cars furnished by Michigan Central Railway for the ship-

ment of hogs.

664. Freight rates charged by the Canadian Pacific Railway on cattle from Alberta points to Winnipeg, Manitoba.

665. Cattle killed along the right of way of the Canadian Pacific Railway near Canora, Saskatchewan, owing to non-fencing along the line of railway.

666. Overcharge on twelve cars of lumber from Arnprior, Ontario to Valleyfield, Quebec, via Grand Trunk Railway.

667. Condition of road-bed of the Canadian Pacific Railway in province of Alberta.

668. Condition of drainage along the right of way of the Grand Trunk Railway Company and Central Vermont Railway at lot No. 247, parish of St. Antoine de Longueuil, near St. Lambert, Quebec.

669. Unsatisfactory mail and train service on Canadian Pacific Railway to and

from Midale, Saskatchewan.

670. Hours of labour of despatchers on Grand Trunk Railway District between Belleville and Brockville, Ontario.

671. Condition of Canadian Northern Railway from Dauphin, Manitoba, to the south bank of South Saskatchewan river.

672. Poor facilities provided by the Canadian Pacific Railway Company for the handling of hogs at Kenilworth, Ontario.

673. Excessive freight rates of Vancouver, Westminster and Yukon Railway on

lumber shipped from Burnaby, British Columbia.

674. Excessive freight rates on shipments of sugar from Raymond, Alberta, via Canadian Pacific Railway and Alberta Railway and Irrigation Company.

675. Storage charges by Grand Trunk Railway on shipment of agricultural im-

plements.

676. Freight rates charged by the Grand Trunk Railway on shipment of feed wheat from Girvin, Saskatchewan to Holstein, Ontario.

677. Excessive freight rates charged by Grand Trunk Railway on corn shipment

from Chicago, Ill., via Chatham, to St. John, New Brunswick.
678. Poor train connections afforded by Grand Trunk Railway Company at Til-

sonburg Junction, Ontario.

679. Insufficient car supply at Clinton, Ontario, for the movement of traffic to

Oxbow, Saskatchewan.
680. Freight rates charged by the Canadian Pacific Railway Company from Mont-

real to Aylmer, Quebec.
681. Freight rates charged by the Canadian Northern Railway Company on ties

681. Freight rates charged by the Canadian Northern Railway Company on ties in carloads to St. Boniface Transfer, Manitoba.

682. Overcharge on shipment of hay on the Grand Trunk Railway from Mitchell and Harley, Ontario to Timagami, Ontario.

683. Overcharge on car of hay shipped by Canadian Pacific Railway from West

Monkton to Timigami, Ontario.

684. Freight rates charged by Grand Trunk and Canadian Pacific Railway Companies on corn shipments from Chicago via Chatham to St. John, New Brunswick.

685. Unsatisfactory train connections of Grand Trunk Railway at Tilsonburg and

Tilsonburg Junction, Ontario.

- 686. Excessive switching charges on Michigan Central Railroad at St. Thomas, Ontario.
- 687. Condition of drainage along right of way of Canadian Northern Ontario Railway near Barne's Bale, Ontario.
- 688. Condition of road-bed on Canadian Northern Railway between Tisdale and Melfort, Saskatchewan.
- 689. Freight rates of Grand Trunk Railway on pulp wood shipment from Pembroke, Ontario to Fulton, New York.
- 690. Refusal of Quebec Central Railway Company to accept bill of lading at D'Israeli, Quebec, on shipment consigned to private siding.
- 691. Unsatisfactory train connection between Canadian Pacific Railway and Temiscouata Railway.
- 692. Loss of cattle killed on right of way of Canadian Northern Railway near Langham, Saskatchewan.
- 693. Passenger rates on Quebec Central Railway from Lake Megantic to Ste. Cecile, Quebec.
- 694. Dangerous condition of farm crossing on Grand Trunk Railway at lot No. 33 in the township of Seneca, Ontario.
  - 695. Switching rates of Canadian Northern Railway at Port Arthur.
- 696. Condition of highway crossing on Canadian Pacific Railway, west of Mountain Station.
- 697. Freight rates charged by railways on ingot tin in less than carload lots from Montreal, Quebec to London and St. Thomas, Ontario.
- 698. Requirements of railways that mileage tickets be presented at ticket office in exchange for passage tickets.
- 699. Flooding of property in front of town of Girvin, Saskatchewan, owing to Canadian Pacific Railway Company not putting in culvert.
- 700. Failure of the Grand Trunk Pacific Railway Company to settle for expropriated lands required for right of way in Fort Rouge, Manitoba.
- 701. Failure of the Grand Trunk Railway Company to provide station near the crossing of the middle line in the township of Somerville, Ontario, in accordance with agreement.
- 702. Overcharge on shipments on the Canadian Northern Railway from Winnipeg to Ninette, Manitoba.
- 703. Failure of the Canadian Northern Railway to plank two crossings in the vicinity of Quill Lake, Saskatchewan.
- 704. Closing of telegraph office by Canadian Pacific Railway and Great Northwestern Telegraph Companies, Colborne, Ontario.
  - 705. Shortage of grain, lost in transit over railways.
- 706. Overcharge on shipment of freight on the Canadian Pacific Railway from Edmonton, Alberta to Vancouver, British Columbia.
- 707. Failure of the Canadian Northern Railway to construct the Goose Lake branch in the province of Saskatchewan.
- 708. Damage to household furniture shipped by Canadian Pacific Railway from Edenland, Saskatchewan, to a point in Manitoba.

709. Loss in transit of 175 bushels of grain shipped by Canadian Pacific Railway from Gainsboro', Saskatchewan, to Fort William, Ontario, and refusal of railway to settle therefor.

710. Shortage in shipment of car of rye flour from Delhi, Ontario, to Montreal, Quebec. Also damage to goods caused by shunting.

711. Condition of crossing of Canadian Pacific Railway Company between town of Arcola and town site of Kisbey, Saskatchewan.

712. Condition of culvert on the Central Ontario Railway near Eldorado, Ontario.

713. Condition of road-bed of Canadian Northern Railway running through Melfort county, to Prince Albert, Saskatchewan.

714. Excessive rates of Grand Trunk Railway on shipment of oats from Kingston, Ontario, to Boston, Massachusetts, as compared with rates from Georgian Bay points.

715. Refusal of Canadian Pacific Railway to sell second class tickets from Dubuc, Saskatchewan, to Toronto, Ontario.

716. Excessive freight rates on the Lake Erie and Detroit Railway on shipment of salt from London, Ontario, to Clamworth, Ontario.

717. Refusal of the Grand Trunk Railway Company to allow commissions on tickets sold for excursions to Sarnia, Ontario.

718. Dangerous condition of the Canadian Pacific Railway at Duncan, British Columbia, and request that an automatic signal be provided.

719. Extra charge on Grand Trunk Railway Company for stop-over privilege on cheese shipments.

720. Failure of the Canadian Northern Railway Company to erect fence and put in proper crossings over ditches and gates at section 14-13-1 west.

721. Delay in delivery of shipment of nursery stock forwarded via Toronto, Hamil-

ton and Buffalo Railway Company to St. Louis station, L'Islet county, Quebec. 722. Estimated weights charged on three head of cattle from Sussex, New Brunswick, to Perth, Ontario.

723. Dangerous condition of crossings of the Grand Trunk and Michigan Central

Railroads in the town of Welland, Ontario.
724. Refusal of the Canadian Northern Quebec Railway to put its rails on a level with the streets and to build sidewalks at the crossings in the town of Masion-

neuve, Quebec.
725. Excessive freight charges on Grand Trunk Railway on green salted hides from Montreal to St. Catharines, Ontario.

726. Delay in construction of Canadian Northern Railway Dalmeny-Carlton extension.

727. Closing of certain streets in the town of Alliston, Ontario.

728. Condition of road leading to freight station of the Canadian Pacific Railway, and damage to goods on account of station platform being too high.

729. Accommodation afforded to the public by the Canadian Pacific Railway Company on the Macleod branch.

730. Length of hours of conductors on the Grand Trunk Pacific Railway, west of Portage la Prairie, Manitoba.

731. Failure of Canadian Pacific Railway Company to establish freight rates to and from Fry's station, Saskatchewan, to stations between Antlers and Redvers.

732. Running of trains by the Canadian Pacific Railway Company without proper inspection from divisional points in the west.

733. Construction of St. Mary's and Western Ontario Railway through lands of property owners at St. Mary's, Ontario, without authority.

734. Dangerous condition of crossing at Canadian Pacific Railway at station at Mission Junction, British Columbia.

735. Running of trains by Canadian Pacific Railway without proper inspection at terminals, and engines without proper braking appliances.

736. Excessive freight rates of the Great Northern Railway on shipments of cedar poles from Creston, British Columbia.

737. Overcharge on shipments of hardwood lumber via Canadian Pacific Rail-

way Company from St. Agathe and Lachute, Quebec.

738. Inefficient train service on Canadian Northern Quebec Railway between Quebec and Montreal; also poor station accommodation at Garneau, Heronville rand St. Tite, Quebec.

739. Delay in delivery of shipment of spruce seedlings forwarded by the Canadian Pacific Railway Company from Grenfell, Saskatchewan, to Strasburg, Sas-

katchewan.

740. Excessive whistling of engines on Canadian Pacific Railway at night be-

tween Quebec station and Dorchester street, Quebec.

741. Excessive freight rates of Grand Trunk and Canadian Pacific Railway Companies on grain shipments from Kingston, Ontario, to New Brunswick and Nova Scotia points, as compared with rates from Georgian bay.

742. Excessive noise caused by operation of moving cars and engines on the Grand Trunk, Canadian Pacific and Ottawa and New York Railways at Ottawa, Optario.

743. Dangerous railway crossing of Grand Trunk and Kingston and Pembroke Railways opposite barracks at Kingston, Ontario.

744. Excessive passenger rates charged by the Windsor, Essex and Lake Shore Rapid Railway Company.

745. Refusal of the Pere Marquette Railway Company to carry passengers on way-freight trains.

746. Condition of trains and accommodation of stations on the Canadian Northern Quebec Railway between Maisonneuve and St. Paul l'Ermite, Quebec.

747. Dangerous condition of road-bed and rolling stock Grand Valley Electric Railway between Brantford and Galt, Ontario.

748. Condition of the Canadian Northern Ontario Railway bridges between Rainy River and Port Arthur, Ontario.

749. Failure of the Canadian Pacific Railway Company to construct its line between Hardisty and eastern boundary of Alberta.

750. Dangerous points on Brennan's siding, Grand Trunk Railway Company, position of electric light poles on northwest corner of Kelly street and Ferguson avenue, Hamilton, Ontario.

751. Running of Canadian Pacific Railway Company's trains in and out of Vancouver, British Columbia, without proper inspection.

752. Unsatisfactory mail service on Canadian Northern Railway between Neepawa and McCreary, Manitoba.

753. Dangerous condition of road-bed of the Central Vermont Railway.

754. Train service of the Grand Trunk Railway Company on Port Perry and Whitby branch.

755. Non-fencing of right of way of the Canadian Northern Railway near Eldon, Manitoba.

756. Fencing of road allowance between concessions 2 and 3 in township of Tay, east of Midland, Ontario, by Grand Trunk Railway.

757. Condition of culvert on the Canadian Northern Ontario Railway near

James Bay Junction, Ontario.

758. Excessive whistling of trains by Canadian Pacific Railway Company's engines at Almonte, Ontario.

759. Loss of cattle on the Canadian Pacific Railway near Cowley, Alberta, from inefficient cattle guards.

760. Unsatisfactory drainage on the Canadian Pacific Railway at Louisville, Quebec,

761. Condition of passenger coaches on the Ottawa and New York Railway.

762. Condition of highway crossings of Canadian Pacific, Grand Trunk and Canadian Northern Ontario Railway Companies in township of Foley, Ontario.

763. Condition of culvert on Grand Trunk Railway at lot 20, township of Lon-

don, Ontario.

764. Refusal of Grand Trunk Railway to refund overcharge on shipment of lumber from Toronto, Ontario.

765. Treatment accorded passengers by conductor on Grand Trunk Railway train

No. 33, from London, September 15, 1908.

766. Excessive freight charges by Canadian Pacific Railway on shipment from Frankfort, Ontario, to Montreal, Quebec.

767. Dangerous condition of roadway on Canadian Pacific Railway near Domin-

ion Copper Company's smelter, Boundary Falls, British Columbia.

768. Order issued by the Grand Trunk Railway Company that train No. 1 shall not stop at Thousand Island station junction, Ontario.

769. Excessive freight rates of the Canadian Northern Quebec Railway, Quebec,

Lake St. John Railway Companies on a through shipment.

770. Refusal of the Canadian Pacific Railway Company to make an allowance for breakage of goods in transit.

771. Condition of farm undercrossing of Canadian Pacific Railway Company at

lot No. 19, concession 2, township of London, Ontario.

772. Excessive delay of railway companies in repayment to shippers of grain for lumber supplied for car doors.

773. Loss of shipment of household effects from Spokane, Washington, to Clares-

holm, Alberta. via Intercolonial Railway.

774. Excessive freight rates charged by the Canadian Pacific Railway Company on shipments of grain to and from Guernsey, Saskatchewan, to the terminal elevators on the great lakes.

775. Crossings of the Canadian Northern Railway, Oak Point branch at Warren,

Untario.

776. Inability of residents of Wainwright, Alberta, to transmit messages over telegraph wires of the Grand Trunk Pacific Railway.

777. Excessive freight rates charged on Canadian Pacific Railway on pulpwood

from St. Stephens to Milltown, New Brunswick.

778. Excessive charges of the Dominion Express Company in Winnipeg, Manitoba, for the carriage of newspapers.

779. Drainage of right of way of Canadian Pacific Railway Company through

farm near the village of Portneuf, Quebec.

780. Condition of farm crossing on Canadian Northern Quebec Railway in village of Portneuf, Quebec.

781. Dangerous condition of crossing on the Grand Trunk Railway near Fergus,

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782. Condition of highway crossing on the Thessalon and Northern Railway, east of road in township of Thessalon, Ontario.

783. Freight rates on sand and gravel from York to Toronto, Ontario, via Grand

Trunk Railway.

784. Delay in delivery by railways of shipments of coal at Elstow, Saskatchewan.

785. Failure of the Canadian Northern Railway to erect fences on southwest quarter, section 13 township of Morley, Rainy River district, Ontario.

786. Insufficient supply of cars by railways for the movement of wheat from Red-

vers, Saskatchewan.

787. Refusal of Grand Trunk Railway Company to rectify error in billing a car of coal to Toronto, Ontario.

788. Closing by Canadian Pacific Railway Company of certain streets in the village of Coteau Junction, Quebec.

789. Failure of the Brandon, Saskatchewan and Hudson Bay Railway to fence the right of way opposite farm property at Wakopa, Manitoba.

790. Overcharge of \$4.95 on shipment of brick from St. Polycarpe to Dorval,

Quebec, by Canadian Pacific Railway Company.

791. Construction of Grand Trunk Pacific Company across property in Hurry, Alberta, severing six to ten acres and making a deep cut through the property and throwing waste dirt over the adjoining land.

792. Overcharge of \$18 (eighteen) on shipment of dog by Dominion Express Co.,

from Winnipeg, Manitoba to Sudbury, Ontario.

793. Failure of the Brandon, Saskatchewan and Hudson Bay Railway to fence

the right of way on northeast quarter section No. 13-4-20, Manitoba.

794. Construction by Canadian Pacific Railway Company of wagon road across property at Strathcona, Alberta.

795. Excessive freight rates charged by the Canadian Pacific Railway Company

on shipment of pulpwood from Corbeil to Hawkesbury, Ontario.

796. Dangerous condition of public crossing of Canadian Pacific Railway Company at the town line beween South Gower and Oxford, Ontario; also unsatisfactory condition of farm crossing.

797. Excessive freight rates on shipments of fence wire from Portage la Prairie,

798. Dangerous crossing of Canadian Pacific Railway Company at range 27, mile

85.5 in the town of Claresholm, Alberta.

- 799. Excessive freight charges by the Canadian Pacific Railway and Canadian Northern Railway Companies on bulkhead cars of grain from western points to Port Arthur and Fort William, Ontario.
- 800. Damage to property by the Central Ontario Railway and removal of material without the consent of the owner at Maynooth, Ontario.
- 801. Injury to horse at public crossing at Forest Station, Manitoba, on the Grand

Trunk Pacific Railway.

802. Stop-over charge of the Grand Trunk Pacific and Canadian Pacific Railway. Companies at Sarnia tunnel on lumber shipments.

803. Damages to property at St. Paulin, Quebec, by diverting of water course by

the Canadian Northern Quebec Railway Company.

804. Freight rates charged by the Canadian Pacific Railway Company on shipments of grain to Montreal and New Brunswick points.

805. Inability of industry at Kemptville, Ont., to recover from Canadian Pacific

Railway Company money paid out by parties in regard to private sidings.

- 806. Shunting on the Hamilton Railroad by London and Port Stanley Railway Company, operated by the Pere Marquette Railway Company.
- 807. Failure of the Canadian Northern Railway Company to fence right of way through section 32-19-21 west 2nd meridian, near Lumsden, Saskatchewan.
  - 808. Closing of crossing near village of Nashville, Ontario, by Canadian Pacific

Railway Company.

- 809. Shortage in delivery on shipment of household goods forwarded by the Canadian Northern, Canadian Pacific and Grand Trunk Railway Companies from Rainy River to Gravenhurst, Ontario.
- 810. Failure of the Canadian Pacific Railway Company to move grain shipment from Grannan, Alberta.
- 811. Proposed closing of station on Canadian Northern Railway at Borden, Saskatchewan.
- 812. Failure of the Canadian Northern Railway Company to fence its right of way. at the northeast quarter section No. 21, township 19, range 21, west 2nd meridian.
- 813. Insufficient car supply by the Canadian Pacific Railway Company for the movement of traffic from Glenboro, Manitoba.

814. Excessive passenger rates on the Canadian Pacific Railway between Hanover and Walkerton, Ontario.

815. Inadequate car supply by Canadian Pacific Railway Company for movement

of grain from Belle Plains, Saskatchewan.

\$16. Refusal of the Canadian Northern Railway to pay for lands taken for right of way at Blackfoot Hill, Alberta.

817. Refusal of the Canadian Pacific Railway to permit third party to use private

siding at Outremont, Quebec.

818. Failure of the Canadian Pacific Railway Company to pay for lands taken at Brookdale, Manitoba, for the construction of McGregor-Varcoe branch.

819. Condition of drainage on the right of way of the Guelph and Goderich

Railway through lot 4, concession 9, township of Morris, Ontario.

820. Change of time table on Halifax and Southwestern Railway between Middleton and Bridgewater, Nova Scotia.

821. Delay by Canadian Northern Railway Company in constructing and opening for traffic of Goose Lake branch.

822. Restriction placed by the Dominion Express Company on the carriage of furs

to Great Britain by charging excessive express rates for insurance of goods.

823. Failure of the Canadian Northern Ontario Railway Company to provide drainage to carry off surface water opposite lots 28 and 29, concession 6, township of McDougal, Ontario.

824. Condition of fences, station accommodation for the handling of express and freight, also lack of an agent at Fruitvale, British Columbia, on the Great Northern Railway.

825. Insufficient car supply by Canadian Pacific Railway for the movement of traffic at Parkland, Alberta.

826. Refusal of the Grand Trunk Railway Company to permit installation of telephones in passenger and freight stations at certain stations in province of Quebec.

827. Hours of duty of trainmen employed on the Canadian Northern Ontario Railway, Rainy River district.

828. Reduction of train service between Bannockburn and Tweed, Ontario, on Bay of Quinté Railway.

829. Inadequate car supply for the movement of live stock on the Canadian

Pacific Railway Company from Cowley, Alberta.

- 830. Excessive freight rates and minimum carload weight on fruit shipments from Peachland, British Columbia, to Victoria, British Columbia, on the Canadian Pacific Railway.
- 831. Condition of swing bridge on the Grand Trunk Railway over Galops canal in the village of Cardinal, Ontario.
- 832. Inadequate car supply by the Canadian Pacific Railway Company at Frys and Antlers stations, Saskatchewan.
- 833. Damage in transit to household effects shipped by the Canadian Pacific Railway Company from Worcester, Massachusetts, to Moosejaw, Saskatchewan.
- 834. Inadequate facilities for the reception of freight and express matter at Beloeil, Quebec.
- 835. Condition of drainage on the Quebec, Montreal and Southern Railway near Picton to Smith's Falls, Ontario.
- 836. Stop-over charge on the Canadian Pacific Railway Company at Cartier, Ontario.
- 837. Excessive rates on the Canadian Pacific Railway on shipment of apples from Picton to Smith's Falls, Ontario.
- 838. Excessive rates charged by the Grand Trunk for switching of car of soft coal at Hagersville, Ontario.
- 839. Refusal of the Canadian Pacific Railway Company at Kamloops, British Columbia, to carry trunk as freight unless boxed.

840. Excessive charges of the express companies in western provinces.

841. Overcharge amounting to \$884.01 collected by the Grand Trunk Railway Company on a shipment of sand and gravel from Niagara Falls to Welland, Ontario.

842. Dangerous condition of crossing on the Canadian Pacific Railway in the

township of Bentinck, county of Grey, at 2nd concession.

843. Damage by the Central Ontario Railway to property at Maynooth, Ontario, by fire.

844. Excessive rates charged by the Canadian Northern Railway for warehousing carload of wheat consigned to Port Arthur, Ontario.

845. Objections to plan of proposed subway on the Grand Trunk Pacific Railway at highway crossing, northeast quarter of 15-53-24 W. 4.

846. Poor train service on the Canadian Pacific Railway to and from Mayook,

British Columbia.

847. Loss in shipment of photo tent forwarded via Canadian Northern Express Company from Lanigan to Battleford, Saskatchewan.

848. Loss of four horses on right of way of the Canadian Pacific Railway Company at Arcola, Saskatchewan.

849. Dangerous condition of Canadian Pacific Railway crossing Main street, Hamilton street, Kenora, Ontario.

850. Misleading information furnished by the Canadian Pacific Railway Company's agent at Lyleton and Brandon, Manitoba, to travelling public.

851. Freight rates on ore shipments by Grand Trunk Railway in favour of United States smelters.

852. Extra charge levied by Dominion Express Company on returned empty lobster cans between Detroit and Atlantic coast points.

853. Delay in delivery of freight shipments at Cobalt, Ontario, and British

Columbia points.

854. Failure of the Canadian Northern Railway to make settlement for property taken for railway purposes at township 33, range 10, section 16, west third meridian, near Tessier, Saskatchewan.

855. Freight rates of Canadian Pacific Railway Company on oats to points on the Toronto, Sudbury branch and main line Bisco to North Bay, Ontario.

856. Placing of power wires across tracks of the Canaian Pacific Railway in the vicinity of Lachine canal swing bridge without authority of board.

857. Damage caused by delay in delivery of shipment of baggage by Canadian Pacific Railway to Vancouver, British Columbia.

858. Failure of the Thousand Islands Railway to deliver consignment of bolts shipped from Gananoque, Ontario, to the National Transcontinental Railway at Cochrane on the Temiscouta and Northern Ontario Railway.

859. Excessive freight rates charged by the Canadian Pacific Railway companies on cartons shipped from Trois Rivières, Quebec, to St. John, New Brunswick.

860. Excessive rates charged by express companies on shipment of fresh fish from Meaford to London, as compared with the rates from Meaford to Toronto, Ontario.

861. Loss sustained by shippers on goods forwarded from Edmonton, Alberta, to flag station on the Canadian Northern Railway near Brudenheim, Alberta.

862. Taking up of planking by the Grand Trunk Railway Company from farm crossing known as the east half lot 43, 6th concession, County Wainfleet.

863. Dangerous and non-protected highway crossing in the vicinity of Swift Current, Saskatchewan.

864. Rates on shipment of freight from Detroit, Michigan to Western Ontario points, as covered by tariff E. 874 effective September 15, 1908.

865. Removal of agent by Canadian Pacific Railway from Kelloe, Manitoba.

866. Increased rates on the Canadian Pacific Railway on bricks, C. L., Casselman, Ontario to Montreal, Quebec.

867. Poor train service of Canadian Pacific Railway between Lauder and Tilston, Manitoba.

868. Condition of the approaches to the wharf at North Bay, Ontario.

869. Delay in running of trains of the Canadian Pacific Railway on the North Shore branch between Montreal, Quebec and Ottawa, Ontario.

870. Overcharge on shipment of settlers' effects forwarded via Canadian Pacific

Railway from Mount Forest, Ontario, to Moosejaw, Saskatchewan.

871. Discontinuance by railways of service of heated cars from points in the province of Quebec in the winter months for the shipment of perishable goods.

872. Condition of highway crossing and lack of sufficient number of crossings,

District of Nutana, Saskatchewan, on the Canadian Northern Railway.

873. Excessive express charges on shipments of cream to Montreal, Quebec.

874. Inadequate car supply for the shipment of grain from Weyburn, Saskatchewan.

875. Inadequate car supply by railways in Alberta for the movement of hay and grain shipments.

876. Failure of the Canadian Northern Railway to compensate for lands taken for

right-of-way over southwestern section 37-27-29, near Dauphin, Manitoba.

877. Condition of fire guards and defective equipment of locomotives on railways in the western provinces.

878. Switching charges on the Grand Trunk Railway at Milton, Ontario.

879. Switching charges on the Canadian Pacific Railway on goods from steamship at West St. John to industries at a distance of 43 miles.

880. Crossing of the Canadian Pacific Railway at Mill street in the town of

Enderby, British Columbia.

881. Inadequate train service Quebec, Montreal and Southern Railway between Longueuil and Montreal, Quebec.

882. Inadequate culvert on the Canadian Pacific Railway near Allan Park, Ontario

883. Erection of fences on southern portion of land at Iberville Junction, Quebec, by Canadian Pacific Railway, causing accumulation of snow.

884. Poor accommodation and lighting of cars on the Quebec Railway Light and

Power Company, to St. Joachims, Quebec.

885. Excessive rates charged by the Canadian Pacific Railway and Canadian Northern Ontario Railway Companies on car of lumber from Parry Sound to Ingersoll, Ontario.

886. Loss on two head of cattle on the Canadian Pacific Railway near Fordwich,

Ontario, owing to inefficient cattle guards.

887. Placing of telephone wires across tracks of the Grand Trunk Pacific Railway by the municipalities of Miniota and Hamiota, Manitoba, without the authority of the Board.

888. Excessive freight rates charged by the Dominion Atlantic Railway and Steamship Company on live lobsters from Yarmouth, Nova Scotia, to Boston, Massachusetts.

889. Overcharge by the Grand Trunk Railway Company on shipment of lumber from Cache bay to Oakville, Ontario.

890. Condition of fences along right of way of railways near Ashville, Manitoba.

891. Overweight on shipment of hay by the Canadian Pacific and Grand Trunk Railway Companies from Seaforth, Ontario.

892. Excessive charges and inefficient service by express companies on shipments of fish from Wheatley, Ontario, to New York city.

893. Excessive freight rates by Canadian Pacific Railway Company on car of

lorses from Pincher Creek, Alberta, to Spokane, Washington.

894. Freight rates charged by railways on corn shipments from Chatham, Ontario.

895. Excessive freight rates charged by Ottawa and New York Railway Company on shipments of drugs and tea to Newington, Ontario.

896. Proposed increase by express companies in the charges for returned empty

cases to Arnprior, Ontario.

897. Practice of Grand Trunk Railway Company of removing planking at farm crossing near Cayuga, Ontario, during winter months.

898. Removal of planking on Canadian Pacific Railway on the Souris branch

in the municipality of Oakland, Manitoba.

899. Excessive freight rates charged by the Pere Marquette Railway on milk shipment from Harrow to Windsor, Ontario.

900. Inadequate car supply by the Canadian Pacific Railway Company on ship-

ments of grain from Belleplains, Saskatchewan.

- 901. Irregularity in freight and passenger rates on the Vancouver, Victoria and Eastern Railway Company involving unjust discrimination in favour of points in state of Washington.
- 902. Inadequate car supply of stock cars for the movement of stock shipments by railways in Alberta, and refusal to supply planks to spike across doorway of such cars.
- 903. Poor accommodation furnished by the Grand Trunk Railway on trains to and from Hawkesbury, Ontario.

904. Failure of the Canadian Pacific Railway to provide station agent or opera-

tor at Hirsch, Saskatchewan.

- 905. Failure of the Canadian Northern Quebec Railway to keep open the station at St. Cuthbert, Quebec, for the arrival and departure of trains.
  - 906. Excessive freight rates on Canadian Pacific Railway in the district of Sun-
- bury, New Brunswick. 907. Length of hours of railway employees on the Canadian Pacific Railway in
- Alberta.

  908. Negligence of the Canadian Northern Railway Company to provide suitable crossing fences and cattle guards on its Winnipegosis and Swan River sections.

909. Complaint about the Grand Trunk Company's siding crossing the highway

at Caledon east, in the township of Albion, Ontario.

910. Rates on the Vancouver, Victoria and Eastern Railway on shipments to

points in Manitoba.

- 911. Additional charges by Dominion and Canadian Express Companies on shipments to residents of Ossington, Concord and Deleware avenues and government road, Toronto, Ontario.
- 912. Refusal of Eastern Canadian Passenger Association to grant special rates in connection with the Montreal carnival of winter sports.
- 913. Overcharge by the Canadian Pacific Railway Company on shipment of Percheron stallion from Minnesota Transfer to Gleichen, Alberta.
- 914. Overcharge of freight on tank cars of oil on which railway companies have refused to give through rate from Philadelphia, Pennsylvania, to Toronto, Ontario.
- 915. Excessive express rates and inadequate connection between competing lines of railway in Muskoka district.

916. Limit of liability of railways on shipments of racing horses.

917. Express rates charged on shipment to and from Port Arthur, Ontario.

918. Express rates on shipment of fish from Nipigon Bay, Ontario.

- 919. Long hours of express messengers and other employees of express companies.
- 920. Alleged discrimination in rates by express companies on shipments of printed matter from Toronto, Ontario.
  - 921. Express rates on fruit shipments from Burford, Ontario.
  - 922. Express rates on shipment to and from Kenora, Ontario.

- 923. Proposed increase in express rates on returned empties to Sudbury, Ontario, from January 1, 1909.
  - 924. Express rates charged on shipment to and from Clarksburg, Ontario.
  - 925. Express rates on shipment to and from Halifax, Nova Scotia.
- 926. Increased rates by express companies on returned empties to Toronto, On-
- 927. Failure of the Canadian Northern Railway to fence right of way northwest quarter section 26-19-22 west 2nd meridian.
- 928. Danger to the public and train crews on railways through the use of ordinary snow ploughs on engines.
- 929. Transportation facilities afforded by railways for the movement of live stock in Alberta.
- 930. Rates of the Canadian Express Company on shipment from Charing Cross, Ontario, to Blairmore, Ontario.
- 931. Loss of cattle on right of way Canadian Northern Railway near Scarth, Manitoba, and erection by the company of a snow fence in that district.
- 932. Loss of lumber shipped via Canadian Pacific Railway from Irish Creek to Chesterville, Ontario.
- 933. Freight rates charged by the Atlantic and Lake Superior Railway on shipment from Point Levis to Caplan, Ontario.
- 934. Freight rates charged by the Michigan Central Railroad on shipments of hogs from Alviston and Brigden, Ontario, to Ingersoll, Ontario, as compared with the rates to Toronto, Ontario.
- 935. Closing of the station at Osage, Saskatchewan, by the Canadian Pacific Railway.
- 936. Unsatisfactory condition in regard to the shipment of perishable goods by the Canadian Northern Railway during the winter months from Prince Albert, Saskatchewan
- 937. Express charges on shipments of fruit and vegetables from Leamington, Ontario.
  - 938. Excessive rates charged on balate and crude rubber to Montreal, Quebec.
- 939. Extension of time allowed the Canadian Pacific Railway for the construction and completion of its line to Dauphin, Manitoba.
- 940. Delivery service of the Canadian Northern Telegraph Company on a message to Prince Albert, Saskatchewan.
- 941. Non-protected condition of the Canadian Pacific Railway, and defective state of fences in the vicinity of Limbreck, Alberta.
- 942. Inadequate train service of the Canadian Pacific Railway to and from Erindale, Ontario.
- 943. Flooding of lands near Zephyr, Ontario, from inadequate drainage provided by the Canadian Northern Ontario Railway.
  - 944. Unsatisfactory classification for shipment of cheese box stock.
- 945. Insufficient protection provided by the Canadian Pacific Railway in the matter of cattle guards in the District of Sapparton, British Columbia.
- 946. Poor service furnished by the Canadian Pacific Railway over spur tracks in vicinity of Estevan, Saskatchewan.
- 947. Inadequate protection of level crossing in the township of Brantford, Ontario.
- 948. Abrupt changes made by railways in long standing rates and regulations generally.
- 949. Excessive rates of the Pere Marquette Railroad on shipments of beet sugar from Wallaceburg, Ontario, to St. Paul, Minnesota.
- 950. Excessive freight rates on the Intercolonial Railway on consignment of castings from Sackville to St. John, New Brunswick.

951. Failure of the Canadian Pacific Railway and Canadian Northern Railway, to employ sufficient operators for the operation of trains in the west.

952. Overcharge on tow boats shipped from South Temiskaming, Ontario to Latch-

ford, Ontario, by the Canadian Pacific Railway.

953. Excessive freight rates on the Quebec, Montreal and Southern Railway on shipments of stone from Mount Johnson and Stanstead, Quebec.

954. Train service of the Canadian Pacific Railway between Smith's Falls and

Vaudreuil, Quebec.

955. Train service of the Canadian Pacific Railway between Dixie, Ontario and Toronto, Ontario.

956. Loss of cattle on Canadian Pacific Railway right of way near Barnet, British

Columbia, on account of fences being down.

957. Excessive freight rates of the Atlantic and Lake Superior Railway, from Caplan Station, Quebec to Meguacha Point, Quebec.

958. Refusal of railways to supply box cars for shipment of pulpwood in the East-

ern Townships.

959. Inadequate arrangements by the Dominion Express Company for the handling of express traffic at Cobalt, Ontario.

960. Construction of fences along right of way of the Pere Marquette Railroad in the township of Raleigh, Ontario.

961. Excessive freight rates charged by the Grand Trunk Railway on salt shipments from Windsor to Kingston, Ontario.

962. Excessive express rates on shipments between points in the maritime provinces.

963. Equipment of suburban railways in the vicinity of Hamilton, Ontario.

964. Overcharge by the Canadian Pacific Railway on consignment of imported liquor from Fort William, Ontario, to Winnipeg, Manitoba.

965. Train service of the Canadian Pacific Railway at Sharbot Lake, Ontario.

966. Excessive freight rates, lack of fences and inadequate cattle guards on the right of way of the Canadian Pacific Railway in the province of Alberta.

967. Excessive freight rates of the Atlantic, Quebec and Western Railway on

shipment of car machinery from St. Hyacinthe to Caplan, Quebec.

968. Dangerous condition of crossing on the Grand Trunk Railway, known as the Carrington road, just west of Belleville station, Ontario.

969. Dangerous condition of crossing on the Grand Trunk Railway in the village

of Burlington, Ontario.

970. Obstruction of water course by the Grand Trunk Railway in the vicinity of Grenfell, Saskatchewan.

971. Operation of Montreal Park and Island Railway line in Mount Royal ward,

Montreal, Quebec.

972. Proposed increase of freight rates by railways on sad irons.

973. Proposed location of the Canadian Pacific Railway between Coldwater and Peterborough, Ontario, and station at Brechin, Ontario.

974. Shortage in shipment of two cars of coal to Guelph, Ontario, via the Grand

Trunk Railway.

975. Failure of the North American Telegraph Company to furnish connections and agreement to interchange of telephone business at Hopetown, Ontario.

976. Condition of drainage of the Grand Trunk Railway in the township of Ops,

Ontario.

977. Overcharge by the Grand Trunk Railway on consignment of eggs to Montreal, Quebec.

978. Inadequate telephone service in the township of Govan and the township of South Monaghan, Ontario.

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979. Condition in and around the station of the Canadian Pacific Railway at

Canmore, Alberta.

980. Loss of oxen through non-erection of fences on the right of way of the Canadian Northern Railway opposite section 23, township 38, range 26, west of the second meridian, near Dana, Saskatchewan.

981. Express rates of the Canadian Northern Express Company on shipment

from Winnipeg, Manitoba, to Lumsden, Saskatchewan.

982. Loss to shippers of live stock in the province of Alberta, through alleged irregularities, difficulties and uncertainties connected with transportation of live stock in the west.

983. Refusal of the Canadian Pacific Railway to allow meat shippers at Calgary,

Alberta, to make shipments to other provinces.

984. Railway facilities in and out of Simcoe, Ontario.

985. Proposed location of Esquimault and Nanaimo Railway on lot 127, Comox district, British Columbia.

986. Express rates on calcium carbide by Canadian and Dominion Express Com-

panies from St. Catharines to Massey, Ontario.

987. Excessive freight rates on hay, grain, straw and farm produce via Great

Northern Railway in eastern British Columbia.

988. Excessive freight rates of the Canadian Pacific Railway on shipment of horses from St. John, New Brunswick, to Olds, Alberta.

989. Delay in movement of freight traffic and overcharge in weights on shipment by Canadian Northern Quebec Railway and Quebec and Lake St. John Railway.

990. Excessive rates charged by the Dominion Express Company on shipment of corsets from Quebec to Vancouver, British Columbia.

991. Excessive freight rates on corn shipments from Michigan Central Railroad

and Pere Marquette Railroad points.

992. Poor train service of the Grand Trunk Railway to and from Watford, Ontario.

993. Blocking of tracks at crossing by cars of Grand Trunk Railway at Coteau Junction, Ontario, and also treatment of passengers at station by employees of the railway.

994. Closing of the Canadian Pacific and Great Northwestern Telegraph offices in

the village of Buckingham, Quebec.

995. Poor station accommodation of the Canadian Pacific Railway at Elkhorn,

Manitoba.

996. Loss of houshold effects shipped by the Caandian Pacific Railway from Winnifred, Alberta to Fernie, British Columbia.

997. Unsatisfactory service of the Canadian Northern Telegraph Company at

Prince Albert, Saskatchewan.

998. Excessive freight rates of the Canadian Pacific Railway on six cars of bricks from Milton to Bala, Ontario.

999. Extra charge of ten cents by the Grand Valley Railway for tickets purchased on trains.

1000. Private telephone rates furnished by the Bell Telephone Company at Montreal, Quebec.

1001. Switch lights and conditions of engine No. 21 on Prince Albert-Regina branch of the Canadian Northern Railway Company.

1002. Loss of furniture shipped by freight and refusal of the Toronto, Hamilton

and Buffalo Railway and the Michigan Central Railway to compensate therefor.

1003. Refusal of the Grand Trunk Railway to remove snow off private siding at

Mile End, Quebec.
1004. Train service on the Quebec Southern Railway between Sorel and St. Hyacinthe, Quebec.

1005. Unauthorized connection of the Vancouver, Victoria and Eastern Railway at Danville, Midway and Myncaster, also discrimination in tariffs of tolls between Princeton and Drumbo, British Columbia.

1006. Excessive freight rates of the Quebec and Lake St. John Railway on shipment

between Quebec and Rivière à Pierre, Quebec.

1007. Refusal of the Windsor, Essex and Lake Shore Rapid Railway to extend time for the use of commutation tickets.

1008. Loss of horses on right of way of the Canadian Pacific Railway between sections 15 and 16, Township 7, range 10, west of the 2nd meridian, on account of fences being down near Wolseley, Saskatchewan.

1009. Excessive freight rates of the Canadian Pacific Railway on vegetable ship-

ments from Frankline to Winnipeg, Manitoba.

1010. Failure of the Grand Trunk Pacific Railway to provide proper farm crossing on farm near Nokomis, Saskatchewan.

1011. Excessive freight and express rates on the products of farm and orchards at Kamloops, British Columbia.

1012. Obstruction to free navigation of watercourse of Victoria Harbour, caused by swing bridge giving access to railway depot, Victoria, British Columbia.

1013. Lack of accommodation furnished by the Canadian Pacific Railway between Burton and Edgewood on Arrow Lakes, British Columbia.

1014. Minimum weights in carloads on export freight traffic.

1015. Excessive switching charges of the Canadian Northern Railway and Canadian Pacific Railway between Canadian Northern Railway siding and Canadian Pacific Railway siding at Winnipeg, Manitoba.

1016. Excessive switching charges of the Canadian Northern Railway and Canalian Pacific Railway on grain from Canadian Northern Railway points to elevators on the Canadian Pacific Railway at Winnipeg, Manitoba.

1017. Poor condition of fences and cattle guards on railways in the province of

Manitoba.

1018. Failure of telegraph company to indicate time on blanks when messages are received for transmission at Winnipeg, Manitoba.

1019. Loss of horses and cattle killed on the Canadian Pacific Railway tracks near Miniota, Manitoba, through removal of cattle guards from crossing.

1020. Loss of horses killed by wreck on railway near Laurier, Manitoba.

1021. Stamping by railways at Halifax, Nova Scotia, on bills of lading, the clause 'Loaded by Shippers.'

1022. Proposed location of the Canadian Pacific Railway from Victoria Harbour

to Peterborough, Ontario, on property near Hartley, Ontario.

1023. Loss of cattle killed on right of way of the Canadian Pacific Railway at Chaplin, Saskatchewan.

1024. Excessive express rates on shipments to and from Fenwick, Ontario.

1025. Accommodation afforded by the Grand Trunk Railway at Port Dover, Ontario.

1026. Practice of railway companies charging ticket agents \$1 for failure to stamp a ticket purchased at station or town office.

1027. Excessive express rates to and from Nanton, Alberta.

1028. Failure of the Canadian Northern Railway to supply fuel for heating station at Brimkild, Manitoba.

1029. Failure of the Canadian Pacific Railway to deliver box of freight consigned to Gaetz Valley, Alberta, via Red Deer, Alberta.

1030. Refusal of Bell Telephone Company to furnish telephone connection with Sorel, Quebec.

1031. Poor condition of the Canadian Pacific Railway for the handling of traffic to and from Wattsburg, British Columbia; also condition of cattle guards, fences, &c.

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1032. Unsatisfactory settlement caused by accident on the Temiscouata Railway near Michaud, New Brunswick.

1033. Passenger fares charged by the British Columbia Electric Railway on its line between Vancouver and New Westminster, British Columbia.

1034. Loss of cattle owing to fences being down on right of way of the Cana-

dian Pacific Railway near Port Moody, British Columbia. 1035. Excessive freight rates of the Canadian Pacific Railway on forest pro-

ducts to Edmonton, Alberta.

1036. Wording of contracts on receipt forms and accommodation for handling fruit at fruit shipping points in the Niagara district and use of freight cars for carriage of fruit by express companies.

1037. Station accommodation of the Canadian Pacific Railway at Redvers, Sas-

katchewan.

1038. Discrimination in local tariffs of express companies against Calgary, Alberta.

1039. Delivery limits of express companies in Winnipeg, Manitoba, and extra charge for delivering outside of city limits.

1040. Express rates and service of companies doing business at Winnipeg, Manitoba.

1041. Express rates and Canadian Pacific Railway train service at Dewdney, British Columbia.

1042. Loss of cattle killed on right of way of Canadian Pacific Railway at Dewdney, Brittish Columbia, owing to improper cattle guards.

1043. Unsatisfactory freight service for the movement of perishable products from Calgary and British Columbia points by the Canadian Pacific Railway.

1044. Excessive freight rates and classification on shipment from Winnipeg, Manitoba.

1045. Proposed change in running of trains 3 and 4 on the Kingston and Pembroke Railway.

1046. Discrimination in passenger rates on the Canadian Pacific Railway from Prescott to Saskatchewan.

1047. Express rates and service at Brandon, Manitoba.

1048. Service and express rates of companies doing business in western Canada.

1049. Overcharge on car of lumber from Hamilton to Listowel, Ontario.

1050. Freight rates charged by railways in the Okanagan Valley, British Columbia. 1051. Freight rates on fish via Canadian Pacific Railway from Lunenburg, Nova

Scotia, to Calgary and Edmonton, Alberta. 1052. Discrimination against Campbellcroft, Ontario, as compared with the rates to Port Arthur and Millbrook, Ontario.

1053. Overcharge on empties from Ottawa to London, Ontario.

1054. Failure of the Grand Valley Railway to carry out agreement with farmers along line from Grand River to St. George, Ontario.

1055. Removal of siding at Garnet, Ontario, by the Grand Trunk Railway.

1056. Delay in delivery of express shipments and excessive express rates charged on shipments from Fort Qu'Appelle, Saskatchewan.

1057. Excessive freight rates of the Central Ontario Railway on shipment of corn from Buxton to Bannockburn, Ontario.

1058. Negligence of employees on Quebec and Lake St. John Railway in the handling of shipment of timbers.

1059. Change in name of station on the Grand Trunk Railway from Garden Hill to Campbelleroft, Ontario.

1060. Condition of highway bridge over Francis up to the southeast limit of St. Francis Xavier de Brampton, New Brunswick, on the Orford Mountain Railway.

1061. Abandonment by the New Westminster Southern Railway (Great Northern Railway) old line from Blain to Fraser river, British Columbia.

1062. Excessive rates of the Grand Trunk Railway on bicycles from Hamilton, Ontario.

1063. Excessive freight rates on the Grand Trunk Railway from Moosomin to St. George, Ontario.

1064. Dangerous condition of wooden bridges and trestles between Annapolis Royal and Digby, Nova Scotia.

1065. Removal by the Atlantic and Lake Superior Railway of frogs and sidings at Nouville West, New Brunswick.

1066. Refusal of the Canadian Northern Telegraph Company at Manville, Alberta, to receive collect message.

1067. Excessive rates of Dominion and American Express Companies on car of strawberries to Brandon, Manitoba.

1068. Loss of horses killed on railway on account of insufficient cattle guards near Rocanville, Saskatchewan.

1069. Switching charge of \$8 by the Canadian Northern Railway at Winnipeg, Manitoba, on hay in carloads.

1070. Condition of railways, inadequate facilities, inequality of passenger and freight rates on railways in British Columbia.

## APPENDIX F.

LIST OF INSPECTIONS MADE BY THE ENGINEERING DEPARTMENT OF THE RAILWAY COMMISSION, APRIL 1, 1908, TO MARCH 31, 1909, INCLUSIVE.

OTTAWA, April 30, 1909.

A. D. CARTWRIGHT, Esq.,

Secretary of Railway Commission, Ottawa, Ont.

Sm,—I beg to submit herewith list of examinations and inspections made by the Engineering Department of the Board, covering the period from Λpril 1, 1908, to March 31, 1909.

I have the honour to be sir,

Your obedient servant,

(Sgd.) GEO. A. MOUNTAIN,

Chief Engineer.

LIST OF INSPECTIONS MADE BY THE ENGINEERING DEPARTMENT OF THE RAILWAY COMMISSION, APRIL 1, 1908, TO MARCH 31, 1909, INCLUSIVE.

March 5, 1908.—Inspection interlocker at crossing of the Canadian Pacific Railway by the Grand Trunk Railway at the Don, Toronto, Ont.

March 11, 1908.—Inspection interlocker at crossing of the Grand Trunk Rail-

way by the Canadian Pacific Railway at Lennoxville, Quebec.

March 20, 1908.—Inspection highway crossing over the Canadian Pacific Rail-

way at Durham, Ont.

March 27, 1908.—Inspection subway at Mile Post 124 96 on the line of the Grand Trunk Railway at Brockville, Ont., where the Canadian Pacific Railway passes under the Grand Trunk Railway.

April 1, 1908.—Inspection crossing of the Canadian Pacific Railway over the Quebec and Lake St. John Railway and the Quebec Railway Light and Power Company at Quebec, P.Q.

April 1, 1908.—Inspection interlocker at crossing of the Canadian Pacific Rail-

way by the Grand Trunk Railway at the Don, Toronto, Ont.

April 1, 1908.—Inspection highway crossings in the town of Napanee on the line of the Grand Trunk Railway.

April 2, 1908.—Inspection highway crossing on the line of the Canadian Pacific Railway at Dorchester street, Quebec, P.Q., re protection.

April 2, 1908.—Inspection highway crossing known as 'Cowan's Crossing,' two miles east of Scarboro Junction on the line of the Grand Trunk Railway.

April 3, 1908.—Inspection Pike Drainage Works about one mile west of Prairie siding on the line of the Grand Trunk Railway, township of Raleigh, Ont.

April 10, 1908.—Inspection at Mileage 61, on the Macleod branch of the Canadian

Pacific Railway, as to cattle guards and crossings.

April 13, 1908.—Inspection of crossing on road-allowance, Canadian Pacific Railway, Rush Lake, Sask.

April 13, 1908.—Inspection crossing Montreal Street Railway by spur of the Canadian Northern Quebec Railway to the harbour at Montreal, P.Q.

April 22, 1908.—Inspection location of the Canadian Pacific Railway across pro-

perty of George Elliott at Woodbridge, Ont, on their Toronto-Bolton line.

April 22, 1908.—Inspection lands in Toronto to be taken by the Canadian Northern Ontario Railway to divert part of Park Drive and a trespass road.

April 23, 1908.—Inspection proposed drain on farm of John Turnbull, of Komoko, Ont., on the line of the Grand Trunk Railway.

April 24, 1908.—Inspection proposed drain across right of way of Grand Trunk Railway one mile east of Elora, Ont.

April 24, 1908.—Inspection highway crossing one mile south of Moorfield, on the

line of the Grand Trunk Railway.

April 28, 1908.—Inspection crossing at intersection of the Lee-Mountain road with the Toronto, Hamilton and Buffalo Railway, in the township of Saltfleet, Ont.

April 28, 1908.—Inspection right of way Canadian Northern Railway in connection with cattle guards near Togo, Sask.

May 2, 1908.—Inspection interlocking plant six miles east of Winnipeg on the Molson cut-off of the Canadian Pacific Railway.

May 6, 1908.—Inspection gates at Simcoe street, Oshawa, Ont, on the line of the Grand Trunk Railway.

May 7, 1908.—Inspection crossing of Main street in the town of Forest by the Grand Trunk Railway.

May 8, 1908.—Inspection highway crossing between counties of Waterloo and Wellington on the line of the Guelph and Goderich Railway at mileage 20.5.

May 8, 1908.—Inspection on the Canadian Northern Railway in connection with cattle guards and fencing on right of way in municipality of Springfield and Tache.

May 12, 1908.—Inspection crossing of public road by single track of the Grand Trunk Railway just east of the station at Maxville, Ont.

May 13, 1908.—Inspection proposed extension of Mountain street, Hull, P.Q., across the tracks of the Canadian Pacific Railway.

May 14, 1908.—Inspection crossing of Pitt street, Cornwall, Ont., by the line of the Grand Trunk Railway.

May 15, 1908.—Inspection electro-pneumatic train control system, patented by J. A. Whyte, Ottawa, Ont.

May 15, 1908.—Inspection interlocking plant at the Canadian Northern Railway crossing of the Brandon, Saskatchewan and Hudson Bay Railway.

May 14, 1908.—Inspection interlocking plant at the crossing of the Canadian Northern Railway over the Canadian Pacific Railway at Morris, Man.

May 16, 1908.—Inspection interlocking plant 11 miles west of Brandon at the Canadian Northern Railway crossing over the Canadian Pacific Railway.

May 18, 1908.—Inspection interlocker at crossing of the Canadian Pacific Railway and the Chatham Wallaceburg and Lake Erie Railway at Raleigh street Chatham, Ont.

May 19, 1908.—Inspection interlocker at crossing of the Lake Erie and Detroit River Railway by the Chatham, Wallaceburg and Lake Erie Railway at Cedar Springs, Ont.

May 19, 1908.—Inspection interlocking plant at crossing of the Canadian Pacific Railway by the Canadian Northern Quebec Railway at Lachevrotiere, P.Q.

May 19, 1908.—Inspection highway crossing at mileage 20, on the Lindsay branch of the Canadian Pacific Railway, township of Ops.

May 19, 1908.—Inspection highway crossing on the line of the Pere Marquette Railway at Cedar Springs, Ont.

May 20, 1908.—Inspection highway crossings on the deviation of the Grand Trunk Railway, Midland branch, from Albert street in the town of Lindsay, to a point in the east half of lot No. 25, concession 2, township of Ops, county of Victoria, Ont.

May 21, 1909.—Inspection highway crossing 1,800 feet east of Bowmanville station on the main line of the Grand Trunk Railway.

May 22, 1908.—Inspection highway crossings on the line of the Grand Trunk Pacific Railway near Miniota, at mileage 24·1, mileage 24·6 and mileage 25·2.

May 26, 1909.—Inspection Brantford and Hamilton Electric Railway, Hamilton

to Aneaster and Aneaster to Brantford, for opening for traffic.

May 30, 1908.—Inspection interlocking plant 14 miles west of Winnipeg crossing of Canadian Northern Railway main line and Souris branch of the Canadian Pacific Railway.

June 1, 1908.—Inspection interlocking plant at the west end of Portage la Prairie yard, Canadian Pacific Railway, Canadian Northern Railway and the Grand Trunk Pacific Railway.

June 1, 1908.—Inspection of branch of the Canadian Northern Quebec Railway from St. Sauveur to Huberdeau, a distance of 30.5 miles, as to general conditions.

June 1, 1908.—Inspection proposed site for a station at Omemee Junction, Ont.,

on the line of the Grand Trunk Railway.

June 1, 1908.—Inspection proposed crossing of the Montreal Terminal Railway by the Canadian Northern Quebec Railway tracks into premises of the Lakefield Portland Cement Company at Lakefield, P.Q.

June 2, 1908.—Inspection work done at crossing of the Lee Mountain road by the Toronto, Hamilton and Buffalo Railway, about one and a half miles east of Stony Creek, Ont.

June 3, 1908.—Inspection Brooker's Crossing, two and a half miles west of Mallorytown, on the line of the Grand Trunk Railway, in the township of the Front of Escott.

June 3, 1908.—Inspection highway crossing on the line of the Toronto, Hamilton and Buffalo Railway, just west of station at Jerseyville, Ont.

June 8, 1908.—Inspection crossings of Queen and Ann streets, in the village of

Blyth, by the Guelph and Goderich branch of the Canadian Pacific Railway.

June 8, 1908.—Inspection crossing of highway between concessions 9 and 10, in township of Motts, just east of Blyth, by Guelph and Goderich branch of the Canadian Pacific Railway.

June 9, 1908.—Inspection interlocking appliances at crossing of double track of the Canadian Pacific Railway by the single track of the Montreal Street Railway on Papineau avenue, city of Montreal, P. Q.

June 9, 1908.—Inspection interlocking appliances for protection of trains, Lachine canal bridge, on the line of the Canadian Pacific Railway, near Highlands, P.Q.

June 15, 1908.—Inspection Pheasant's Hill branch extension of the Canadian

Pacific Railway from Saskatoon to Asquith, a distance of 23 miles.

June 16, 1908.—Inspection of Pheasant's Hill branch of the Canadian Pacific Railway from Lanigan, mileage 254:5 to Saskatoon, mileage 328:4, a distance of 73:9 miles.

June 16, 1908.—Inspection proposed crossing over St. Charles street on Jones bridge, by the Canadian Pacific Railway at St. Johns, P.Q.

June 16, 1908.—Inspection Canadian Northern Ontario Railway for opening for traffic from Still river to Romford.

June 16, 1908.—Inspection interlocker at crossing of the Canadian Pacific Railway and the Canadian Northern Ontario Railway near Elbow Creek, Ont.

June 16, 1908.—Inspection from crossing at St. Bruno, P.Q., on the line of the Grand Trunk Railway.

June 17, 1908.—Inspection interlocking plant east end of Portage la Prairie yard, Canadian Northern Railway crossing with the Grand Trunk Pacific Railway.

June 17, 1908.—Inspection farm crossing for Mrs. MacLeod, at Footes Bay, Ont., on the line of the Canadian Northern Ontario Railway.

June 18, 1908.—Inspection farm crossing for Mr. Dufresne on the St. Guillaume branch of the Canadian Pacific Railway near St. Pie station, P.Q.

June 24, 1908.—Inspection interlocker on the line of the Canadian Pacific Railway near London asylum, London, Ont.

June 24, 1908.—Inspection cattle-guards on the line of the Vancouver. West-

minster and Yukon Railway, between Vancouver and Cloverdale, B.C.

June 25, 1908.—Inspection highway crossing in village of Duncan, B.C.

June 25, 1908.—Inspection proposed crossing of the Esquimalt and Nanaimo Railway over highway at mile post 41, near Duncan, B.C.

June 26, 1908.—Inspection drainage at Mountain, complained of by S. B. Porter.

health inspector.

June 26, 1908.—Inspection condition drainage along right of way of the Canadian Pacific Railway on B. McKendrie's property at Mountain, Ont.

June 30, 1908.—Inspection road diversion at Canford, B.C., on N. K. and S.

Railway.

July 2, 1908.—Inspection crossing of the Grand Trunk Railway by the Toronto and York Radial Railway, in the village of Sutton, Ont.

July 3, 1908.—Inspection Listowel branch of the Guelph and Goderich Railway from Linwood Junction to Listowel, a distance of 16·1 miles, for opening for traffic.

July 3, 1908.—Inspection of the St. Mary's and Western Ontario Railway for opening for traffic, also bridges on the line.

July 3, 1908.—Inspection of Canadian Pacific Railway (Elwood, Burt spur) at Carrigan, N.B.

July 3, 1908.—Inspection public highway crossing Canadian Pacific Railway, St. Andrews branch, Rolling Dam, N.B.

July 3, 1908.—Inspection bridges on the Atlantic division of the Canadian Pacific Railway, Fredericton section.

July 3, 1908.—Inspection bridges on the Gibson section, Atlantic division of the Canadian Pacific Railway.

July 3, 1908.—Inspection road diversion by the Canadian Pacific Railway, lot 15, parish of Brighton, county of Carlton, N.B., near Newburg Junction.

July 3, 1908.—Inspection New Brunswick Southern Railway from St. John to

St. Stephen, N.B.

July 3, 1908.—Inspection public road diversion from a point on lot 15, parish of Brighton, county of Carlton, N.B., near Newburg Junction, on the line of the Canadian Pacific Railway.

July 3, 1908.—Inspection Brockville, Westport and Northwestern Railway as to

general condition.

July 4, 1908.—Inspection portion of the Walkerton and Lucknow Railway from Saugeen Junction to mile 27.5 at Hanover for opening for traffic.

July 4, 1908.—Inspection diversions of the Toronto, Grey and Bruce Railway for opening of traffic from mileage 7.3 to 8 near Emery; mileage 10.8 to 13.4 near Woodbridge; 15.3 to 17.5 near Eleinburg, and mileage 19.3 to 21.8 near Bolton, Ont.

July 6, 1908.—Inspection line of the Great Northern Railway of Canada from

Phænix to Grand Forks, B.C., a distance of 24 miles.

July 6, 1908.—Inspection location of spur crossing 5th and 6th streets on the line of the Canadian Pacific Railway in the town of Grand Forks, B.C.

July 6, 1908.—Inspection station grounds at St. Pie, P.Q., on the St. Guillaume branch of the Canadian Pacific Railway.

July 7, 1908.—Inspection bridges on the St. John section, Atlantic division, of the Canadian Pacific Railway.

July 7, 1908.—Inspection bridges on the Woodstock section, Atlantic division of the Canadian Pacific Railway.

July 7, 1908.—Inspection bridges on the Edmonton section of the Atlantic division of the Canadian Pacific Railway.

July 10, 1908.—Inspection drainage on farm of P. Livernoche and others at Louiseville, P.Q., on the line of the Canadian Pacific Railway.

July 15, 1908.—Inspection diamond at the intersection of Hess and Herkimer streets, Hamilton, Ont.

July 16, 1908.—Inspection Canadian Pacific Railway from Kemptville Junction, mileage 102.3, to Smith's Falls, mileage 123.3, a distance of 20 miles.

July 20, 1908.—Inspection Grand Valley Railway crossing of tracks of the Grand Trunk Railway in the city of Brantford, Out.

July 20, 1908.—Inspection crossing of the Toronto, Hamilton and Buffalo Railway by the Grand Valley Railway in the city of Brantford.

July 20, 1908.—Inspection crossing of the Brantford and Hamilton Railway by the Grand Valley Railway at Brantford, Ont.

July 20, 1908.—Inspection proposed location of highway crossing in the township of Woolastin, near Coe Hill on the Central Ontario Railway.

July 21, 1908.—Inspection station grounds at Maynooth, Ont., on the line of the Central Ontario Railway.

July 21, 1908.—Inspection crossing at Jamieson avenue, Toronto, Ont.

July 22, 1908.—Inspection proposed farm crossing on the line of the Toronto, Hamilton and Buffalo Railway, west of Hamilton, Ont.

July 23, 1908.—Inspection for opening for traffic of the Chatham, Wallaceburg and Lake Eric Railway from the crossing of the Michigan Central Railway near Charing Cross to Erie Beach Park.

July 24, 1908.—Inspection interlocking plant at Chatham, where the Chatham, Wallaceburg and Lake Erie Railway crosses the Grand Trunk Railway.

July 24, 1908.—Inspection road crossings at Hagersville, Ont., over the Michigan Central Railway.

July 24, 1908.—Grand Trunk Pacific Railway for opening for traffic from Winnipeg to Battle River, a distance of 625 miles.

July 31, 1908.—Inspection Amos Morgan's property crossed by the right of way of the Canadian Pacific Railway, lot 1, concession 9, near Crookstown, Ont.

August 3, 1908.—Inspection cattle guards at Cowley, Alta.

August 3, 1908.—Inspection proposed change of location of the Crowsnest branch of the Canadian Pacific Railway in the vicinity of Pincher's Creek, and Cowley, Alta.

August 5, 1908.—Inspection Main street crossing at Welland, Ont., over the tracks

of the Grand Trunk Railway.

August 6, 1908.—Inspection proposed road diversion on the Toronto, Hamilton and Buffalo Railway, known as the London to Hamilton road, at a point three miles east of the city of Brantford, Ont.

August 6, 1908.—Inspection for opening for traffic of the Walkerton and Lucknow branch of the Canadian Pacific Railway, mileage 27.5 to 37.7.

August 12, 1908.—Inspection interlocking plant at Sarnia where the Sarnia Electric Railway crosses the Grand Trunk Railway.

August 15, 1908.—Inspection of branch line of the White Pass and Yukon Railway, August 15, 1908.—Inspection temporary bridge over the Cornwall canal on the Ottawa and New York Railway.

August 25, 1908.—Inspection double track of the Canadian Pacific Railway be-

tween Kemptville Junction and Finch, Ont.

August 25, 1908.—Inspection derailment of Great Northern Railway train about one mile west of Port Kells, B.C.

August 28, 1908.—Inspection lands at St. Hilaire, for expropriation by the Grand Trunk Railway for double track.

August 28, 1908.—Inspection crossing of highway in village of Maxville by the Grand Trunk Railway.

August 29, 1908.—Inspection Central Vermont Railway in Canada as to general

August 30, 1908 .- Inspection bridge at Rush lake, Swift Current Section, Canadian Pacific Railway.

August 30, 1908.—Inspection highway crossings on grade revision of the Canadian Pacific Railway between Kincorth and Walsh, mileage 102 11 to 110 56, Medicine Hat section.

August 30, 1908.—Inspection bridges on Medicine Hat section, miles 124 and

144.6.

September 4, 1908.—Inspection property of Mr. McCuaig at Dalhousie Mills, Ont., to be expropriated by the Canadian Pacific Railway.

September 5, 1908.—Inspection Prince Albert branch of the Canadian Northern

Railway from Tisdale to Melfort, a distance of 26 miles.

September 8, 1908.—Inspection interlocking plant at Nokomis, Alta.

September 8, 1908.—Inspection Canadian Pacific Railway between Rocanville and Tantallon.

September 9, 1908.—Inspection Grand Trunk Pacific Railway for opening for traffic between Portage la Prairie, mileage 54·3, and Pacific Junction, mileage 6·5, and from Oak Point Junction to a junction with the line of the Canadian Northern Railway near Pembina Avenue, Winnipeg, mileage, 4·4 to 3·0.

September 11, 1908.—Inspection Grand Valley Railway as to general conditions. September 11, 1908.—Inspection farm crossing of H. Frenette at Portneuf, on the

line of the Canadian Northern Quebec Railway.

September 11, 1908.—Inspection farm crossing of F. Leduc on the line of the Canadian Northern Quebec Railway, parish of St. Casimir, P.Q.

September 11, 1908.—Inspection road diversion on the line of the Canadian Northern Quebec Railway between Portneuf and Cap Sante, about mile 37.

September 12, 1908.—Inspection drainage on farm of H. Frenette, at Port-

neuf, P.Q.
September 12, 1908.—Inspection overhead bridge Eight street, Brandon, on the line

the Canadian Pacific Railway

of the Canadian Pacific Railway.

September 14, 1908.—Inspection farm crossing Madame Plouffe, mile 15, St. Jerome-St. Sauveur branch of the Canadian Northern Quebec Railway.

September 18, 1908.—Inspection bridge at mileage 109.9, Calgary section of the

Canadian Pacific Railway.

September 18.—Inspection bridge at mileage 179·1, Calgary section of the Canadian Pacific Railway.

September 18, 1908.—Inspection bridge over irrigation canal near Langdon on the

line of the Canadian Pacific Railway.

September 18, 1908.—Inspection bridge over the irrigation canal near Strathmore, on the line of the Canadian Pacific Railway.

Scptember 18, 1908.—Inspection crossings on the line of the Canadian Pacific Railway south of Claresholm, Sask.

September 18, 1908.—Inspection drainage at Lachine, P.Q.

September 19, 1908.—Inspection twenty bridges on the mountain section, Pacific division of the Canadian Pacific Railway between Laggan and Revelstoke, B.C.

September 21, 1908.—Inspection Canadian Northern Ontario Railway 'Y' at

Sudbury, Ont.

September 22, 1908.—Inspection bridges on Cascades section, Pacific division, Canadian Pacific Railway between North Bend, and Vancouver, B.C.

September 22, 1908.—Inspection farm crossing Mrs. McGregor on the line of the

Canadian Pacific Railway at Warren, Ont.

September 23, 1908.—Inspection highway crossing on line of the Canadian Pacific Railway at Cache bay, Ont.

September 25, 1908.—Inspection double track Canadian Pacific Railway from

Kemptville to Mountain, Ont.

September 26, 1908.—Inspection for opening for traffic of the Canadian Pacific Railway, Medicine Hat section, mileage 15 to 22·1; 49 to 59; 75·1 to 80·1; also new second track from mileage 43·1 to Dunmore Station.

September 28, 1908.—Inspection station at St. Brigide, and shelter at St. Gregoire on the line of the Canadian Pacific Railway.

September 28, 1908.—Inspection bridges and road-bed on the line of the Canadian

Northern Railway between Port Arthur and Winnipeg, Man.

September 28, 1908.—Inspection bridge at River du Sud on the line of the Quebec, Montreal and Southern Railway.

September 30, 1908.—Inspection highway crossings on the line of the St. Lawrence and Adirondack Railway.

October 1, 1908.—Inspection opening for traffic of the Canadian Pacific Railway, Weyburn to Stoughton branch, a distance of 36.7 miles.

October 6, 1908.—Inspection opening for traffic Canadian Pacific Railway diversion Medicine Hat section, from Piapot, mileage 67 · 75, to mileage 75 · 10, distance 7 · 35 miles.

October 8, 1908.—Inspection cattle guards near Winnipeg, known as the Sutherland guards.

October 9, 1908.—Inspection connection between Canadian Pacific Railway and Canadian Northern Railway at St. Jerome, P.Q.

October 9, 1908.—Inspection half interlocker at Sutton, Ont., at crossing of the Grand Trunk Railway by the Toronto and York Radial Railway.

October 9, 1908.—Inspection Canadian Northern Quebec Railway, St. Jerome to Huberdeau.

October 10, 1908.—Inspection for opening for traffic of the Brantford and Hamilton Railway from Alfred street to Market street in the city of Brantford, Ont.

October 12, 1908.—Inspection re proposed station near Vineland on the Grand Trunk Railway.

October 12, 1908.—Inspection opening for traffic of the Canadian Pacific Railway west of Saskatoon from Asquith, mileage 25.0 to Wilkie, mileage 99.0, distance, 74.0 miles.

October 13, 1908.—Inspection cattle guards on the Canadian Northern Railway main line at Chipman and Lamont.

October 15, 1908.—Inspection diamond at crossing of the Canadian Pacific Railway by the Toronto Suburban Railway on St. Claire Avenue, Toronto, Ont.

October 15, 1908.—Inspection drain complained of by Mr. Freeman of Burlington Junction on the line of the Grand Trunk Railway.

October 16, 1908.—Inspection new road leading from new Bolton station on the Canadian Pacific Railway to highway leading to village of Bolton, Ont.

October 16, 1908.—Inspection Canadian Pacific Railway track at Bolton recomplaint of A. A. McFall.

October 21, 1908.—Inspection grade revision on the line of the Canadian Pacific Railway at Romford crossing.

October 21, 1908.—Inspection crossings in the township of Medonte on the Toronto-Sudbury branch of the Canadian Pacific Railway.

October 21, 1908.—Inspection interlocker at Hervey Junction at crossing of the Canadian Northern Quebec Railway and the National Transcontinental Railway.

October 22, 1908.—Inspection near St. Pauline station on the Canadian Northern Quebec Railway on the property of N. Lessard.

October 22, 1908.—Inspection culverts on the Canadian Northern Quebec Railway between Hervey Junction and St. Tite, Que.

October 22, 1908.—Inspection train service and accommodation on the Canadian Northern Quebec Railway at St. Tite, Que.

October 23, 1908.—Inspection bridges and abutments on the Canadian Pacific Railway, Ignace Station.

October 23, 1908.—Inspection for opening for traffic second track, Ignace section, Canadian Pacific Railway, mileage 127.8, to 133.5, distance, 5.7 miles.

October 24, 1908.—Inspection bridges, abutments and piers, Kenora section, Canadian Pacific Railway.

October 24, 1908.—Inspection opening for traffic second track of Kenora section of the Canadian Pacific Railway, from Kenora, mileage 0, to Busteed, mile 14.0, and from Deception, mile 18.6, to Ingolf, mile 31.2.

October 24, 1908.—Inspection opening for traffic Canadian Pacific Railway second track, Ignace section, mile 98.6 to mile 99; from mile 102.65 to 104.61, and from mile 130 to mile 132.

October 26, 1908.—Inspection crossings over the Grand Trunk Railway tracks and the Montreal, Park and Island Railway tracks in the town of Lachine.

October 27, 1908.—Inspection Brennan's siding on Ferguson avenue, Hamilton, Ont.

October 27, 1908.—Inspection interlocker and gates at crossing of Toronto Railway by the Grand Trunk Railway at Front street, Toronto, Ont.

October 29, 1908.—Inspection Canadian Pacific Railway for opening for traffic, Reston-Wolseley branch from Kaiser, mileage 98.2, to Wolseley, mileage 122.2, distance 24 miles.

October 30, 1908.—Inspection Canadian Pacific Railway, Sheho extension, from mileage 42.2 to mileage 66.2, a distance of 24 miles.

November 4, 1908.—Inspection Canadian Pacific Railway for opening for traffic Moosejaw Northwestern extension from mile 63 to 91, a distance of 28 miles.

November 6, 1908.—Inspection re estimate of cost of subway under the Canadian Northern Railway at Saskatoon, Sask.

November 7, 1908.—Inspection interlocker at Canadian Pacific Railway crossing on Richmond street, London, Ont.

November 7, 1908.—Inspection Canadian Pacific Railway crossing on Quebec street, London, Ont.

November 7, 1908.—Inspection condition of culvert under the tracks of the Canadian Pacific Railway on lot 20, township of London, two miles west of London, Ont.

November 17, 1908.—Inspection bridges on the Emerson section of the Canadian

Pacific Railway.

November 17. 1908.—Inspection Canadian Northern Ontario Railway from Rosedale to Queen street, Toronto, Ont.

November 18, 1908.—Inspection proposed site of crossing for H. New, owner of pressed brick works on the line of the Toronto, Hamilton and Buffalo Railway at Hamilton, Ont.

November 19, 1908.-Inspection Canadian Northern Ontario Railway spur in

the town of Parry Sound, Ont.

November 19, 1908.—Inspection deviation of Great North Road in the town of Parry Sound, Ont.

November 19, 1908.—Inspection Canadian Northern Ontario Railway trestle approach to the Ottawa river bridge at Hawkesbury, Ont.

November 19, 1908.—Inspection farm crossing of E. Raymond, Staynerville, P.Q., on the line of the Canadian Pacific Railway.

November 19, 1908.—Inspection interlocking plant at crossing of the Canadian Northern Ontario Railway and the Grand Trunk Railway at Hawkesbury, Ont.

November 19, 1908.—Inspection opening for traffic of the Canadian Pacific Railway second track, Fort William section, from mile 31.6 to 31.63, from 106 to 106.2, and from 112.6 to 124.7.

November 20, 1908.—Inspection Canadian Pacific Railway for opening for traffic second track from mile 71.9 to 89.9 and from 140.8 to 148.

November 20, 1908.—Inspection Hawkesbury street crossings by the Canadian Northern Railway, affecting Mrs. A. Brown.

November 21, 1908.—Inspection switch on the Canadian Northern Quebec Railway at Morrow street, Montreal, P.Q.

November 24, 1908.—Inspection opening for traffic Canadian Northern Railway, Rossburn extension, from Rossburn, mile 78.7, to Russell, mile 104.3, distance 25.6 miles.

November 24, 1908.—Inspection opening for traffic Grand Trunk Pacific Railway, Lake Superior branch, from West Fort William, mile 0.5, to Lake Superior Junction, mile 288.2, distance 287.5 miles.

November 26, 1908.—Inspection farm crossing F. Quebec, Parry Sound, Ont., on line of the Canadian Northern Railway.

November 27, 1908.—Inspection proposed site for a station at Crysler, Ont., on the line of the Ottawa and New York Railway.

November 28, 1908.—Inspection opening for traffic of the Canadian Northern Railway, Goose Lake extension, from Saskatoon, mile 0, to Zelanda, mile 60, distance 60 miles.

November 28, 1908.—Inspection Canadian Northern Railway, Prince Albert section, from Prince Albert to Erwood, distance 169.8 miles, in connection with the complaint of the Prince Albert Board of Trade as to unsafe condition of the road-bed.

November 28, 1908.—Inspection street crossings in the town of Vegreville over the tracks of the Canadian Northern Railway.

December 1, 1908.—Inspection gates at crossing on Bloor street by the Grand Trunk Railway in Toronto, Ont.

December 2, 1908.—Inspection Grand Trunk bridges between St. Catharines and Merritton.

December 2, 1908.—Inspection five overhead bridges between St. Catharines and Merritton, Ont.

December 3, 1908.—Inspection street crossings on the line of the Walkerton and Lucknow Railway in the town of Durham, Ont.

December 3, 1908.—Inspection culvert on the line of the Canadian Pacific Railway at Lily lake, Ont., township of Humphrey, Muskoka district.

December 3, 1908.—Inspection re accident at Ottawa South on the line of the Grand Trunk Railway.

December 3, 1908.—Inspection new second track of the Grand Trunk Railway North Parkdale to St. Claire Avenue in the city of Toronto, Ont.

December 4, 1908.—Inspection interlocker at crossing of the Tilsonburg branch of the Grand Trunk Railway by the Brantford and Hamilton Railway in the city of Brantford, Ont.

December 4, 1908.—Inspection interlocking plant installed by the Montreal Street Railway on Pie IX. Avenue crossing of the Chateauguay and Northern Railway, Montreal, P.Q.

December 4, 1908.—Inspection St. Catherine Street bridge over Hochelaga yard of the Canadian Pacific Railway, Montreal.

December 5, 1908.—Inspection opening for traffic Canadian Pacific Railway Moosejaw Northwestern extension, mileage 91 to mileage 169.8, distance of 78.8 miles.

December 7, 1908.—Inspection opening for traffic Canadian Northern Railway, Lumsden diversion, 8.46 miles.

December 8, 1908.—Inspection Canadian Northern Ontario Railway, Hawkesbury trestle approach Ottawa river bridge.

December 8, 1908.—Inspection Canadian Northern Ontario Railway location near Grenville, P.Q.

December 11, 1908.—Inspection highway crossings at Cache bay, Ont.

December 14, 1908.—Inspection sewer under the tracks of the Grand Trunk Railway in the town of Notre Dame de Grace, P.Q.

December 14, 1908.—Inspection fences on the line of the Canadian Pacific Railway, Grand Trunk Railway and the Canadian Northern Ontario Railway between Winchester street and Queen street, Toronto, Ont.

December 14, 1908.—Inspection semaphores just west of Bathurst street bridge, Toronto, Ont.

December 15, 1908.—Inspection interlocking appliances at crossing of the Grand Trunk Railway by the Lake Erie and Detroit River Railway at Chatham, Ont.

December 15, 1908.—Inspection fences on the line of the Grand Trunk Railway at Swansea, Ont.

December 15, 1908.—Inspection crossing of Lesperance road by Grand Trunk Railway, Tecumseh, Ont.

December 15, 1908.—Inspection interlocker tower at crossing of Grand Trunk Railway by the Chatham Wallaceburg and Lake Erie Railway at Chatham, Ont.

December 16, 1908.—Inspection new second track of Grand Trunk Railway between Hamilton and Port Dover, Ont.

December 16, 1908.—Inspection fencing on the line of the Canadian Northern Railway, Oak Point branch, section 14-3-1, W.P.M.

December 17, 1908.—Inspection spur to Peters Coal Company at West Toronto, Ont., on the line of the Canadian Pacific Railway.

December 18, 1908.—Inspection re interchange in traffic between the Grand Trunk Railway and the Canadian Pacific Railway, at Listowel, Ont.

December 18, 1908.—Inspection highway crossings on the Canadian Northern Railway, Oak Point branch.

December 18, 1908.—Inspection bridges, piers and abutments on the Canadian Pacific Railway, Fort William section.

December 18, 1908.—Inspection Chatham, Wallaceburg arnd Lake Erie Railway for opening for traffic on Union street, Aberdeen bridge, King street, Third street, Raleigh street, from Raleigh street to William street, and on William and Queen streets in the city of Chatham, Ont.

December 22, 1908.—Inspection road crossing on the Grand Trunk Railway near St. Marys, Ont.

December 29, 1908.—Inspection interlocking plant at Rockland. Ont., at crossing of the Grand Trunk Railway by the Canadian Northern Ontario Railway.

December 29, 1908.—Inspection grade revision between Woodstock and Hartland, N.B., near Newburg Junction, mile 55:3 to 59:8 and from mile 62:5 to 64:0 near Hartland Junction on the line of the Canadian Pacific Railway, for opening for traffic.

December 29, 1908.—Inspection diversions of highways in the vicinity of Newburg Junction, N.B., by the Canadian Pacific Railway.

December 31, 1908.—Inspection interprovincial bridge at Ottawa, Ont.

January 2, 1909.—Inspection electric bell installed by the Grand Trunk Railway at Main street crossing, Forest, Ont.

January 7, 1909.—Inspection culvert on the line of the Canadian Pacific Railway on A. Mayer's farm at Allan Park, Ont.

January 7, 1909.—Inspection Hutton Hill highway crossing on the Walkerton and Lucknow Railway in township of Bentinck, west of Durham, Ont.

January 7, 1909.—Inspection wire crossings over the Canadian Pacific Railway of the Ingersoll Electric Light and Power Company at Ingersoll, Ont.

January 5, 1909.—Inspection new road at Bolton on the line of the Canadian Pacific Railway.

January 9, 1909.—Inspection farm crossing, C. Franche, on the line of the Canadian Northern Ontario Railway at Wendover, Ont.

January 9, 1909.—Inspection opening for traffic Canadian Pacific Railway Gull Lake diversion from mileage 35.8 to 42.5.

January 9, 1909.—Inspection road crossings, Canadian Pacific Railway, grade revision, from Tompkins to Crane Lake, nine crossings in all.

January 9, 1909.—Inspection road crossings Canadian Pacific Railway, Medicine Hat section, grade revision, between Second to Antelope, eight crossings in all.

January 9, 1909.—Inspection road crossings Canadian Pacific Railway, Medicine Hat section, grade revision, between Gull Lake and Carmichael, eight crossings in all.

January 9, 1909.—Inspection road crossings Canadian Pacific Railway, Medicine Hat section, grade revision, between Piapot and Maple Creek, sixteen crossings in all.

January 10, 1909.—Inspection highway crossing over the Canadian Pacific Railway, five miles east of Swift Current, as to its unsafe condition.

January 11, 1909.—Inspection crossing over the Canadian Pacific Railway tracks at Qu'Appelle, Sask., as to its unsafe condition.

January 14, 1909.—Inspection crossing of the Ottawa Electric Railway by spur of the Canadian Pacific Railway at the end of St. Patrick street, Ottawa, Ont.

January 14, 1909.—Inspection connection of Napierville Junction Railway with the Grand Trunk Railway at Lacolle, P.Q.

January 15, 1909.—Inspection bridges on south bank of Lachine canal, Canadian Pacific Railway.

January 15, 1909.—Inspection bridge over Canal at Cardinal, Ont., Grand Trunk Railway.

January 18, 1909.—Inspection gates at Thames street crossing of the Grand Trunk Railway at Ingersoll, Ont.

January 18, 1909.—Inspection interlocking appliances at crossing of Grand Trunk Railway by the Hamilton Street Railway at intersection of Barton street and Ferguson avenue, Hamilton, Ont.

January 18, 1909.—Inspection crossing of Grand Trunk Railway by the Canadian Pacific Railway at Brampton, Ont.

January 18, 1909.—Inspection line of the Brantford and Hamilton Railway between Alfred and Market streets in the city of Brantford, Ont,

January 18, 1909.—Inspection gates at the crossing of Thames street, Ingersoll, Ont., by the Grand Trunk Railway.

January 18, 1909.—Inspection interlocker at Lorette, P.Q., at crossing of the Canadian Pacific Railway by the Canadian Northern Quebec Railway.

January 19, 1909.—Inspection half interlocker at Ontario street, Montreal, between the Montreal Street Railway and the Canadian Northern Quebec Railway.

January 19, 1909.—Inspection crossing of the Grand Trunk Railway by the Canadian Pacific Railway at Drumbo, Ont.

January 20, 1909.—Inspection opening of Grand Trunk street across the tracks of the Grand Trunk Railway at Upton, Que,

January 21, 1909.—Inspection opening for traffic the Kettle River Valley Railway from Grand Forks, B.C., mileage 0 to mileage 19.

January 27, 1909.—Inspection opening for traffic Vancouver, Victoria and Eastern Railway from Huntingdon (international boundary) to Cloverdale, distance 29.28 miles; from Blain (international boundary) to the junction at Oliver, distance 11.33 miles, and from a point near Oliver to the Fraser river bridge, distance 9.72 miles.

January 27, 1909.—Inspection re complaint Arthur Thuot, of Iberville, P. Q.

January 27, 1909.—Inspection bridges on the eastern division of the Canadian Pacific Railway, Farnham section.

January 27, 1909.—Inspection bridges on the eastern division of the Canadian Pacific Railway, Newport section.

January 27, 1909.—Inspection highway crossings on the Canadian Pacific Railway and the Quebec, Montreal and Southern Railway at Iberville, P.Q.

January 27, 1908.—Inspection highway crossings on the Canadian Pacific Railway at Sherbrooke, P.Q.

January 27, 1909.—Inspection highway crossings on the Grand Trunk Railway at Sherbrooke, P.Q.

January 27, 1909.—Inspection highway crossings on the Grand Trunk Railway at St. John's, P.Q.

January 27, 1909.—Inspection highway crossings on the Canadian Pacific Railway

at St. John's, P.Q.

January 28, 1909.—Inspection bridges on the castern division of the Canadian

Pacific Railway, Sherbrooke section.

January 28, 1909.—Inspection highway crossings on the Grand Trunk Railway at Richmond, P.Q.

January 28, 1909.—Inspection highway crossings on the Boston and Maine Rail-

way at Lennoxville, P.Q.

January 28, 1909.—Inspection Canadian Pacific Railway and Grand Trunk Railway level highway crossing at College street, Lennoxville, P.Q.

January 29, 1909.—Inspection opening for traffic of the Canadian Pacific Railway Sheho extension from Leslie, mile 66.2, to Winyard, mile 89, distance 22.8 miles.

February 3, 1909.—Inspection crossing of Place d'Armes opposite Tete du Pont

barracks at Kingston, Ont., by the Canadian Pacific Railway.

February 4, 1909.—Inspection highway crossing at Coteau street, Quebec, by the Canadian Pacific Railway.

February 5, 1909.—Inspection opening for traffic Canadian Pacific Railway, Sheho extension, from Leslie, mile 66.2, to Winyard, mile 89.0, distance 22.8 miles.

February 11, 1909.—Inspection re ditch on property of G. Elliott, Woodbridge, Ont.

Feburary 12, 1909.—Inspection crossing of Cannifton road by the Grand Trunk Railway at Belleville, Ont.

February 12, 1909.—Inspection overhead bridge on the Grand Trunk Railway at

Kingston, Ont.

February 13, 1909.—Inspection highway crossing over the Grand Trunk Railway at Collins Bay, Ont.

February 13, 1909.—Inspection highway crossing over the Grand Trunk Railway

on Elliotts lane, Montreal road and Perth road at Kingston, Ont.

February 15, 1909.—Inspection re extension of Place Viger station yards at Montreal, P.Q.

February 15, 1909.—Inspection re extension of Windsor street station yards at

Montreal, P.Q.

February 15, 1909.—Inspection highway crossing over the Grand Trunk Railway

in the village of Burlington, Ont.

February 16, 1909.—Inspection Canadian Pacific Railway trestle over Cobbs Lake, Ont.

February 16, 1909.—Inspection highway crossing at Murrays Cut on the Canadian

Pacific Railway near Owen Sound, Ont.

February 17, 1909.—Inspection Canadian Pacific Railway, MacLeod branch, location of a proposed spur line to serve the Okotaks Milling Company and Electric Light plant.

February 17, 1909.—Inspection Canadian Pacific Railway, MacLeod branch at Okotoks, re spur line to serve the Pugh and Livingstone Lumber Company, and the

Western Canada Pressed Brick and Tile Company.

February 20, 1909.—Inspection crossing where the city of Edmonton and the Strathcona Radial Tramway Co. propose to cross the track of the Canadian Pacific Railway on White Avenue, Strathcona, Alta.

February 20, 1909.—Inspection proposed overhead crossing on the Grand Trunk Pacific Railway over the Fort Saskatchewan trail and the diversion of the Fort Saskatchewan trail to Norton street to cross at right angles under the Grand Trunk Pacific Railway on Norton street, near Edmonton, Alta.

February 20, 1909.—Inspection proposed crossing of the city of Edmonton Street Railway over the lines of the Canadian Northern Railway and the Grand Trunk Pacific Railway on Syndicate avenue, Edmonton, Alta.

February 22, 1909.—Inspection highway crossing on the Michigan Central Rail-

way and Pere Marquette Railway in the village of Rodney, Ont.

February 22, 1909.—Inspection highway crossing over the Pere Marquette Railway and the Michigan Central Railway in the village of Dutton, Ont.

February 22, 1909.—Inspection highway crossing over the Pere Marquette Railway

and the Michigan Central Railway in the village of West Lorne, Ont.

February 22, 1909.—Inspection subway where the Chatham, Wallaceburg and Lake Erie Railway crosses underneath the Michigan Central Railway at Charing Cross, Ont.

February 22, 1909.—Inspection highway crossing on the Michigan Central Railway at Queen street in the village of Tilbury, and also at the Fourth Concession road crossing a short distance east of Tilbury, Ont.

February 25, 1909.—Inspection re protection at crossing at London Junction,

Ont.

February 26, 1909.—Inspection overhead farm crossing at M.P. 125·12, township of London, on A. Dickie's land, on the line of the Grand Trunk Railway.

February 26, 1909.—Inspection highway crossings in the town of Montmorency by the Quebec Railway, Light and Power Company.

March 1, 1909.--Inspection bridges on the Guelph and Goderich Railway.

March 1, 1909.—Inspection bridges, Webbwood section, Lake Superior division, Canadian Pacific Railway.

March 2, 1909.—Inspection bridges, Cartier section, Lake Superior division, Canadian Pacific Railway.

March 2, 1909.—Inspection St. Catherine street bridge over the Canadian Pacific Railway yards at Hochelaga, Montreal, P.Q.

March 2, 1909.—Inspection location of transmission wires over the Canadian Pacific Railway tracks at Gomez street and Cartier and Talbot avenues, Winnipeg, Man.

March 2, 1909.—Inspection bridges and abutments on the Esquimalt and Nanaimo Railway (Canadian Pacific Railway) four bridges in all.

March 4, 1909.—Inspection bridges Lake Superior division, Soo branch of the Canadian Pacific Railway.

March 23, 1909.—Inspection Gravel Road crossing of the Grand Trunk Railway way, township of Johnson and Tarbutt.

March 4, 1909.—Inspection bridges Owen Sound section, Ontario division, Canadian Pacific Railway.

March 4, 1909.—Inspection bridges North Toronto branch, Canadian Pacific Railway

March 6, 1909.—Inspection bridges Teeswater section, Ontario division, Canadian Pacific Railway.

March 6, 1909.—Inspection bridges Orangeville section, Ontario division, Canadian Parife Pailman

dian Pacific Railway.

March 8, 1909.—Inspection bridges, Port Burwell branch, Ontario division, Cana-

dian Pacific Railway.

Varch 8, 1909 — Inspection transmission wires crossing of Canadian Pacific Rail.

March 8, 1909.—Inspection transmission wires crossing of Canadian Pacific Railway by the Saraguay Electric Light and Power Company on Prud'homme avenue, Notre Dame de Grace, P.Q.

March 19, 1909.—Inspection proposed location of the Canadian Pacific Railway Pheasant Hills branch, for a siding near N.E. \(\frac{1}{4}\) section 22-17-32, W. 1st, near Rocanville.

March 23, 1909.—Inspection gravel road crossing of the Grand Trunk Railway east of Morrisburg station.

March 23, 1909.—Inspection location of the Canadian Northern Ontario Railway from north side of Queen street to west side of Cherry street in the city of Toronto, for opening for traffic.

March 23, 1909.—Inspection Canadian Pacific.Railway (McGregor-Varco branch)

as to flooding of lands near Brookdale, Man.

March 24, 1909.—Inspection crossing of the Canadian Pacific Railway by the Hamilton Radial Railway near Lambton Mills, Ont.

March 25, 1909.—Inspection crossing of the town line road between Sandwich East and Sandwich West by the Michigan Central Railway and the Windsor, Essex and Lake Shore Rapid Railway.

March 26, 1909.—Inspection farm crossing of H. Dynes on the Hamilton Radial

Railway one mile west of Burlington, Ont.

March 26, 1909.—Inspection crossings on the Canadian Northern Railway main line near Quill Lake, Sask.

March 26, 1909.—Inspection station on the Canadian Northern at Denholm, Sask. March 26, 1909.—Inspection road crossings on the Canadian Northern Railway re complaint of local improvement district 18-B-3, near Nutana, Sask.

March 26, 1909.—Inspection crossing of the Michigan Central Railway by the

Gravel road at the east end of Windsor yard, Ont.

May 27, 1909.—Inspection highway crossings, Local Improvement District 21-J-3 on the Canadian Northern Railway near Maymont, Sask.

March 29, 1909.—Inspection re complaint condition of level crossings on the Canadian Northern Railway, mileage 244 also condition of bridge near mileage 243.

March 29, 1909.—Inspection station platform at Togo, Sask., on the main line of the Canadian Northern Railway.

March 30, 1909.—Inspection Temiscouata Railway as to general conditions.

March 30, 1909.—Inspection highway crossing parish of Notre Dame du Lac on the line of the Temiscouata Railway.

March 30, 1909.—Inspection *re* dumping of snow from Victoria Jubliee bridge over the St. Lawrence river by the Grand Trunk Railway.

# APPENDIX G.

# REPORT OF THE INSPECTOR OF ACCIDENTS OF THE BOARD.

May 11, 1909.

DEAR SIR,—I beg to submit herewith report of the Accident and Equipment Department showing the number of persons killed and injured in train accidents during the period commencing April 1, 1908, and ending March 31, 1909, as per returns furnished by the railway companies in accordance with the Railway Act; and also giving a synopsis of the work done by the inspectors in connection with railway equipment and operation all over Canada.

During the above period 448 persons were killed and 1,201 were injured; they are classified as follows:—

	Killed.	Injured.
Passengers	26	227
Employees	191	769
Other persons	231	205
Totals	448	1201

Investigations were made by the Board's inspectors in 374 of the above cases and reports on the same were handed to the Board.

The inspectors have also made 300 reports relating to equipment in general, and 35 special reports relating to operation. A general inspection of stations and of crossings was also attended to.

Yours truly,

EUGENE A. PRIMEAU.

A. D. Cartwright, Esq., Secretary, B.R.C. Building.

# THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

STATEMENT showing the number of persons killed and injured on various railways in Canada for year ending March 31, 1909.

Name of Railway.		Passe	ngers.	Empl	oyees.		her sons.	Tot	al.
Canadian Pacific         18         47         120         158         113         84         251         289           Canadian Northern         1         8         7         170         8         17         16         195           Michigan Central         3         142         15         7         18         152           Michigan Central and Pere Marquette         1         1         2         3           Montreal Park and Island         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         4         4         4         4         1         1         1         4         4         4         4         4         4         4         4         4         4         4         4         4         1         1         1         1         1         1         1         1         1	Name of Railway.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
26 227 191 769 231 205 448 1,201	Canadian Pacific. Canadian Northern Michigan Central. Michigan Central and Pere Marquette. Montreal Park and Island. Quebec, Montreal and Southern St. Lawrence and Adirondack. Grand Trunk and Intercolonial. Windsor, Essex and Lake Shore Rapid Co. Central Vermont. Algoma Central. Wabash Bay of Quinte. Alberta Ry. and Irrigation Co. British Columbia and Yukon Ry. Esquimalt and Nanaimo. Thousand Island Ry. Co. Grand Trunk and Can. Pacific. Dominion Atlantic. New York and Ottawa (Ottawa and N.Y.). Canadian Northern and Grand Trunk Pacific. Canadian Northern and Lake Erie Electric Ry. Great Northern Niagara, St. Catharines and Toronto. Chatham, Wallaceburg and Lake Erie Electric Ry Kingston and Pembroke. Moneton and Buetouche. Canadian Northern, Ontario. Oxford Mountain. Canadian Northern, Quebec. Temiscouata. Toronto, Hamilton and Buffalo.	4	47 8 3 6 2 2 1 1 4	120 7 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	158 170 142 1 1 3 1 5 6 6 1 1	113 8 15 1 1 7 2 1 1 1 1 1 1	84 17 7 2 1 1  1 1 1 1 1 1	251 16 18 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	289 195 152 3 1 9 4 5 4 1

STATEMENT Showing the Character of the Accidents Sustained by the Persons Killed and Injured on Various Railways in Canada, for Year ending March 31, 1909.

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SESSIONAL PAPER No. 20c

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STATEMENT Showing the Character of the Accidents Sustained by the Persons Killed and Injured on Various Railways in Canada, for Year ending March 31, 1909.

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# THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Statement showing the character of accidents on various railways in Canada for year ending March 31st, 1909.

	Passe	engers.	Emp	loyees.		her sons.	То	tals.
CHARACTER OF ACCIDENT.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Derailment. Head-on collision Stealing ride. While shunting Level crossing. Palling off freight cars Prespassing. Palling off freight cars Prespassing. Prespassi	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 10 10 15 15 4 10 17	1 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	39 36 36 39 6 39 6 39 6 23 21 11 17 7 7 3 2 8 8 8 8 6 2 14 17 17 2 2 2 2 19 19 19 19 19 19 19 19 19 19	2 41 3 83 47 2 2 5 5 6 8 1 1 9 21 21	12 18 4 4	2 1 1 11 7 7 222 15 12 12 15 12 1 1 1 1 1 1 1 1 1 1	12 6 6 544 388 577 40 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Totals	. 26	227	191	769	231	205	448	1,201

COMPARATIVE STATEMENT of killed and injured beween year ending March 31, 1908, and year ending March 31, 1909.

	Passe	ngers.	Empl	oyees.	Otl Pers	her sons.	То	tal.
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Year ending March 31, 1908	64 26	326 227	246 191	806 769	219 231	177 205	529 448	1,309 1,201
Increase over 1908	38	99	55	37	12	28	81	108

Comparative Statement in totals of killed and injured between year ending March 31, 1908, and year ending March 31, 1909, for each railway separately.

	19	08.	19	09.		19	09.	
Name of Railway.					Incr	ease.	Deci	rease.
AAME OF RAILWAI.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Thousand Island Railway Co. Grand Trunk and Canadian Pacific New York and Ottawa. Canadian Northern and G. T. P. Canadian Pacific and New York Central Grand Trunk and Toronto Electric. Niagara, St. Catharines and Toronto. Chatham, Wallaceburg and Lake Erie Electric Ry Moncton and Buctouche. Oxford and Moncton Temiscouata		721 341 123 5 1 72 12 6 3 3 1 4 11 11 11 1,309	127 251 16 1 18 3 1 1 2 1 1 1 1 1 1 1 1	462 289 195 2 1 152 25  9  3 1 1  1 7 2 1 1 1 2 1 2 1 3  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 8 8 1 2 1 1 1 1 4 4 1 1	80 136	38 32 3 1 7 22 1 1 1 3 2 2 4 4 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	259 52 3 3 14 2
Increase					24	232		
Decrease							105	340
Decrease for 1909.							81	108

# COLLISIONS INVESTIGATED DURING YEAR 1908-1909.

SESSION	NAL PAPER No. 2	20c								
COLLISIONS INVESTIGATED DURING YEAR 1908-1909. COLLISIONS.	Cause of Accident,	Collision—Switchman allowed engine 546 to back up in face of extra 868; in yard.	Collision, head-on. Train despatcher forgot about extra 198 and issued orders to engine 331, without first securing extra 198.	Collision—Prakes were not applied in time to prevent cars striking car standing in siding.	CollisionSwitch set for siding instead of main line,	Collision, hevd-on. Operator received and accepted order from the train despatcher after train had passed his station.	Collision, rear-end. Train ran into train ahead. Engineer did not regard the explosion of one torpedo.	Collision, head-on. Supply train, engine 407, north bound, failed to await the arrival of the south bound ballast train at the lifting gang and pro-	ceeded without instructions. Collision, rear-end. No. 2 collided with rear of No. 69.	Collision, rear-end. Car No. 260 pitched into car Duchess of York.
ATED DU	Lajured.		∞	Çì	H	9		ଟୀ	ಣ	14
ED	Killed.	<u>:</u>	:	<u> </u>	:	-	:	ÇI	:	
SIONS INVESTIGAT	Place,	Allandale,	Simeoe, near	Atikokan yard	12 Jan. 13 Canadian Northern Kamsack yard	Brocket, 4 mile west	Hank, 2 miles east of	Parry Sound, 5 miles north	Leamington, 4 miles west of.	Britannia line, near Barry's hotel.
COLLI	Name of Railway.	f. 1 Grand Trunk	7 Mar. 24 Grand Trunk	3 Canadian Northern Atikokan yard	Canadian Northern	13 Dec. 22 Canadian Pacific	:	1908. 26 May 11 Canadian Pacific	704 June 16 April 16 Père Marquette	9 May 24 Ottawa Electric Ry
	Date of Acci-	00	far. 24	6 Feb. 3	<sup>5</sup> an. 13	1907. Jec. 22	Nov. 26	1908. Iay 11	April 16	day 24
		8. - 1.J.	1-		12.3	13 L	13 N	26 1	16 2	9 N
	Date Reported.	No. 1908. 190 584 April 1 Jan.	=	May	=	=	Ξ	=	June	=
	Reference to Record.	No. 584	3214	645	647	2892	660	673	704	400

COLLISIONS INVESTIGATED DURING YEAR 1908-1909—Continued.

												9-	10	ED\	NAF	RD V	VII.,	Α.	1910
Cause of Accident.		Collision, head-on. Engine 1490 ran away from shop track on to main line	and collided with passenger train No. 19.	Collision, broadside. Engine 456 collided with side of one car and rear of	engine 40.	Collision—Giving signal to No. 22 to enter London passenger station before	making sure that switches were properly set.	Collision, rear-end. Switchman turned switch and let engine and six cars	out on man me arter engineer of 100, 5 had received proceed signal.	Collision, rear-end. Brakeman did not go far enough to protect his train,	waren was saanding. die went only eignt telegraph poles.	Collision, head-on. Crew of freight extra forgot about No. 94, and on	account of curve engineers and not see each other until it was too late,	Collision, head-on. Engineer did not examine train register before leaving	Medicine Hat. Train No. 17 had not yet arrived.	Collision—Engine 980 collided with forward end of train No. 12.		Collision, head-on. Engine 1298, in charge of watchman, collided with a	van coupled to engine 368.
Injured.		00		1		14		0.1		6		খ		Ü		4		:	_
Killed.		<b>C1</b>		i		:		:		Ç3		:		2		:			_
Place.		29 Canadian Pacific Owen Sound		Stratford Yard		London		Point St. Charles		Homle Yard, east end		Port Arthur, 2 miles east		9 Canadian Pacific Medicine Hat, 12 miles east		Toronto, Union Station		Peart	
of Railway.		eific				:		:						acific		:		7 Canadian Pacific Peart .	
Name of		Canadian Pa		Grand Trun		Grand Tru		Grand Tru		Canadian I		Canadian I		Canadian P		Grand Trun		Canadian P	
Date of Acci-dent.	1908.	Ξ		2 " 28 Grand Trunk		13 July 8 Grand Trunk.		27 June 19 Grand Tru		31 July 27 Canadian Pacific		6 " 18 Canadian Pacifie		z		4 " 11 Grand Trunk.			
dent.	1907. 1908.			=		" 13 July 8 Grand Tru		" 27 June 19 Grand Trunk.		" 31 July 27 Canadian I		=				=		799 Sept. 25 Aug. 7 Canadian P	

SESSI	IONAL	PAPE	R No. 2	20c								
3 Collision, head-on. No. 50 overran the east switch and collided with No. 55, which was stopped and about to pull into siding.	Collision, rear-end. Failure of brakeman to obey a signal to stop when he ran over a torpedo.	Collision, rear-end. Failure of brakeman to properly protect his train.	3 Collision, broadside. Motorman failed to stop and electric car struck side of freight train.	Collision, head-on. Between extra freight west engine 189 and pilot engine 483. The pilot engine was running tender first.	3 Collision, rear-end. Between extra trains east, engines 647 and 811. Weather very foggy.	Collision, broadside. Engineer of No. 48 failing to notice position of the switch ahead and running foul of east bound freight main line.	6 Collision—Switch left open; switch set for siding instead of main line.	Collision—Extra freight engine 371, standing on main track and passenger 94 approaching station.	Oollision, head-on. Extra No. 91 and extra 517. Engineer of No. 517 forgetting his meet order with 91 at Stickney.	Collision, rear-end. No. 423 running at high rate of speed and coming upon engine 747 before the crew of the engine could be protected by flagman.	3 Collision, rear-end. 1st No. 54 and No. 56. Failure of engineer of No. 1st 54 to notice position of distant semaphore.	2 Collision, lead-on. Switch set for siding instead of main line.
-	:	:	-	ಣ	:	-	-	:	G1 .	ಣ	:	ಣ
	Gilbert Station, 1 mile east		r John St	les east of	:					Bowmanville, 14 miles east of.	:	miles west of
[slington.	Gilbert Sta	Welland	Foronto, nea	Burford, 2 mi		London Yard.	Mimico	Parry Sound.	Stickney	Bowmanville,	Peterboro	Sandbank, 25 Peterboro.
5 Sept. 26 Canadian Pacific Islington	16 " 22 Canadian Pacific Gilbert Sta	16 " 23 Grand Trunk Welland	16 Oct, 7 Grand Trunk and To-Toronto, near John St	16 " 6 Grand Trunk Burford, 2 miles east of	16 Sept. 23 Grand Trunk Clarkson	16 Oct. 7 Grand Trunk London Yard.	23 " 1 Grand Trunk and Cana-Mimico dian Pacific.	27 " 15 Canadian Pacific Parry Sound.	10 " 17 Canadian Pacific Stickney	27 Nov. 5 Grand Trunk Bowmanville,	27 " 14 Canadian Pacific Peterboro	30 " 23 Canadian Pacific Sandbank, 25 Peterboro.
ific	" 22 Canadian Pacific	" 23 Grand Trunk	7 Grand Trunk ronto Electric	" 6 Grand Trunk	23 Grand Trunk Clarkson .	7 Grand Trunk	" 1 Grand Trunk dian Pacific.	" 15 Canadian Pacific	" 17 Canadian Pacific	5 Grand Trunk	" 14 Canadian Paoific	" 23 Canadian Pacific

COLLISIONS INVESTIGATED DURING YEAR 1908-1909—Continued.

												9-1	0 E	OWA	ARD	VII	I., A.	1910
	Cause of Accident.		4 Collision—Switch set for siding instead of main line, but was noticed in time	to prevent a more serious accident.	Collision, head-on. Failure of train No. 5 to stop at semaphore and extra	of journing east switch at east end of yard.	Collision, rear-end. Failure of motorman on car No. 8 to stop, colliding	With real of cal Ivo. 14 allead.	Collision, head-on. Failure of engine 312 to clear for No. 78.	Collision, broadside. Failure to protect No. 798, which was 10 cars foul at the east end of siding, and giving No. 50 signal to proceed.	Collision-Defective engine, escaping steam preventing engineer from seeing	Cars.	Collision-Train ran into open switch and struck cars standing on side track.		Collision, rear-end. Conductor of extra 580 misread his orders, and ordered	engineer to back up, coniding with approaching 180, 76.	Collision, head-on. No. 584 extra freight. Train took wrong track at Harriston and collided with No 311 environs giving woong signal for	switch.
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	Killed.		:		-		4		-	 :	63		:		63		27	
	Place.		Virden Station		Danby		Chathain, Queen St		Pembroke, 1 mile east of	Bethany, Havelock Section.	Fort William				Sidewood Station, near		Harriston, 3\frac{1}{2} miles north	
	Name of Railway.		30 Oct. 24 Canadian Pacific Virden Station		6 Grand Trunk		3 Aug. 10 Chatham, Wallaceburg & Chathain, Queen St.	rane true trice try.	3 Canadian Pacific	30 Canadian Pacific	7 Canadian Pacific		2 Grand Trunk Prairie Siding		27 Jan. 13 Canadian Pacific		26 Grand Trunk	
-10	Date of Acc	1908.	Oct. 24		3 Nov. 6		Aug. 10		9 Dec. 3	9 Nov. 30	23 Dec. 7		16 Dec. 2	1909	Jan. 13		5 " 26	
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-	Date Reported	1909.	30		873 Dec.		=		=	z.	5		Jan. 1		= Ç1		915 Feb. 4	

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" 17 Feb. 12 Canadian Pacific Hector Station	" 23 " 16 Canadian Pacific Kenogami 1 Collision, head-on. Conductor and engineer making a mistake of an hour in the time.	far. 6 Feb. 22 Canadian Pacific Ingolf Station	" 23 Michigan Central & Père Springfield	1908.  Dec. 16 Canadian Pacific Glen Sutton, 14 miles north 1 6 Collision, head-on. Failure of conductor to comply with orders issued and failure of despatcher to issue orders to agent at necting point.	13. Mar. 5 Canadian Pacific Port Arthur Yards 1 Collision—Disregard of yard limit beard, and the man in charge of plough neglecting to give engineer signal.	" 16 Jan. 27 Canadian Pacific   Emerald Station	and Trunk and Canal Hawkesbury	" 22 " 10 Canadian Northern Brandon   Collision, rear-end. Disregarding of yard limit board.
17 Feb. 23 Jan.				2 Dec.	13 Mar	16 Jan.	22 Mar	
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# DERAILMENTS INVESTIGATED DURING YEAR 1908-9.

DERAILMENTS.

								9-10 EDV	VARD \	/II., A	. 1910
	Cause of Accidents.	Derailment—Caused by the accumulation of snow and ice on public crossing.	Derailment—Caused by snow on track.	Derailment—Culvert washed out on account of heavy rain during the night and early morning.	Derailment—Train ran into a rock slide.	Derailment—Train ran into a rock slide,	Derailment—Car left track on account of a piece of cord wood and ice on track.	Derailment—Breaking of engme truck spring, which broke apparently as engine was passing switch points.	Derailment—Broken rail.	Derailment—Ran into open switch, then work engine pitched into wreck.	Derailment—Broken tire on the left leading driving wheel.
I NO	.bərujured.	-	Ξ	¢1	ಣ	СI	:	L+		0.1	:
TEN	Killed.		:	:	:			:	:	:	
DENALDARA	Place.	Berlin, 1 mile south	Paris	Seaforth, 4 miles south	Kanaka Tunnel, mt. section	Hope (near) mt. section	Winnipeg Yard	Dauphin Yard	Lethbridge Jct	Eagle (near)	1   Feb. 27   Canadian Northern   Port Arthur Yard
	Name of Railway.	96 Grand Trunk	15 Grand Valley Electric Ry Paris	28 Grand Trunk	28 Feb. 15 Canadian Pa ific	7 Canadian Pacific	6 Can. Pacific	30 Canadian Northern Dauphin Yard.	26 Canadian Pacific	15 Canadian Pacific	Canadian Northern
	Date of Accidents.	1908 3 Feb.	13 Jan. 15	21 Mar. 28	28 Feb. 15	1907. 28 Dec. 7	1908. 6 Feb. 6	6 Jan. 30	4 Feb. 26	13 Mar 15	1 Feb. 27
	Date of Report.	1908. Apr.	=	=	=	=	May	z	Aug.		=
	Вегелсе to Весотd.	No. 595 A	612	617	628	631	689	3142	674 A	656 May	3060

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2 Derailment—Train left rails at switch, cause unknown.	Derailment—Some of the brake gearing breaking and coming in contact with the tender track wheels.	Derailment—Due to a broken flange on the forward wheel of the rear truck.	Derailmont—Broken flange on C.P.B. flat, first car ahead of caboose.	Derailment—A sunkink in the rail	Derailment—Tender of engine left rails, derailing baggage, express, first and second class cars.	Derailment—Broken axle on the trailing tender wheels,	Derailment—Tender of engine 1630 and six cars derailed. Cause unknown.	Derailment—Dump and track breaking away from the side of the bill as the train came to it.	Derailment—A loose boulder rolling down out of the side of a cut and remaining on the track. $\ ^{\prime}$	Derailment—Sun caused the rails to expand to such an extent that the rails kinked. Track out of line 3 feet.	Derailment—Cause unknown.	Derailment—Cause unknown. Probably due to a sunkink.	Dera Iment—Soft piece of track on muskeg.	Derailment—Tender left rails, causing the whole train to be derailed. Gause unknown.
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Kenora Yard	Cartier (near), between M.P 12 & 13.	20 Niagara, St. Catharine & Therold	Milestone, 3 miles west	Oxdrift, 10 tel. poles east	Crandall, 1 mile east of	Molita, east switch	9 Wabash & Grand Trunk Stevensville, ½ mile west	Edison, 1 mile west Ignace section.	McMillan, 1 mile cast	Wakami Station, near M. 91½. Chapleau section.	Gilford Station	Pringle Station, 2 miles east.	Star City (near), M. P. 283	St. Lambert, 6 miles south
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10 Canadian Pacific	26 May 19 Canadian Northern .	gara, pronte	23 Canadian Pacific	11 June 1 Canadian Pacific	25 Canadian Pacific	5 Canadian Pacific,	bash sint S	6 May 25 Canadian Pacific.	9 Canadian Pacific	10 June 21 Canadian Pacific	18 July 15 Grand Trnnk	26 Canadian Pacific	15 June 14 Canadian Northern	27 Aug. 22 Central Vermont,
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DERAILMENTS INVESTIGATED DURING YEAR 1908-9.—Continued.

											9-1	0 ED	)WA	RD	VII.,	Α.	1910
Cause of Accidents,		Derailment—Broken rail.	Derailment—Running faster than the condition of the track warranted.		Derailment—Breaking of a rail joint. Due to speed in excess of that	ordered by the company.	1 Derailment-The tender leading wheel of the leading truck breaking down.		Derailment—Eight cars derailed. Cause unknown.		Derailment.—Wheel broke under third car of first 76; second 76 collided with wreckage of first section.	Derailment—The three rear cars of No. 42 derailed. Cause unknown, pro- bably due to a sunkink caused by first part of train.		Derailment—Engine derailed. Too high rate of speed with heavy power on light stoel.		Derailment—Train left track at switch.	
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Killed.		:			prof		:		:			:					
Place.		Gobels, ‡ mile west	Radisond, near M. 519		3 Sept. 14 Canadian Northern M. 137 east		M. 4, Pointe Fortune branch.		Kilworthy & Koshee (betw'n)		Austin Station	Allandale, 1 mile north		24 Canadian Northern M. 43, Port Arthur section		Ottawa South, Rideau Jet	
Name of Railway.		3 Grand Trunk	6 Canadian Northern		1 Canadian Northern		2 Canadian Pacific		6 Aug. 13 Grand Trunk		22 Canadian Pacific	15 Grand Trunk		4 Canadian Northern		27 Nov. 18 Grand Trunk	
Date of Accidents.	1908.	Sept. 12 Sept. ?	30 Aug. (		3 Sept. 1		=		6 Aug. 1.		9 Sept. 2	22 Oct. 1		Ξ		7 Nov. 1	_
Date of Report.	1908.	ept. 1	ಣ =		Oct.		· ·		:		=	e3		Nov. 10		21	
Reference to Record,	No.	789 S	805	3657	810 0	3794	812	3008	829	3715	821	812	3954	N 098	3950	867	4111

SESSIONAL PAPER No. 20c

SES	SSIC	NA	AL PAP	ER 1	٧٥.	20c										
and							on.									
bog							4 Derailment—Spreading of a rail on a 20 degree curve on 1, inch elevation.									
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Der		1 Derailment—Broken switch rod.	Derailment—Breaking of a defective steel rail.		30 Derailment-Tire coming off one of the wheels.		Der		Der		43 Derailment—Trying to run through snow slide.		4 Derailment—Broken rail on the inside of curve.		Der	1
3   Derailment—Connecting rod on the switch became disconnected and allowed noints to shift.		-	∞		30		4		Derailment—Train ran into snow slide.		43		7		Derailment—Broken rail.	
27/Oct. 16 Canadian Pacific Bear Creek		:	-		:		:		¢1		¢1		:		Regina (nr.) Regina-Prince	:
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ear		Vinn	=		our		r. 56		hrec		ailor		ndo		legii	
 E		3 Nov. 14 Canadian Northern Winnipeg West Yard	<u> </u>		Gourock, 1 mile south		Pembroke M. 56, near Sharbot Lake		H		· .		· ·		:	
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# APPENDIX H.

# RULES AND REGULATIONS OF THE BOARD.

Since the publication of the last annual report, the following amendments have been made to the Board's Rules and Regulations: On the 1st April, 1908, Rule 1 was rescinded and the following substituted therefor:

- 1. Regular sittings of the Board will be held at the Court Room, Ottawa, at 10 a.m., on the first Tuesday of every month for the hearing of matters, applications or complaints.
- (a) In addition to its regular sittings, the Board may appoint special sittings at Ottawa or elsewhere.
- 7. (a) Any party to any matter, application or complaint pending before the Board may set the same down for hearing at the next monthly sitting of the Board upon giving at least ten days, or shorter notice as the Board may order, to all parties interested.
- (b) When contested matters, applications or complaints are ready for hearing, and are not at once set down by any party interested, the secretary shall set the same down for the first sitting commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down.
- (c) When a matter, application or complaint is set down for hearing by the secretary, he shall give ten days' notice of hearing (or such shorter time as the Board may order) to all parties interested.

On the 26th January, 1909, the following general regulations affecting highway crossings were approved.

### GENERAL REGULATIONS AFFECTING HIGHWAY CROSSINGS.

- 1. That, unless otherwise ordered by the Board, the width of approaches to rural railway crossings over highways be twenty feet road surface on concession and main reads and sixteen feet on side and bush roads.
- 2. That a strong, substantial fence, or railing, four feet six inches high, with a good post-cap (four inches by four inches, a middle piece of timber (one and a half inches by six inches), and a ten-inch board firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing where the height is six feet or more above the level of the adjacent ground—leaving always a clear road-surface twenty feet wide.
- 3. That the width of approaches to rural railway crossings made in cuttings be not less than twenty feet clear from bank to bank.
- 4. That, unless otherwise ordered by the Board, the planking or paving blocks, or broken stone topped with crushed rock screenings, on rural railway crossings over highways (between the rails and for a width of at least eight inches on the outer sides thereof) be twenty feet long on concession and main roads and sixteen feet on side and bush roads.

# RULES AND REGULATIONS-MAY 1, 1909.

MEETING AT OTTAWA, MONDAY, THE 19TH DAY OF APRIL, A.D. 1909.

The Board, in virtue of the provisions of the Railway Act, hereby makes the following rules and regulations:—

# PUBLIC SESSIONS.

1. For the hearing of matters, applications or complaints other than those relating to rates and traffic matters, a sittings will be held at the offices of the Board at Ottawa, Ontario, at 10 a.m., on the first Tuesday in every month, and for hearing all matters, applications and complaints relating to rates and traffic matters, a sittings will be held at the place and hour aforesaid on the third Tuesday in every month.

(a) In addition to its regular sittings, the Board may appoint special sittings at

Ottawa and elsewhere.

### INTERPRETATION.

2. In the construction of these rules, and the forms herein referred to words importing the singular number shall include the plural, and words importing the plural number shall include the singular number; and the following terms shall (if not inconsistent with the context or subject) have the respective meanings hereinafter assigned to them; that is to say, 'Application' shall include complaint under this Act; 'Respondent' shall mean the person or company who is called upon to answer to any application or complaint; 'Affidavit' shall include affirmation; and 'Costs' shall include fees, counsel fees and expenses.

### APPLICATION OR COMPLAINT.

3. Every proceeding before the Board under this Act shall be commenced by an application made to it, which shall be in writing and signed by the applicant or his solicitor; or in case of a corporate body or company being the applicants shall be signed by their manager, secretary or solicitor. It shall contain a clear and concise statement of the facts, the grounds of application, the section of the Act under which the same is made, and the nature of the order applied for, or the relief or remedy to which the applicant claims to be entitled. It shall be divided into paragraphs, each of which, as nearly as possible, shall be confined to a distinct portion of the subject, and every paragraph shall be numbered consecutively. It shall be endorsed with the name and address of the applicant, or if there be a solicitor acting for him in the matter, with the name and address of such solicitor. The application shall be according to the forms in schedule No. 1.

The application, so written and signed as aforesaid, shall be left with or mailed to the secretary of the Board, together with a copy of any document, or copies, of any maps, plans, profiles, and books of reference, as required under the provisions of the Act, (a) referred to therein, or which may be useful in explaining or supporting the same. The secretary shall number such applications according to the order in which they are received by him, and make a list thereof. From the said list there shall be made up a docket of cases for hearing which, as well as their order of entry on the docket, shall be settled by the Board. Said docket list when completed to be put upon a notice board provided for that purpose, which shall be open for inspection at the office of the secretary during office hours.

### ANSWER.

4. Unless the Board otherwise directs, the respondent or respondents shall mail or deliver to the applicant, or his solicitor, a written statement containing in a clear and concise form their answer to the application, and shall also leave or mail a copy thereof with or to the secretary of the Board at its office, together with any documents that may be useful in explaining or supporting it. The answer may admit the whole or any part of the facts of the application. It shall be divided into paragraphs, which shall be numbered consecutively, and it shall be signed by the person making the same, or his solicitor. It shall be endorsed with the name and address of the respondents, or if there be a solicitor acting for them in the matter, with the name and address of such solicitor. It shall be according to the form in schedule No. 2.

(a) The time limit for filing and delivery of answer shall be as follows: Where the subject matter of the complaint arises east of Port Arthur, Ont., fifteen days; between Port Arthur and the western boundary of the province of Saskatchewan, twenty

days; and west thereof, thirty days.

(a) For further particulars of plans, &c., see regulations in Appendix.

### REPLY.

5. Within four days from the delivery of the answer to the application, the applicant shall mail or deliver a reply thereto to the respondents, and a copy thereof to the Secretary of the Board, and may object to the said answer as being insufficient, stating the ground of such objection, or deny the facts stated therein, or may admit the whole or any part of said facts. The reply shall be signed by the applicant or his solicitor, and may be according to form No. 3 in the said schedule.

The Board may, at any time, require the whole or any part of the application, answer or reply, to be verified by affidavit, upon giving a notice to that effect to the party from whom the affidavit is required; and if such notice be not complied with the application, answer or reply may be set aside, or such part of it as is not verified

according to the notice may be struck out.

### SUSPENSION OF PROCEEDINGS.

6. The Board may require further information, or particulars, or documents from the parties, and may suspend all formal proceedings until satisfied in this respect.

If the Board, at any stage of the proceedings, think fit to direct inquiries to be made under any of the provisions of this Act, it shall give notice thereof to the parties interested, and may stay proceedings or any part of the proceedings thereon accordingly.

### NOTICE.

7. In all proceedings under this Act, where notice is required, a copy or copies of said proceeding, or proceedings, for the purpose of service, shall be endorsed with notice to the parties in the forms of endorsement set forth in schedules Nos. 1 and 2; and in default of appearance the Board may hear and determine the application exparte.

Endorsements shall be signed in accordance with the provisions of section 41.

The Board may enlarge or abridge the periods for putting in the answer or reply and for hearing the application, and in that case the period shall be endorsed in the notice accordingly.

Except in any case where it is otherwise provided, ten days' notice of any application to the Board, or of any hearing by the Board, shall be sufficient; unless, in any

case, the Board directs longer notice. The Board may, in any case, allow notice for any period less than ten days, which shall be sufficient notice as if given for ten days or longer. (Section 43.)

Notice may be given or served as provided by section 41 of the Act.

When the Board is authorized to hear an application or make an order, upon notice to the parties interested, it may, upon the ground of urgency, or for other reason appearing to the Board to be sufficient notwithstanding any want of or insufficiency in such notice, make the like order or decision in the matter as if due notice had been given to all parties; and such order or decision shall be as valid and take effect in all respects as if made on due notice; but any person entitled to notice, and not sufficiently notified, may, at any time within ten days after becoming aware of such order or decision, or within such further time as the Board may allow, apply to the Board to vary, amend, or rescind such order or decision; and the Board shall thereupon, on such notice to all parties interested as it may in its discretion think desirable, hear such application, and either amend, alter, or rescind such order or decision, or dismiss the application, as may seem to it just and right. (Section 45.)

(a) Any party to any matter, application, or complaint pending before the Board may set the same down for hearing at the next monthly sitting of the Board, upon giving at least ten days, or such shorter notice as the Board may order, to all parties

interested.

(b) When contested matters, applications, or complaints are ready for hearing, and are not at once set down by any party interested, the Secretary shall set the same down for the first sittings commencing after the expiration of ten days (or such shorter notice as the Board may order) from the date of such setting down.

(c) When a matter, application, or complaint is set down for hearing by the Secretary, he shall give ten days' notice of hearing (or such shorter time as the Board

may order) to all parties interested.

### CONSENT CASES.

- 8. In all cases the parties may, by consent in writing with the approval of the Board, dispense with the form of proceedings herein mentioned, or some portion thereof.
- 9. If it appears to the Board at any time that the statements in the application, or answer, or reply do not sufficiently raise or disclose the issues of fact in dispute between the parties, it may direct them to prepare issues, and such issues shall, if the parties differ, be settled by the Board.

# PRELIMINARY QUESTIONS OF LAW.

10. If it appear to the Board at any time that there is a question of law which it would be convenient to have decided before further proceeding with the case, it may direct such question to be raised for its information, either by special case or in such other manner as it may deem expedient, and the Board may, pending such decision, order the whole or any portion of the proceeding before the Board in such matter, to be stayed.

### PRELIMINARY MEETING.

11. If it appear to the Board at any time before the hearing of the application that it would be advantageous to hold a preliminary meeting for the purpose of fixing or altering the place of hearing, determining the mode of conducting the inquiry, the admitting of certain facts or the proof of them by affidavit, or for any other purpose, the Board may hold such meeting upon such notice to the parties as it deems sufficient, and may thereupon make such orders as it may deem expedient.

### PRELIMINARY EXAMINATION WITH THE PARTIES.

12. The Board may, if it thinks fit, instead of holding the preliminary meeting, provided for in Rule 11, communicate with the parties direct, and may require answers to such inquiries as it may consider necessary.

# PRODUCTION AND INSPECTION OF DOCUMENTS.

13. Either party shall be entitled, at any time, before or at hearing of the case, to give notice in writing to the other party in whose application, or answer, or reply reference was made to any document, to produce it for the inspection of the party giving such notice, or his solicitor, and to permit him to take copies thereof; and any party not complying with such notice shall not afterwards be at liberty to put in such documents in evidence on his behalf in said proceedings, unless he satisfy the Board that he had sufficient cause for not complying with such notice.

### NOTICE TO PRODUCERS.

- 14. Either party may give to the other a notice in writing to produce such documents as relate to any matter in difference (specifying the said documents), and which are in the possession or control of such other party; and if such notice be not complied with, secondary evidence of the contents of the said documents may be given by or on behalf of the party who gave such notice.
- 15. Either party may give to the other party a notice in writing to admit any documents, saving all just exceptions, and in case of neglect to admit, after such notice, the cost of proving such documents shall be paid by the party so neglecting or refusing, whatever the result of the application may be; unless, on the hearing, the Board certifies that the refusal to admit was reasonable; and no costs of proving any document shall be allowed, unless such notice be given, except where the omission to give the notice is, in the opinion of the Board, a saving of expense.

### WITNESSES.

16. The attendance and examination of witnesses, the production and inspection of documents, shall be enforced in the same manner as its now enforced in a Superior Court of Law; and the proceedings for that purpose shall be in the same form, mutatis mutandis, and they shall be sealed by the Secretary of the Board with the seal and may be served in any part of Canada. (Section 26.)

Witnesses shall be entitled, in the discretion of the Board, to be paid the fees and

allowances prescribed by schedule No. 4, annexed hereto.

# THE HEARING.

17. The witnesses at the hearing shall be examined viva voce; but the Board may, at any time, for sufficient reason, order that any particular facts may be proved by affidavit, or that the affidavit of any witnesses may be read at the hearing on such conditions as it may think reasonable; or that any witnesses whose attendance ought, for some sufficient reason, to be dispensed with, be examined before a Commissioner appointed by it for that purpose, who shall have authority to administer oaths, and before whom all parties shall attend. The evidence taken before such Commissioner shall be confined to the subject-matter in question, and any objection to the admission of such evidence shall be noted by the Commissioner and dealt with by the Board at the hearing. Such notice of the time and place of examination as is prescribed in the order shall be given to the adverse party. All examinations taken in pursuance of any

of the provisions of this Act, or of these rules, shall be returned to the Court; and the depositions certified under the hands of the person or persons taking the same may, without further proof, be used in evidences, saving all just exceptions. The Board may require further evidence to be given either *viva voce* or by deposition, taken before a Commissioner or other person appointed by it for that purpose.

The Board may, in any case when deemed advisable, require written briefs to

be submitted by the parties.

The hearing of the case, when once commenced, shall proceed, so far as in the judgment of the Board may be practicable, from day to day.

### JUDGMENT OF THE BOARD.

18. After hearing the case the Board may dismiss the application, or make an order thereon in favour of the respondents, or reserve its decision, or (subject to the right of appeal in the Act mentioned) make such other order on the application as may be warranted by the evidence and may seem to it just.

The Board may give verbally or in writing the reasons for its decisions. A copy of the order made thereon shall be mailed or delivered to the respective parties. It shall not be necessary to hold court merely for the purpose of giving decisions.

Any decision or order made by the Board under this Act may be made an order of the Exchequer Court, or a rule order, or decree of any Superior Court of any province of Canada, and shall be enforced in like manner as any rule, order, or decree of such court. To make such decision or order a rule, order or decree of such court, the usual practice and procedure of the court in such matters may be followed, or in lieu thereof the form prescribed in subsection 2, section 46, of the Act.

The Board shall with respect to all matters necessary or proper for the due exercise of its jurisdiction under this Act, or otherwise for carrying this Act into effect, have all such powers, rights and privileges as are vested in a Superior Court. (Sec-

tion 26.)

### ALTERATION OR RESCINDING OF ORDERS.

19. Any application to the Board to review, rescind, or vary any decision or order made by it shall be made within thirty days after the said decision or order shall have been communicated to the parties, unless the Board think fit to enlarge the time for making such application, or otherwise orders.

### APPEAL.

20. If either party desire to appeal to the Supreme Court of Canada from the decision or order of the Board upon any question which, in the opinion of the Board, is a question of law, he shall give notice (c) thereof to the other party and to the Secretary, within fourteen days from the time when the decision or order appealed from was made, unless the Board allows further time, and shall in such notice state the grounds of the appeal. The granting of such leave shall be in the discretion of the Board.

For procedure upon such leave being obtained see section 56, subsection 4 et seq. of the Act.

An appeal shall lie from the Board to the Supreme Court of Canada upon a question of jurisdiction; but such appeal shall not lie unless the same is allowed by a judge of the said court upon application and hearing the parties and the Board.

The costs of such application shall be in the discretion of the judge.

### INTERIM EX PARTE ORDERS.

21. Whenever the special circumstances of any case seem to so require, the Board may make an Interim ex parte order requiring or forbidding anything to be done which the Board would be empowered upon application, notice and hearing to authorize, require or forbid. No such Interim Order shall, however, be made for a longer time than the Board may deem necessary to enable the matter to be heard and determined. (Section 49.)

### AFFIDAVITS.

22. Affidavits of service according to the form No. 6 shall forthwith, after service, be filed with the Board in respect of all documents or notices required to be served under these rules; except when notice is given or served by the Secretary of the Board, in which éase no affidavit of service shall be necessary.

All persons authorized to administer oaths to be used in any of the Superior Courts of any province, may take affidavits to be used on any application to the Board.

Affidavits used before the Board, or in any proceeding under this Act, shall be filed with the secretary of the Board at its office.

Where affidavits are made as to belief, the grounds upon which the same are based must be set forth.

(c) For form of notice see Form No. 5 in the Schedule hereto.

### COMPUTATION OF TIME.

23. In all cases in which any particular number of days, not expressed to be clear days, is prescribed by this Act, or by these rules, the same shall be reckoned exclusively of the first day and inclusively of the last day, unless the last day shall happen to fall on a Sunday, Christmas Day or Good Friday, or a day appointed for a public fast or thanksgiving in the Dominion or any of the provinces, in which case the time shall be reckoned exclusively of that day also.

# ADJOURNMENT.

24. The Board may, from time to time, adjourn any proceedings before it.

### AMENDMENT.

25. The Board may at any time allow any of the proceedings to be amended, or may order to be amended or struck out any matters which, in the opinion of the Board, may tend to prejudice, embarrass or delay a fair hearing of the case upon its merits; and all such amendments shall be made as may, in the opinion of the Board, be necessary for the purpose of hearing and determining the real question in issue between the parties.

### FORMAL OBJECTIONS.

26. No proceedings under this Act shall be defeated or affected by any technical objections or any objections based upon defects in form merely.

# PRACTICE OF EXCHEQUER COURT WHEN APPLICABLE.

27. In any case not expressly provided for by this Act, or these rules, the general principles of practice in the Exchequer Court may be adopted and applied, at the discretion of the Board, to proceedings before it.

### COSTS.

28. The costs of and incidental to any proceedings before the Board shall be in the discretion of the Board, and may be fixed in any case at a sum certain, or may be taxed. The Board may order by whom and to whom the same are to be paid, and by whom the same are to be taxed and allowed.

# Schedule No. 1.

(Forms of Application.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

Application No. retary on receipt.)

(This No. is to be filled in by the Sec-

- A. B. of C. D. hereby applies to the Board for an order under sections 252-253 of the Railway Act, directing the Railway Company to provide and construct a suitable farm crossing where the company's railway intersects this farm in Lot Con. Tp. County of Ontario, and states—
  - 1. That he is the owner of the land, &c.
  - 2. That by reason of the construction of the said railway he is deprived, &c.

, A.D.19 .

3. That it is necessary for the proper enjoyment of his said land, &c.

Dated this day of

(Signed A. B.)

### Endorsements.

The within application is made by A.B. of

(state

address and occupation) or by C. D. of , his solicitor.

Take notice that the within named Railway Company is required to file with the Board of Railway Commissioners within ten days from the service hereof, its answer to the within application.

# FORM OF APPLICATION.

(Where no Notice Required.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

# Application No.

The Railway Company hereby applies to the Board for an Order under section 167 of the Railway Act, sanctioning the plans, profiles and books of reference submitted in triplicate herewith, showing a proposed deviation of its line of railway as already constructed between and , mileage to

Dated this day of , A.D. 19 .

### Schedule No. 2.

(FORM OF ANSWER.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

In the matter of the Application, No. of A.B. for an order under sections 252-253 of the Railway Act, directing Railway Company to provide a farm crossing.

The said Company in answer to the said application states:-

1. That the said A. B. is not the owner, but merely, &c.

- 2. That upon the acquisition of the right of way of the said Railway, A. B. was duly paid for and released, &c.
  - 3. That the said A. B. has other safe and convenient means, &c.

4. That, &c.

Dated, &c.

# Endorsements.

The within answer is made by A. B. of address and occupation) or by C. D. of , his solicitor.

Take notice that the within named Applicant is required to file with the Board of Railway Commissioners within four days from the service hereof, his reply to the within answer.

# Schedule No. 3.

# (REPLY.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

In the matter of the application of A. B. against the Company.

The said A. B., in reply to the answer of the said Company states that:—1.

2. And the said A. B. admits that

Dated this day of , A.D. 19 .

(Signed Q.)

# Schedule No. 4.

# (FEES AND ALLOWANCES TO WITNESSES.)

# THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

To witnesses residing within three miles of the Court-room, per diem (not	
including ferry and meals)	\$1 00
Barristers, attorneys, and physicians, when called upon to give evidence	
in consequence of any professional services rendered by them, or to give	
professional opinion, per diem	5 00
Engineers, surveyors and architects, when called upon to give evidence of any	
professional services rendered by them, and to give evidence depending	
upon their skill and judgment, per diem	5 00

If the witnesses attend in one case only, they will be entitled to the full allowance. If they attend in more than one case, they will be entitled to a proportionate part in each case only.

When witnesses travel over three miles they shall be allowed expenses according to the sum reasonably and actually paid, when in no case shall exceed twenty cents per mile one way.

# Schedule No. 5.

(NOTICE OF APPEAL.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

, of A.B., for an In the matter of the application No. order under sections 252-253 of the Railway Act, authorizing the Railway, &c., &c.

To the Board of Railway Commisioners, and

To

The above named Applicant (or Respondent, as the case may be).

Take notice that the Company will apply to the Board day of , (not exceeding 14 days from the date thereof), for leave to appeal to the Supreme Court of Canada from the Order of the , in the matter of the above application Board, dated the day of authorizing the expropriation of certain lands referred to in said Order, and directing that compensation or damages to be awarded to the owners of said lands, or persons interested therein, shall be ascertained as and from the date of the application (or such other time as may be named in this Order).

The grounds of appeal are that as a matter of law, the awarding of such compensation or damages should be ascertained and deterimined from the date of the deposit of plan, profile, &c., as provided under section 192 of the Act, and not from the time stated in the Order.

Dated this

day of

Signed,

Solicitor, &c.

# Schedule No. 6.

(FORM OF AFFIDAVIT OF SERVICE.)

THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

In the matter of the application No.

A.B., for an Order

under sections 252-253 of The Railway Act, directing Railway Company to provide a farm crossing.

- of the City of Ottawa, &c., make oath and say:-
- 1. That I am a member, &c.
- serve the (C.P.) Railway Company above 2. That I did on 19, names, with a true copy of the (application of the said (A.B.) in this matter by delivering the same to (C.D.), the (Secretary) of the said Company, (or to E.F., the Asst. to the Gen. Mgr.) of the Company, being an adult person in the employ of the Company, at the head office of the Company in (Montreal) see section 41 (a), which said copy was endorsed with the following notice, viz .:-

(Copy exactly.)

Sworn, &c.

# Requirements on Application having Reference to Plans.

No. 1.—General Location of Railway.—Section 157.

Send to secretary of the Department of Railways and Canals: 3 copies of map showing the general location of the proposed line of railway, the termini and the principal towns and places through which the railway is to pass, giving the names thereof, the railways, navigable streams and tide-water, if any, to be crossed by the railway,

and such as may be within a radius of thirty miles of the proposed railway, and generally the physical features of the country through which the railway is to be connected.

1st copy to be examined and approved by the Minister and filed in the Department of Railways and Canals.

2nd copy to be approved by Minister for filing by the Minister with the Board. 3rd copy to be approved by Minister for the Company.

Scale of Map-not less than 6 miles to the inch.

No. 2.—Plan, Profile, &c., of Located Line.—Section 159.

Upon approved general location map being filed by the Minister with the Board, send to the Secretary of the Board three sets of plans, prepared exactly in accordance with the 'general notes'\* as follows:—

1 plan.
1 profile.
1 profile.
2 To be certified as copy of original and returned to the Company for registration.
3rd set—Same as 1st.
To be certified as copy of original and returned to Company.

Scale—Plans—400 feet to the inch.
Profiles.
Wertical, 20 feet.
(N.B.—In prairie country, scale may be 1,000 feet to the inch.)

No. 3.—To Alter Location of Curves or Grades of Line Previously Sanctioned or Completed.—Section 167.

Send to the secretary of the Board three sets of plans, profiles and books of reference as required in No. 2.

(N.B.—The plans and profiles so submitted will be required to show the original location, grades and curves and railway highway and farm crossings, and the changes desired or necessitated in any of these, giving reason for same. Upon completion of the work application must be made to the Board for leave to operate.

Scale—Same as No. 2.

# No. 4.—Plans of Completed Railway.—Section 164.

Send to the Secretary of the Board within six months after completion three sets of plans and profiles of the completed road.

1st set to be filed with the Board.

2nd set to be certified as copy of plan filed, and returned to the Company.

3rd set to be certified as copy of plan filed. To be returned to the Company for registration purposes.

Scale—Same as No. 2.

No. 5.—To take Additional Lands for Stations, Snow Protection, &c.—Section 178.

Send to the secretary of the Board three sets of plans and documents as follows:-

To be examined and certified and deposited with Board.

<sup>\*</sup> General Notes, see pages 17 and 18.

2nd set—Same as 1st. {For certificate and return for registration, with duplicate authority. }
3rd set—Same as 1st. }

(For certificate and return to Company, with copy of authority. }

ity.

# Scale—Same as No. 2.

N.B.—Ten days' notice of application must be given by the applicant Company to the owner or possessor of the property, and copies of such notice with affidavits of service thereof must be furnished to the Board on application.

No. 6.—Branch Lines, not exceeding six miles—Sections 221-225.

Where a branch line runs directly from the right of way of the railway Company on to the property of any person requiring such a line, the four weeks' public notice of application to the Board may be dispensed with. The Company must, however, furnish the consent of the owner of the land to the construction of the branch line. (a) 1 plan, profile and book of reference same as No. 2 to be deposited in Registry Office.

Upon such registration four weeks' public notice of application to the Board to be given. Where such a branch crosses a highway, consent of municipality must be furnished with application, or evidence of service of 10 days' notice to the municipality with copies of application and plans accompanying same.

Send to the secretary of the Board an application with copies of the plan, profile and book of reference certified by the Registrar as a duplicate of those so deposited

in the Registry Office.

After the Board has approved of the plan, &c., a certified copy of the Order authorizing the construction of the branch lines to be registered together with any papers and plans showing changes directed by the Board.

A map showing the adjacent country, neighbouring lines, &c., must be sent to the secre-

tary of the Board with the application.

Proof of registration, and of public notice except as above mentioned having been duly given will be required upon the application.

# Scale—Same as No. 2.

# No. 7-RAILWAY CROSSINGS OR JUNCTIONS.—Section 227.

Send to the secretary of the Board with an application three sets of plans and profiles of both roads on either side of the proposed crossing for a distance of one mile in each direction.

Scale—Plan—400 feet to the inch.
Profile. 

100 feet to inch horizontal.
20 feet to inch vertical.

1st set approved by and filing with the Board.

2nd and 3rd sets to be certified and furnished to the respective companies concerned,

with certified copy of order.

The applicant Company must give ten days' notice of application to the company whose lines are to be crossed or joined, and shall serve with such notice a copy of all plans and profiles and a copy of the application. Upon completion of work application must be made to the Board for leave to operate.

No. 8—Highway Crossing—Sections 235 to 243.

Send to the secretary of the Board with an application three sets of plans and profiles of the crossings.

Scale—Plan—400 feet to inch.

Profile. \( \begin{array}{c} 400 & feet to an inch horizontal. \\ 20 & feet to an inch vertical. \end{array}

Profile of highway. { 100 feet to an inch horizontal. 20 feet to an inch vertical.

1st set for approval by and filing with the Board.

2nd and 3rd sets to be furnished to the respective parties concerned, with a certified copy of the order approving the same.

The plan and profile shall show at least one-half a mile of the railway each way and

300 feet of the highway on each side of the crossing.

- Plan must show intervening obstructions to the view from any point on the highway within 100 feet of the crossing to any point on the railway within one-half mile of said crossing.
- If the company prefers, the above information may be shown on the location plan, and this plan may be used in connection with its application for approval of the highway crossing.
- The applicant must give ten days' notice of the application and copies of plan to the municipality in which the proposed crossing lies, and furnish Board with proof of service.
- 1. That, unless otherwise ordered by the Board, the width of approaches to rural rail-way crossings over highways be twenty feet road surface on concession and main roads and sixteen feet on side and bush roads.
- 2. That a strong, substantial fence, or railing, four feet six inches high, with a good post-cap (four inches by four inches), a middle piece of timber (1½ inches by 6 inches), and a ten-inch board firmly nailed to the bottom of the posts to prevent snow from blowing off the elevated roadway, be constructed on each side of every approach to a rural railway crossing where the height is six feet or more above the level of the adjacent ground—leaving always a clear road-surface twenty feet wide.
- 3. That the width of approaches to rural railway crossings made in cuttings be not less than twenty feet clear from bank to bank.
- 4. That, unless otherwise ordered by the Board, the planking, or paving blocks, or broken stone topped with crushed rock, screenings, on rural railway crossings over highways (between the rails and for a width of at least eight inches on the outer sides thereof) be twenty feet long on concession and main roads and sixteen feet on side and bush roads.

No. 9—Crossings with Telegraph, Telephone or Power Wires.—Section 246.

Send to the secretary of the Board, with the application, a plan and profile in triplicate. The plan must show the location of the track or tracks to be crossed, the location of poles and their perpendicular distance from the track. The profile must show the height of poles, distance between the wires and the rails, and between the different lines of wires.

In the case of crossings with power wires, the details of construction and the method of protection must be shown.

A copy of the plan and profile must be sent to the railway company with notice of application.

In the case of power crossings, application to operate must be made to the Board upon completion of the work.

No. 10.—Crossing with Pipes for Drains, Water Supply, Gas, &c.—Section 250.

Send to the secretary of the Board, with the application, a plan and profile in triplicate. The plan must show the track or tracks proposed to be crossed. The profile must show the distance between the pipe and the base of rail, the size of

the pipe, and the material of which it is constructed. A copy of the plan and profile must be sent to the railway company with notice of application.

No. 11.—Crossings and Works upon Navigable Waters, Beaches, &c.—Section 233.

Upon site and general plans being submitted to Department of Public Works and being approved by the Governor in Council, sent to the secretary of the Board:—Certified copy of Order in Council with plans and description approved thereby and so certified—one application and two sets of detail plans, profiles, drawings and specifications.

The plans must show details of construction of piers and their foundations, also details of superstructure, if standard plan of the same has not already been ap-

proved.

The profile must show the cross-section of the river or stream at the place of crossing and high and low water marks.

The name of the river or stream, and the mileage of the bridge should be given. Upon completion of work application must be made to the Board for leave to operate.

No. 12—Bridges, Tunnels, Trestles, &c., over 18 feet span.—Section 257.

(a) Must be built in accordance with standard specifications and plans, approved of by the Board.

(b) Or detail plans, profiles, drawings, and specifications, which may be blue, white or photographic prints, must be sent to the Secretary of the Board for approval, &c., as in No. 11.

Upon completion of the work application must be made to the Board for leave to operate.

No. 13.—Station Grounds and Station Buildings.—Section 258.

Send to the Secretary of the Board:—
2 sets of plans showing the location, and details of structures, and yard tracks.
1st set for filing with the Board.

2nd set to be certified and returned to Company with certified copy of order of ap-

proval.

Note.—If approved plans, showing location, &c., of a station, are on file with the Board, and such station were burned, a letter from the company that it intended to erect another station of the same plan and location, would call from the Board an approval and waiver of filing new plans, unless the local conditions had so changed since the original station was erected, that public convenience called for enlarged facilities or change of location.

# GENERAL NOTES.

Plans (for Nos. 2 to 6) must show the right of way, with lengths of sections in miles, the names of the terminal points, the station grounds, the property lines, cwners' names, the areas and length and width of land proposed to be taken, in figures (every change of width being given) the curves and bearings, also all open drains, watercourses, highways, and railways proposed to be crossed or affected.

Should the company at any time require right of way more than 100 feet in breadth for the accommodation of slopes and side ditches, it will be necessary to place on the plan cross-sections of the right of way, taken one hundred feet apart

and extending to the limits of the right of way proposed to be taken.

 $20c-24\frac{1}{2}$ 

Profiles shall show the grades, eurves, highway and railway erossings, open drains and watereourses, and may be endorsed on the plan itself.

Books of reference shall describe the portion of land proposed to be taken in each lot to be traversed, giving numbers of the lots, and the area, length and width of the portion thereof proposed to be taken, and names of owners and occupiers so far as they can be ascertained.

All plans, profiles and books of reference must be dated and must be certified and signed by the President or Vice-President or General Manager, and also by the Engineer of the company.

The plan and profile to be retained by the Board must be on tracing linen, the copies to be returned may be either white, blue, or photographic prints.

All profiles shall be based, where possible, upon sea level datum.

All books of reference must be made on good thick paper and in the form of a book with suitable paper cover. The size of such books when closed shall be as near as possible to  $7\frac{1}{2}$  inches by 7 inches, or book of reference may be endorsed on the plan.

FORM OF BOOK OF REFERENCE REQUIRED.

...... Railway Company.

Воок	of Re	FERENCE	с то А	FOR RA					ing I	LANDS R	EQUIRED
Station to	Station.	Width of Railway	Owner.		Sentre of Book when open.	Part of	Section or Lot.	Township Parish Block or Number of Claum.	Range	Contents Acres.	Remarks.

### INTERLOCKING SYSTEM.

Rules governing the use of Interlocking and Derailing Signals and speed of trains where one railway crosses another at rail level, or where a railway crosses a draw-bridge.

- 1. The normal position of all signals must indicate danger.
- 2. When the distant semaphore indicates caution, the train passing must be under full control and prepared to come to a full stop before reaching the home signal.
  - 3. When the home signal indicates danger, it must not be pissed.
- 4. When clear signals are shown where one railway crosses another at rail level, the speed of passenger trains must be reduced to thirty-five miles an hour and freight trains to twenty miles an hour, until the entire train has passed the crossing.
- 5. When clear signals are shown where a railway crosses a drawbridge, the speed of passenger trains must be reduced to twenty-five miles an hour and the speed of freight trains to fifteen miles an hour, until the entire train has passed the drawbridge.

# General Requirements Applicable to Steam Railways for Interlocking, Derailing and Signal System at Crossings at Rail Level, at Junctions and at Drawbridges.

The plan and construction of interlocking, signalling and derailing system to be used at rail level crossings, junctions and drawbridges, shall conform to the following rules:—

1. Derails shall be placed not less than five hundred (500') feet from the crossing point, junction point or from the ends of the drawbrige unless otherwise ordered. On single track railways derail points, when practicable, should be on inside of curve, and on double track railways the derail points should be in outside rail on both tracks. On the latter back-up derails will be required.

2. Home signals shall be placed fifty-five (55') feet in advance of derail point, and the distance between home and distant signals shall not be less than twelve hundred (1,200') feet, unless otherwise ordered. Signal post shall be placed over or

on the engineman's side of the track, unless otherwise ordered.

3. Guard rails shall be laid on outside of rail in which the derail is placed, or on the inside of the opposite rail, and, commencing at least six (6') feet in advance of derail point, shall extend thence towards the crossing, parallel with and nine (9") inches distant in the clear from the track rail, for four hundred (400') feet, fully spiked. In no instance, however, should the guard rail approach within one hundred (100') feet of the diamond, junction point or end of drawbridge.

4. The normal position of all signals must indicate danger, derail points open unless otherwise ordered, and the interlocking so arranged that it will be impossible for

the signalman to give conflicting signals.

5. Signals shall be of the semaphore type, the indications given by not more than three positions, and in addition at night by lights of prescribed colours.

6. The apparatus shall be so constructed that the failure of any part directly controlling a signal will cause it to give its least favourable indication.

7. Sempahore arms that govern shall be displayed to the right of the signal post, as seen from an approaching train.

8. Where switch and lock movements are used on facing point switches or derails on high speed routes they must be placed outside the rails and bolt locked with the signals governing them; when this is not practicable, facing point locks must be used.

9. The established order of interlocking shall be such that a clear signal cannot be displayed until derails or diverging switches, if any, in conflicting routes, are in their

normal position, and the switches for the required route are set and locked.

10. High speed routes shall be indicated by high signals not more than three blades to be displayed on one signal post. Dwarf signals shall be used for low speed routes and for double track back-up derails.

11. The blades and back lights of all signals should be visible to the signalman in the tower. If from any cause, the blade or light of any signal cannot be placed so as

to be seen by the signalman a repeater or indicator should be provided.

12. Application for inspection of interlocking plant must be made to the Board, accompanied by a plain diagram, showing location of the crossing, junction or drawbridge, and the position of all main tracks, sidings, switches, turnouts, &c., within the limits of the interlocker.

The several tracks must be indicated by letters or figures, and reference made to each, explaining the manner of its use. The rate of grade on each main track must be shown, together with the number of signals, derails, locks, &c., corresponding to levers in the tower.

## Details.

- 13. The machine shall be of the latch locking type, and levers shall be numbered from left to right.
  - 14. One lever shall operate not more than one signal.

## Pipe Line.

15. One inch pipe of soft steel or wrought iron shall be used for connections to switches, derails, movable wing and point frogs, detector bars, locks, bridge couplers

and home signals.

(a) Pipe lines shall be straight where possible, and shall not be placed less than four feet (4') from gauge line, except where the lines run between tracks. On draw spans and approaches, they shall be kept as far from the gauge line as conditions will permit.

(b) Pipe lines shall be supported on pipe carriers, spaced not more than seven (7')

feet apart.

(c) Couplings in pipe lines shall be located not less than twelve (12) inches from

pipe carriers with lever on centre.

(d) Pipe connections shall be made with threaded sleves, and the joints plugged and riveted; or keyed or by other approved method.

## Wire Line.

16. Wire connected signals shall be operated by wires, the back wire to have

two (2") inches more stroke than the front wire.

(a) Wire lines shall be carried in wire carriers placed not more than forty (40') feet apart. Where wire lines run next to the pipe lines, the wire carriers shall be attached to the pipe carrier foundations if convenient. Where wire carriers are attached to independent foundations, they shall be placed not less than six (6') feet from gauge of nearest rail, where practicable.

By order of the Board,

A. D. CARTWRIGHT,

Secretary.

## APPENDIX I.

## CATALOGUE OF BOOKS IN LIBRARY OF THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

American Electrical Cases, 7 vols.

American Railway Reports, vols. 1 to 21 (vol. 1, Trueman; vols. 2, 3, 4 and 5, Mallory; 6, 7, 8 and 9, Shipman; 10 to 21, Ladd; Ladd includes 20 and 21 Clemens.) America R.R. & Corporation Reports, Lewis, 12 vols.

American and English R.R. Cases, old series, 61 vols.; Digest, vols. 1-35, 36-43

American and English R.R. Cases, new series, 52 vols.; Digest, vols. 1-23, 24-43 (2 vols.)

American Street Railway Decisions, Richardson & Hook, 2 vols.

Annual Report R.R. Commission of Georgia, 1905, 1906 and 1907.

Annual Report of the R.R. & W. Commission of Illinois, 1905, 1906.

Annual Report of the R.R. Commission of Louisiana, 1905.

Annual Report of the R.R. Commissioners of Mass., 1905, 1908.

Annual Report of the Commissioner of Railroads of Michigan, 1904, 1906.

Annual Report of the R.R. & W. Commission of Minnesota, 1891-97, 1899-1907.

Annual Report of the Chief of Engineers of the United States Army, 1894, 6 vols.

Annual Report of the Interstate Commerce Commission, 1887-1907.

American and English Encyclopedia of Law, 32 vols.

American and English Encyclopedia of Law, supplement, vols. 3, 4.

Annual Supplements, 1898-1908, incl.

Armstrong's Digest N.S. Reports, 1 vol.

Anderson's Dictionary of Law.

Abbott's Railway Law of Canada, 2 vols.

Abbott on Telephony, 6 vols.

Abbott on Electrical Transmission of Energy.

Allen's Telegraph Cases.

Adams on the Block System.

Anderson-Index Digest of Interstate Commerce Law.

Ashe-Electric Railways.

Audette—Practice of the Exchequer Court.

Acts of the Provinces and of Canada Not Repealed by the Revised Statutes, 1887. Actes du Canada et des Provinces non abrogés par les Statuts Revisés, 1887.

Acts of Assembly, 1878-1882, 1 vol.

Acts of Assembly, 1883-1886, 1 vol.

British Columbia Reports, 13 vols.

Beavan & Walford Railway Cases.

Beaudry-Lacantinerie, Droit Civil.

Beullac-Code de Procedure Civile.

Bird's Digest, B.C. Case Law, 1 vol.

Bouvier's Law Dictionary, 2 vols.

Beach's Law of Railways, 2 vols.

Baldwin-American Railroad Law.

Beach's Railway Digest, Annual, 1889.

Beach—Monopolies and Industrial Trusts.

Beal on Bailments.

Beal—Cardinal Rules of Legal Interpretation.

Beal & Wyman-Railroad Rate Regulation.

Beauchamp—Jurisprudence of the Privy Council.

Bell & Dunn's Practice Forms.

Bigg—General Railway Acts, 15th Ed., 1898.

Biggar-Municipal Manual, 11th Ed., 1900.

Blakemore—The Abolition of Grade Crossings in Massachusetts.

Bligh & Todd-Dominion Law Index, 2nd Ed., 1898.

Booth—Street Railways.

Boulton—The Law and Practice of a Case Stated.

Boyle & Waghorn-The Law relating to Railway and Canal Traffic, 3 vols.

Boyle & Waghorn-The Law and Practice of Compensation.

Brice-Ultra Vires, 3rd Ed., 1893.

Brice-Tramways and Light Railways, 2nd Ed., 1902.

Broom's Legal Maxims, 7th Ed., 1900.

Browne—The Law of Compensation, 2nd Ed., 1902.

Browne-Law of Carriers.

Browne's Practice before the Railway Commissioners.

Browne & Theobald-Law of Railways, 3rd Ed., 1899.

Bligh's Ontario Law Index to 1900.

Butterworth—Railway and Canals, 2nd Ed., 1889.

Butterworth—Practice of the Railway and Canal Commission.

Car Builders' Dictionary, 1906.

Century Dictionary and Cyclopedia, 10 vols.

Canadian Railway Cases, vols. 1-7

Canadian Railway Act (Annotated) MacMurchy & Dennison.

Cartwright on British North America Cases, 5 vols.

Code Civil de la Province de Quebec, M. Mathieu.

Code de Procedure Civile, Montreal, C. Theoret.

Cyclopedia of Law and Procedure, vols. 1-29, 1907; Annotations, 1 vol.

Coutlee's Digest Supreme Court Reports.

Canadian Annual Digest, 1896-1907.

Congdon's Digest, N.S. Reports, 1 vol.

Canada Law Journal, vols. 41, 42, 43.

Canadian Law Review, vols. 3, 4, 5, 6.

Cartwright's Canadian Law List, 1906-1908.

Carmichael's Law of the Telegraph, Telephone and Submarine Cable.

Chambers-Parliamentary Guide, 1909.

Chitty's K.B. Forms, 13th Ed., 1902.

Canadian Annual Review, 1906, 1907.

Chitty's Archbold's Q.B. Praetice, vols. 1 and 2, 14th Ed., 1885.

Clarke-Street Railway Accident Law, 2nd Ed., 1904.

Clements—Canadian Constitution, 2nd Ed., 1904.

Clode-Rating of Railways.

Cooley-Taxation, vols. 1 and 2, 3rd Ed., 1903.

Connors—Report of the Working of American Railways.

Copnall—A Practical Guide to the Administration of Highway Law.

Cowles—A General Freight and Passenger Post, 4th Ed., 1905.

Croswell—The Law Relating to Electricity.

Currier—Railway Legislation of the Dominion of Canada, 1867-1905.

Consolidated Statutes of New Brunswick, 1903, vols. 1 and 2.

Consolidated Ordinances, N.W.T., 1898.

Complement des Statuts de Quebec, 1888.

Consolidated Ordinances of the Yukon Territory, 1902.

Daviel, Des Cours d'Eau, 3 vols.

Digest American Reports, 2 vols.

Digest U.S. Supreme Court Reports, vols. 1-206, 6 vols.

Digest U.S. Supreme Court Reports, vols. 1-186, 4 vols.

Digest Canadian Case Law, 1 vol. 1901-1905, incl.

Dale & Lehmann's English Overruled Cases, vols. 1 and 2.

Daniell-Chancery Forms, 5th ed., 1901.

Darlington-Railway Rates.

Darlington-Railway and Canal Traffic Acts.

Denton-Municipal Negligence (Highways.)

Disney—Carriage by Railway.

Dictionary of Altitudes in Canada, 1903.

Dodd—Law of Light Railways.

Dorsey-English and American Railroads compared.

Duff on Merchants Bank and Railroad Bookkeeping, 20th Ed., 1888.

Encyclopedia Britannica, 35 vols.

English Reports (reprints), 91 vols.

English Law Reports (complete set to 1908).

Exchequer Court Reports, 10 vols.

English Railway and Canal Cases, Nichol, 6 vols.

English Railway and Canal Traffic Cases, Brown, Macnamara and Neville, 12 vols.

English Ruling Cases, 26 vols and sup. vol. 27.

Encyclopedia of the Laws of England, 2nd Ed., 12 vols.

E. C. Clifton and A. Grunaux— A new Dictionary of the French and English Languages.

Ewart's Digest Manitoba Law Reports, 1 vol.

Elliott on Railroads, vols. 1, 2, 3 and 4.

Elliott on Roads and Streets, 2nd Ed., 1900.

Endlich on Statutes.

Eddy on Combinations, vols. 1 and 2.

Fuzier-Herman, Code Civil, 4 vols. sup, 2 vols.

Fuzier-Herman, Repertoire due Droit Français, 37 vols. (Vols, 13 to 37 include Carpentier-Saint).

Farnham's Water and Water Rights, vols, 1, 2 and 3.

Fetter—Carriers of Passengers, vols. 1 and 2.

Fry-Specific Performance, 3rd Ed., 1892.

Gilbert—American Electrical Cases, 1903-4, vol. 8.

Gillette, Halbert P.—Handbook of Cost Data.

Glen on Highways, 2nd Ed., 1897.

Goodeve-Railway Passengers, 2nd Ed., 1885.

Gould on Waters, 3rd Ed., 1900.

Gray-Communication by Telegraph.

Greene-Highways, 2nd Ed., 1902.

Grierson-Railway Rates English and Foreign.

Grunaux, A. and Clifton, E.C.—A new Dictionary of the French and English Languages.

Hadley-Railway Transportation, 16th impression, 1903.

Haines—Railway Corporations as Public Servants.

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Hamilton-Railway and other Accidents.

Hamilton—Railroad Laws of New York, 1906-7.

Hamlin-Interstate Commerce Acts Indexed and Digested.

Hardeastle's Statute Law, 3rd Ed., 1901.

Hay, Jr., on the Law of Railway Accidents in Massachusetts.

Hendrick—Railway Control by Commissions.

Henderson—Ditches and Water Courses, 1895.

High on Injunctions, vols. 1 and 2, 4th Ed., 1905.

Hodges on Railways, by J. M. Lely, vols. 1 and 2, 7th Ed., 1888.

Hodgins—Dominion and Provincial Legislation, 2nd Ed., 1887-1895. Holmested & Langton—Ontario Judicature Act, 3rd Ed., 1905.

Holmestead & Langton-Forms and Precedents.

Holt-Canadian Railway Law.

Hopkins—The Law of Personal Injury.

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Hutchinson on Carriers, 2nd Ed., Mecham, 1891.

Hutchinson's Carriers, vols. 1, 2 and 3, 3rd Ed., 1906.

Interstate Commerce Commission Reports, vols. 1-5.

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Index of Cases Reported in Law Reports, 1905-1908.

Imperial Statutes, 1876.

Index to Quebec Official Reports.

Joyce-Electric Law.

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Kent's Index to Cases Judicially Noticed in the Law Reports.

Keasbey-Electric Ways, 2nd Ed., 1900.

Kerr-Injunctions, 4th Ed., 1903.

Kirkman-The Science of Railways, 12 vol.

Law Times Reports, 98 vols.

Lower Canada Reports, 17 vols.

Lower Canada Jurists, 1-34.

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Langelier, Cours de Droit Civil, vols. 1 to 4.

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Langelier, De La Preuve, vol. 1.

Laurent, Droit Civil, vols. 1-33; Sup. 8 vols.

Littré et Beaujeu—Dictionnaire de la Langue Française, avec un Supplément d'Histoire et de Géographie.

Lafleur—Conflict of Laws.

Lefroy's Legislative Power in Canada.

Leggett—Bills of Lading.

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Manitoba Reports, Temp. Wood, 2 vols.

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Montreal Law Reports, S.C., 7 vols. Q. B., 7 vols.; Digest by Saint Cyr.

Mignault, 3 sets, 7 vols.

Mews' Digest of English Case Law, 16 vols.

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McPherson & Clarke—Law of Mines.

Macnamara-Law of Carriers.

Mann-Massachusetts Railroad and Railway Laws, 1908.

Maxwell on Statutes, 4th Ed., 1905.

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Mayer-British State Telegraphs.

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Michigan Railroad Laws, 1905-07.

Moore on Carriers.

New Brunswick Reports, 38 vols.

New Brunswick Equity Reports, 3 vols.

Nova Scotia Reports, Young's Admiralty, 1 vol.

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Nellis-Street Railroad Accident Law.

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Nelson—The Anatomy of Railroad Reports.

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Nova Scotia Laws, 1878-1882, 5 vols.

Nova Scotia Statutes, 1883.

Nova Scotia Laws, 1884.

Nova Scotia, Revised Statutes of, fifth series, 1884..

Nova Scotia, Revised Statutes of, fourth series, 1 vol.

Nova Scotia Laws, 1885-1892, 6 vols.

Nova Scotia Statutes, 1893-1899, 7 vols.

Nova Scotia, Revised Statutes of, 1900, 2 vols.

Nova Scotia Judicature Act, 1900.

Nova Scotia Statutes, 1900-1907, 7 vols.

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Ontario Railway Digest, 1 vol.

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O'Brien's Conveyancer, 3rd Ed., 1906.

Oxley's Light Railways, vols. 1 and 2.

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Ordinances, N.W.T, 1899-1905

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Paine-The Law of Bailments.

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Parsons-The Heart of the Railroad Problem.

Prentice—Federal Powers over Carriers and Corporations.

Patterson-Railway Accident Law.

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Poor-Manual of Railroads, 1905-1908.

Pratt—Railways and their Rates.

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Quelec, Statutes of, 1868-1887, vols. 1 to 21, incl.

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Quebec, Statutes of, 1888-1895, vols. 22 to 29. incl

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Report of the Board of Railroad Commissioners (Mass.), 1871, 1872, 1873, 1874, 1875.

Report of the Railroad Commissioners of Mississippi, 1903.

Report of the R.R. & W. Commissioners of Missouri, 1904-5.

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Report of the New York Railroad Commissioners, 1902, 2 vols; 1905, 2 vols.; 1906, 3 vols.

Report of the Railroad Commission of Texas, 1905, 1907.

Report of the State Corporation Commission of Virginia, 1905, 2 vols.; 1906, 2 vols.; 1907.

Report of Railroad Commission of the State of Wisconsin, 1906.

Report of the Department of Railways and Canals, 1902, 1903, 1905.

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Ramsay & Morin, Reports.

Rapalje's Digest of American Decisions and Reports, 3 vols.

Robinson & Joseph's Digest, 2 vols.

Rapalje & Mack's Digest of Railway Law, 8 vols.

Ray-Negligence of Imposed Duties, Freight Carriers.

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Redman—Arbitration and Awards, 4th Ed., 1903.

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Richards and Soper—Compensation.

Robertson—Tramways (3rd Ed. of Sutton's Tramway Acts of the United Kingdom), 1903.

Roscoe's Nisi Prius, vols. 1 and 2, 17th Ed., 1900.

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Russell—Arbitration, 9th Ed., 1906.

Russell & Bayley—Indian Railways Act, 1890, 2nd Ed., 1903.

Revised Statutes of British Columbia, 1897, 2 vols.

Revised Statutes of Manitoba, 1891, 2 vols.

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Street Railway Reports, 2 vols.

Special Report of the Illinois R.R. & W. Commission, 1902-1906, 1 vol.

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Special Report Incorporate Relationships of Railways in the U.S. as of June 30, 1906. Interstate Commerce Commission.

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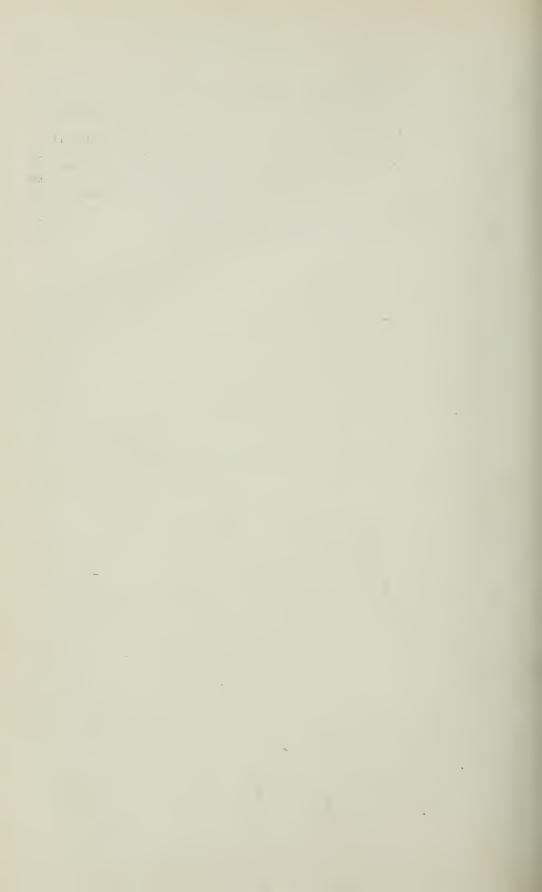
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## DEPARTMENT OF RAILWAYS AND CANALS

## REPORT

OF THE

## HUDSON'S BAY RAILWAY SURVEYS

FRINTED BY ORDER OF PARLIAMENT



### OTTAWA

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

1909

[No. 20d—1910]



## REPORT

ON THE

## HUDSON BAY RAILWAY PROJECT

October 30, 1909.

Hon. George P. Graham,
Minister of Railways and Canals,
Ottawa, Ont.

SR,—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 at Port Churchill and Port Nelson—and at important river crossings.

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.

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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.  $\Lambda$ 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 tribufary 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 1,930,000 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 Saskatoon—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 15th.

Mr. Armstrong's report will be found attached hereto.

I have the honour to le, Sir.
Yours faithfully,

M. J. BUTLER,

Deputy Minister and Chief Engineer.

October 21, 1909.



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 Port 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. Surveys 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 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 as 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 Port 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 susceptable 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 discharge 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 such 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.

The fourth section, extending from the 36th mile to Port 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° 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 case 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° 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 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, harborage, docks, facilities for providing railway terminals and other works necessary for the transhipment of goods, length of season open to navigation, ice conditions, 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 proportion of it being such as can be done with heavy grading or breaking ploughs.

## 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 vards 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 of 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 esimate any loose rock. For this reasan 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 Churchhill 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 low, thus cutting down the length of the piles and also reducing the length of bridging 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 concrete, all others wood. Our expedition is practically the first which has obtained definite and specific information 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 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 contingenciese.

#### 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 allowance of \$15 to cover the difference between common ties and switch ties at each switch.

#### 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 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

\$19,108,672 00

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 war-house 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 creeted 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.
Bolts and nuts Spikes Ties Track-laying Switches (complete) Water tanks Steel bridges, steel	Acre C. yd L. ft B. M B. M Lb Ton Ton Ton Ton Each Mile Each Lb C. yd Mile	454 2,040 1,700,000 567 300 30 -3,700,000 6,000 567 477	8 cts.  40 00 100 00 0 50 0 50 40 00 55 60 0 05 40 00 65 00 65 00 0 50 500 00 250 00 5,000 00 0 05 15 00 1,000 00 300 00	\$ cts. 280,000 00 60,000 00 4,870,000 00 9,000 00 139,000 00 139,000 00 220,000 00 139,000 00 2,160,000 00 720,000 00 134,000 00 134,000 00 132,600 00 132,600 00 75,000 00 155,000 00 155,000 00 155,000 00 155,000 00 143,100 00 143,100 00
Increase due to 89 th. rail				765,000 00 11,351,520 00
Station buildings, telegraph station houses, locomotive and car re tools, warehouse at port, coal raw 4,000,000 bush, cap, fire proof Yard facility at terminals Engineering, law costs and conting	pair shops, inloading p elevators	power plant, lant	\$1,700,000 fi0 4,000,000 50 320,000 00 1,737,152 00	
Harbour work, piers, dredging, exc buoying			\$7,757,152 00 \$6,675,000 00	

### NELSON ROUTE.

_	Rate.	Quantity.	Amount.
·	8 ets.		
Clearing Acres Grubbing Cu. ft. Grubbing Cu. ft. Grading Cu. ft. Cling L. ft. Climber in culverts M. ft., B. M. Climber in bridges and trestles Ton in bridges and culverts Lb. Greel rails Ton. Constant	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7,000 600 7,500,000 200,000 2,800,000 3,200,000 2,100,000 45,500 2,280 390 1,740 1,450,000 240 483 25	280,000 60,000 3,000,000 80,000 112,000 105,000 1,820,000 608,000 114,000 31,200 113,100 580,000 60,000 241,500
Vater tanks         Each.           elegraph lines         Mile.           ridges, steel         Lb.           concrete         Cu. yds.           allasting         Mile.	5,000 00 300 00 0 05 15 00 1,000 00	9,400,000 12,000 483	125,000 123,000 650,000 . 180,000 483,000
Total		-	8,333,800 648,000
		-	8,981,800
Station buildings, telegraph cabins, section houses, repair shops, locomotive and caplant, warehouse at port, coaling plant  Two 4,000,000 bush fire proof elevators  Yard facility at terminals  Law costs and contingencies. Engineering, 1  Harbour work, piers and dredging, exclusive	ar, tools, power	\$ 1,647,600 4,000,000	
and buoying		\$5,065,000 -	\$16,426,340

## PORT 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.

Port 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, 8419-2

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 Port 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 in-coming 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.

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 re-crossing 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 shear 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 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 ac-

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curate 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 in 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 4½ and 5 ft. The average thickness at York Factory, where a record has been kept for many years, seems to be about 4 ft. 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 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.

9-10 EDWARD VII., A. 1910

## MATERIAL FOR CONSTRUCTION.

Stone for the construction of breakwaters and other works may be cheaply obtained. About 75,000 or 100,000 cubic yards may be picked up along the tidal flats in the shape of scattered boulders. Up the Nelson river, about 40 miles above Flamboro 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 materials, 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 earry the extreme long range guns are of such a draft as to render it somewhat dangerous to manœuvre in less than 45 ft. of water, thus preventing their closer approach than 15 or 18 miles, a distance considerably greater then 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.

(Sgd.) JOHN ARMSTRONG, Chief Engineer Hudson Bay Railway Surveys.

WINNIPEG, Sept. 8, 1909.







The Pas Station, C. N. Railway.



The Pas to Split Lake.



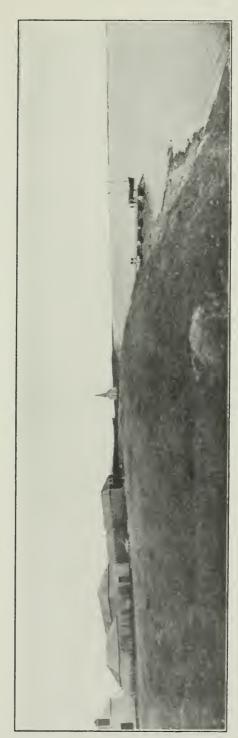


Metishto Creek, Winter.



R. N. M. P., Churchill.





Mouth of Hayes River, York Factory.





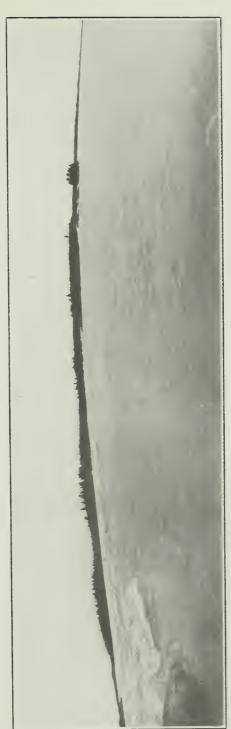
York Factory.





Expansion of Nelson River.





Thoal Falls, Nelson River.

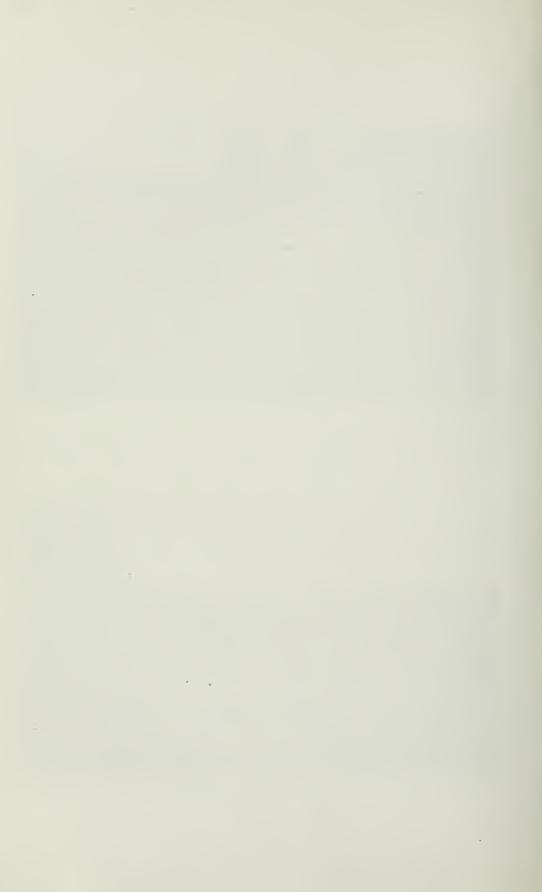




Log Jam, Metishto Creek.



Metishto or Limestone Creek.





Manitou Rapids, Nelson River.





Little Manitou Rapids on Nelson River.





At the Maniton Rapids, Nelson River.





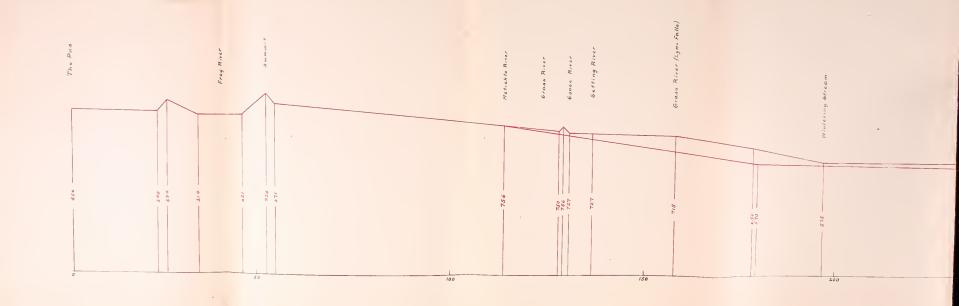
Hudson Bay Company's Steamer "Saskatchewan."

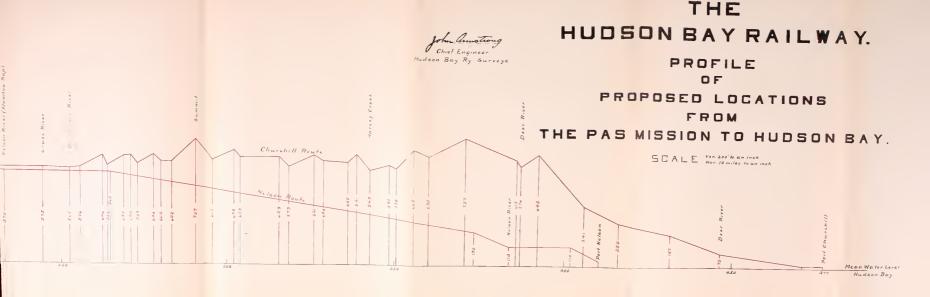


Metishto Lake.



1. ale 2007. (LUL & C. 11, 10111111111 Las Par





Profile of proposed locations

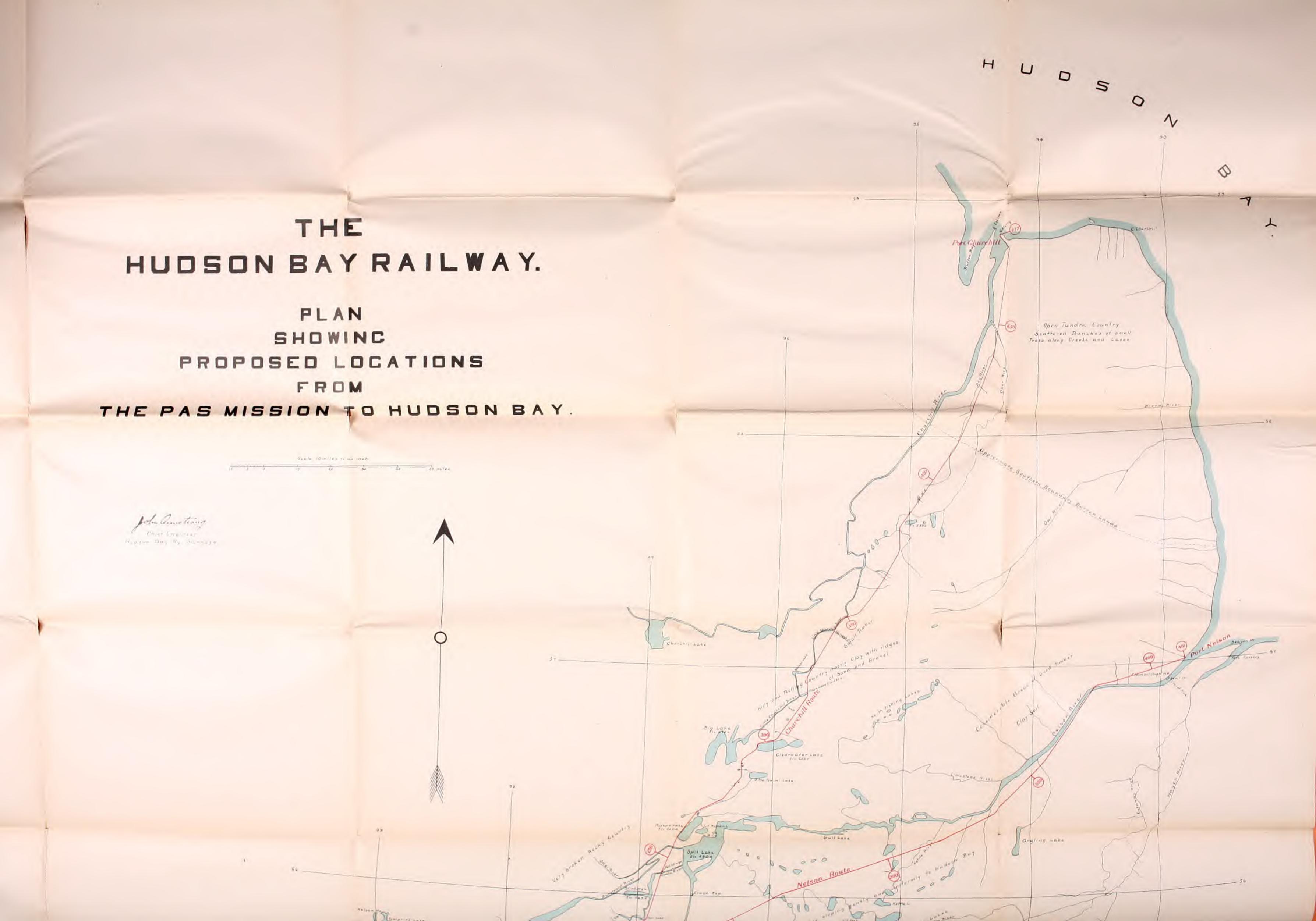
The Pas Mission to Hudson Bay

(61. Lu. 1910. 11 1910.



General Map North-Western Canada

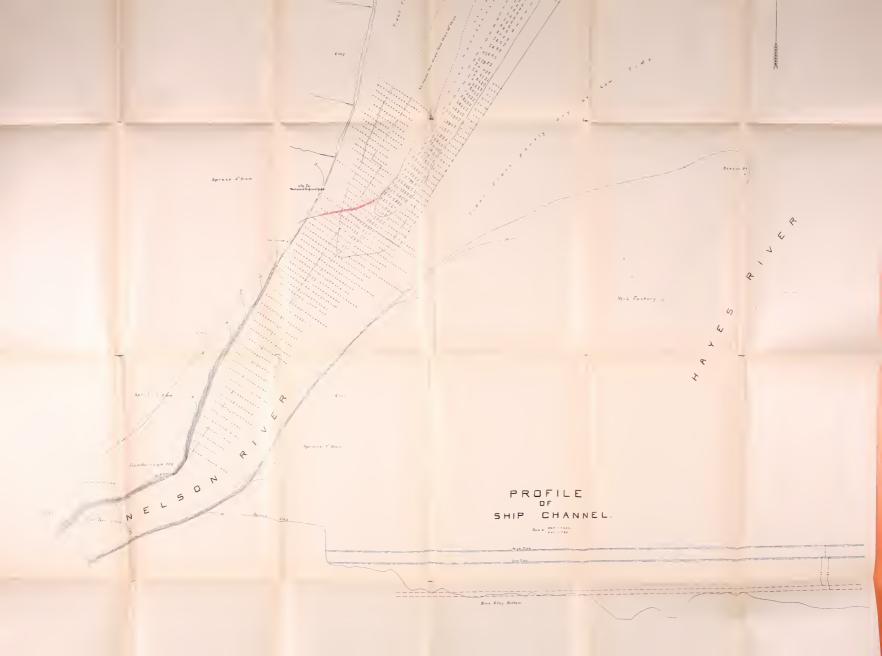
Lancor Julien 20d. Courado Parlement















## FORTY-SECOND ANNUAL REPORT

OF THE

# DEPARTMENT OF MARINE AND FISHERIES

1909

## MARINE

PRINTED BY ORDER OF PARLIAMENT



#### AWATTO

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING MOST EXCELLENT MAJESTY
1909

|No 21-1909|



To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick; Baron Grey of Howick; a Baronet, G.C.M.G., &c., &c., &c., &c., Governor General of Canada.

#### MAY IT PLEASE YOUR EXCELLENCY:

I have the honour to submit herewith for the information of Your Excellency and the Parliament of Canada, the Forty-Second Annual Report of the Department of Marine and Fisheries, Marine Branch.

I have the honour to be,

Your Excellency's most obedient servant,

LOUIS-PHILIPPE BRODEUR,

Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES, OTTAWA, September, 1909.



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"		Superintendent	

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Entry Island, Magdalen Islands, Lighthouse.

Cape Dogs, Que., Lighthouse.

Point Edwards, Ont., Front Range Lighthouse under construction.

New Steamer Lambton for Lighthouse Construction Service Great Lakes.

Stag Island Shoal Lighthouse St. Clair River, Ont.

Iceberg in Strait of Belle Isle.

Colchester Reef, Ont., Lighthouse.

Iceberg in Strait of Belle Isle.

Plate 1. High Power Revolving Catoptric Light.

Plate 2. High Pressure Revolving Joint.

Pin Platte on Lake St. Peter, St. Lawrence river.

Owen Sound, Ont., Back Range Lighthouse.

New Steamer Lambton for Lighthouse Construction on the Great Lakes.

Reinforced Concrete Lighthouse at North End of Belle Isle.

New Steamer Simcoe Employed in Lighthouse Supply and Buoy Service on the Great Lakes.

First Order Lighting Apparatus, Cape Ray Lighthouse, Nfld., Maintained by Dominion Government.

Low Light on South End of Belle Isle.

Interior of Sawmill Sorel Government Shipyard.

Government Shipyard Sorel, Machine Shop and Blacksmith Shop.

Powerhouse, Government Shipyard, Sorel.

Sawmill, Government Shipyard, Sorel.

The new C. G. Steamer Lambton Ready for Launching at the Government Shipyard, Sorel.

New Steamer Simcoe Employed in Lighthouse Supply and Buoy Service on the Great Lakes.

Interior of Power House, Government Shipyard, Sorel.

St. Anne de Beaupré, Que., Front Range Lighthouse.

Canadian Northern Railway, Iron Ore Trestle Key Inlet, Georgian Bay.

St. Pancras Point Lighthouse, Quebec.

Outline Chart of Atlantic Coast of Canada, showing location of Lights of Hyper-radial, first order, &c.

North End of Belle Isle Light Station.

C. G. Steamer Montmagny under Construction at Sorel Government Shipyard.

Cape Ray Lighthouse, Nfld.

Port Stanley, Ont., Lighted Concrete Beacon under Construction.

Triangle Island, Cape Scott, B.C.

Fishing Schooners moored in Black Joke Cove, Belle Isle.

Little Metis, Que., Showing new Lighthcuse Concrete Tower.

Grand Trunk Elevator, Depot Harbour, Ont.

Entrance to Port Stanley, Ont.

Port Stanley, Ont., Site for Concrete Lighted Beacon.

## REPORT

OF THE

## DEPUTY MINISTER OF MARINE AND FISHERIES

To the Honourable Louis-Philippe Brodeur,

Minister of Marine and Fisheries.

SR,—I have the honour to report on the transactions of the Marine Branch of the Department of Marine and Fisheries for the fiscal year ending March 31, last..

The various branches were employed in the maintenance of aids to the navigation of Dominion waters, the construction of lights and fog signal towers, the establishment of other new aids and the improvement and repairs to the old. Hydrographic and tidal surveys were continued and new charts and tide tables issued. New lanterns and new types of lighting apparatus were substituted for older kinds; additional gas and signal buoys and sub-marine signals were put in position. Applications for new aids from the shipping interests received attention so far as the parliamentary appropriations would permit and the actual needs of navigation required. The local superintendence of the service by agents of the department as well as other outside officers was as usual performed. The general supervision of the service at Ottawa involved the issuing of directions and authority necessary in carrying on the operations of the department. The work of superintending and delivering supplies to light stations, attending the buoy service and conveyance of material for construction and repairs of towers, engaged the steamers and crews under the control of the department.

Winter communication between Prince Edward Island and the mainland and at River Ouelle and Murray bay, on the St. Lawrence river, was maintained without any interruptions. Icebreaking on the St. Lawrence river, at Cap Rouge, engaged the attention of the officers and crew of the *Montcalm* and the immense accumulation of ice at the point was successfully broken up and carried down by the current. The contracts for icebreaking at Fort William, Port Arthur, Collingwood, Midland and Depot Harbour, were carried out.

The work in the ship channel of the St. Lawrence river progressed satisfactorily and construction and repairs of steamers, dredges, tugs and barges at the Sorel ship-yard proceeded in the usual way. Inspection of steamboats, live stock shipments and other cargo, was performed. Certificates were issued to marine engineers and masters and mates and medical attendance given at marine hospitals and by port physicians to sick mariners. Wireless telegraphy and meteorological stations were increased and the services improved generally.

The contracts for the construction of an icebreaking steamer for service between Prince Edward Island and the mainland and for a steamer for supply and buoy service above Montreal and Georgian bay, are being carried out.

In my report will be found summaries of reports of the officers of the department, but the reports themselves form appendices.

The Subdivisions of the Marine Branch and the expenditure in connection therewith are as follows:—

The construction of lighthouses and fog alarms.

The maintenance of lights, gas buoys and other buoys.

The lighthouse board, which decides the necessity for aids to navigation.

The hydrographic surveys.

The tidal surveys.

The ship channel St. Lawrence river and Sorel works.

Meteorological and magnetic service.

Investigations into wrecks.

Board of steamboat inspection.

Cattle shipments inspection.

Wireless telegraph service.

Signal service.

Life-saving service.

Marine hospitals.

Submarine signals.

Shipping under the Merchants Shipping Act.

Legislation and administration of laws relating to the Department of Marine and Fisheries.

Humane service in connection with seamen.

Wrecking plant subsidized.

Winter communication.

Removal of obstructions to navigation.

Examination of masters and mates and issuing certificates.

Naval militia.

Pilotage.

Government of ports and proclaiming of harbours in the Dominion.

Control of harbours and government wharfs.

Dominion steamers, Marine and Fisheries.

Hudson bay and navigation of northern waters.

#### APPROPRIATIONS AND EXPENDITURE.

#### OCEAN AND RIVER SERVICE.

Appropriation.
Expenditure less than appropriation\$ 125,995 24
PUBLIC WORKS CHARGEABLE TO CAPITAL.
Appropriation

Expenditure less than appropriation.....\$ 146,715 42

Appropriation		
Expenditure	2,721,801	58
Expenditure less than appropriation\$	286,298	42
SCIENTIFIC INSTITUTIONS AND HYDROGRAPHIC SURVEY	rs.	
Appropriation\$		
Expenditure	296,579	30
Expenditure less than appropriation\$	95,670	70
MARINE HOSPITALS AND SHIPWRECKED AND DISABLED SE.	AMEN.	
Appropriation\$ Expenditure	58,000 56,993	
Expenditure less than appropriation\$	1,006	13
	•	
STEAMBOAT INSPECTION AND FOG ALARMS.	F1 100	00
Appropriation \$ Expenditure		
Expenditure less than appropriation\$	9,873	53
CIVIL GOVERNMENT SALARIES MARINE AND FISHERIE	S.	
*Expenditure\$ Appropriation		
Expenditure more than appropriation\$	40,972	36
-		
Appropriation\$	91 150	٥٥
Expenditure.	20,320	
Expenditure less than appropriation\$	829	08
MISCELLANEOUS.		
Appn.	Ex.	
To repay A. Cushing & Co., re seizure of schooner Evolution in 1893\$ 800 00	\$ 800	00
Investigation Marine and Fisheries Department	31,316	00
Returns to parliament	681	
\$56,300 00 32,797 92	\$32,797	92
Expenditure less than appropriation\$23,502 08		

<sup>\*</sup> Note.—A number of outside officers that were previously paid out of separate votes were transferred and paid out of civil government from September 1, 1908.  $21-1\frac{1}{2}$ 

	Total appropriation, Fisheries Branch, not include civil government and fisherics bounty  Total expenditure same branch	\$1,324,900 00
	Expenditure less than appropriation	\$ 533,171 31
	Grand total appropriation	
	Grand total expenditure less than appropriation	\$1,182,089 55
۵	statement of expanditure in detail is Anneudix No.	5 to this report.

#### LIGHTHOUSE SERVICE.

The lighthouse service of the Dominion is divided as follows:—The Ontario division, embracing all lights from Montreal westward to the Northwest Territories; the Quebec division, extending below Quebec and including the St. Lawrence river from Platon, the Gulf of St. Lawrence and Strait of Belle Isle, Cape Ray, and Cape Anguille, Newfoundland; the Montreal division, including the St. Lawrence river from Montreal to Platon; the Nova Scotia division, including St. Paul's island, Sable island and Cape Race, Newfoundland; the New Brunswick division, the Prince Edward Island division and British Columbia division, each including lights within the provincial boundaries.

The lighthouse construction service under the chief engineer includes the preparation of plans, draughting of specifications, locating of light and fog alarm stations and construction of all buildings connected therewith. Personal inspection is made by the Chief Engineer or his assistants and by district engineers. Notices to mariners are issued by this branch giving to mariners the exact location, latitude and longitude of stations, the kind and order of lights established, also prompt notice of accidents or changes in lights. Similar notices are issued in connection with all aids to navigation. During the past year 127 notices were issued covering 321 cases of improvements and establishment of new aids.

During the past year, twenty-seven new lighthouses, thirteen fog alarms and two acetylene beacons, were established.

The total number of light stations, separate fog alarm stations and light-ships in the Dominion is 968; lights attached to these stations 1,193; steam fog horns, bells and fog guns, 123; the lightkeepers and engineers of fog-alarms according to the pay-lists number 921; gas buoys, 234; whistling buoys, 23; bell buoys, 57; submarine bells, 9.

Eight new lights were established in Nova Scotia; three in New Brunswick; eight in Quebec and eight in Ontario.

The chief engineer's report relating to lighthouse construction, repairs, tidal and hydrographic surveys, &c., contains information relating to these subjects in detail.

Ice breaking at Collingwood, Midland and Depot Harbour, Georgian Bay, and in the approaches to Fort William and Port Arthur in Lake Superior, was performed in connection with this branch. A report of the work done appears in the chief engineer's report. The same report contains details of removal of obstructions to navigation and the cost. The principal repairs to stations and improvements as well as the

establishment of new aids are subjects reported upon and some account given in detail. The report of the inspector of fog-alarms is appended to the chief engineer's report.

Among the subjects receiving special attention was the construction of reinforced concrete towers and increase of standard diaphones which have proved so successful as fog-signals. The tidal surveys and the report of the officer in charge, enumerating the tide tables so far prepared, and the effect of currents in the waters surveyed, is also contained in the chief engineer's report. The plans, specifications and other work done in the drafting room are stated in an 'inclosure' accompanying his report. It will be seen that descriptions of lights and other aids and sailing directions requiring special care in the compilation are mentioned.

Agents at Halifax, St. John, Charlottetown, Quebec and Victoria as usual, directed the delivery of material for repairs and lighthouse supplies, consisting of illuminating oil, paint, paint oil, coal for fog-alarms, brooms, buckets, soap, matches, towels and other necessary articles for maintaining and keeping the lighthouses clean. The supplies were delivered by the Dominion steamers under the supervision of the superintendents of each agency who reported to the agents and the agents to the department. The superintendent of lights above Montreal whose district includes Outario has his office in the department at Ottawa, and reported directly. The steamer Neepawah was chartered for the delivery of supplies in 1908, to the lights above Montreal, but while on her trip ran ashore in a fog near Peninsula harbour in Lake Superior. It was necessary to transfer the supplies to another boat to continue the trip to the remaining lighthouses.

In connection with the lighthouse service a new classification of lightkeepers' salaries was made to go into operation from April 1, 1908. Regulations have been published on this subject. The former practice of supplying lightkeepers with fuel, light, water, horse keep, &c., has been discontinued with the exception of at fog alarm stations, where keepers may heat their dwellings with fuel supplied the station.

The report of W. P. Anderson, chief engineer, form appendix No. 1 to this report.

#### ILLUMINANTS, ILLUMINATING APPARATUS AND GAS BUOYS.

In the report of the Commissioner of Lights will be found a detailed account of the work done in the light and buoy branch. This branch attends specially to lighting apparatus, warning and gas buoys and illuminants. The principal work performed has been the installation of lanterns and their attachments at new lighthouse stations, the substitution of modern dioptric apparatus in a number of major coast lights and the improvement of minor lights by the use of petroleum vapour as an illuminant, and the maintenance of lights throughout the Dominion.

The lighting apparatus now in use in the Dominion lighthouse service consists of lanterns, in which are operated distinctive lights known as quick flashing lights, occulting lights, fixed lights (red and white), anchor lenses for pole lights and a few Wigham 30 day lights. The reflector or catoptric apparatus is used for revolving and fixed lights. The illuminants used consist of oil, oil vapour, and acetylene (compressed and automatically generated) and pintsch gas.

The submarine bell service has given, during the year, excellent service. The improved bells introduced in the summer of 1907 have not required any attention with regard to readjustment. Four shore stations and five lightship stations are in

successful operation, one accident only occurring and that to the cable at Negro Head, New Brunswick, which failed, requiring the cable to be raised and repaired. The submarine stations in operation are at Negro Head, Yarmouth and Lurcher lightship, all in the Bay of Fundy; Louisburg, Cape Breton; Chebucto Head, Nova Scotia; Anticosti lightship in the Gulf of St. Lawrence and White island, Red island and Prince shoal lightships in the St. Lawrence river.

The coast buoy service in each agency was carried out by the Dominion steamers, but it was necessary to charter the *Restigouche* in New Brunswick, and the *Joliffe* and *Cascade* in British Columbia also for this work.

From the Dominion lighthouse depot at Prescott, lighthouse apparatus was distributed throughout the Dominion. The stores consisting of lamps, burners, lenses, reflectors and other lantern attachments are kept in stock. The repair shops were kept occupied during the year and lighthouse apparatus of a special nature was manufactured. Photometric and other tests are made at the depot from time to time to determine the efficiency of modern apparatus and to establish comparisons between the older types and kinds and the new. Upon these comparisons is determined which are the effective optical appliances, mechanism and illuminants. In this connection an important advance has been made in the development of a revolving mercurial joint, which makes possible the use of petroleum vapour as an illuminant in conjunction with revolving reflectors. By this means a light of 48,000 candle power can be manufactured at a moderate cost. Diagrams showing a high power catoptric revolving light in a lantern 10 feet in diameter, and high pressure revolving joint will be found in the illustrations of this report and a description of the advance on the familiar mercurial seal, will be found in the Commissioner's report.

The buoy service in the St. Lawrence river between Kingston and Montreal has been conducted as usual by the steamers *Scout* and *Reserve*, having their headquarters at the Prescott depot. The buoys and moorings were stored in the yard and upon the docks at the depot during the winter where they received overhauling and repairs and were made ready for putting in position when navigation opens.

In the Parry Sound agency, work was performed in the maintenance of acetylene lights and the location of gas buoys in Georgian bay. The buoys were placed and taken up by the aid of a derriek scow and a chartered tug. The new dock has been used for storing buoys for the winter and for the work of overhauling and preparing the buoys for placing in position.

In British Columbia many changes and improvements were made in acetylene and other coast buoy service by the addition of new buoys. In this agency the new scow was an efficient aid in handling heavy buoys and moorings. The purchase of the steamer Newington for moving the scow and for other service, enabled the officers of that agency to accomplish much better work and more extensive operations than formerly. The rapid development of water traffic made the establishment of new aids necessary.

Five 'inclosures' accompany this report containing details by provinces of new aids to navigation and improvements in the lights for 1908-9; the number of light stations, lights, fog-alarms and warning buoys in operation; the number of gas buoys and gas buoy stations throughout the Dominion at which gas buoys were in service and an outline chart of the Atlantic coast of Canada showing quick flashing lights

of the hyper-radial and first order, second order, third order, third order small model and fourth order in operation during the fiscal year 1908-9.

The report of the Commissioner of Lights forms Appendix number 2 of this report.

#### RIVER ST. LAWRENCE SHIP CHANNEL.

The report of Mr. V. W. Forneret for the superintending engineer of the work in the St. Lawrence river ship channel contains a short historical account of the improvements made in the ship channel since its commencement and showing the total expenditure to the end of the season of 1908 to be \$7,208,543.50 for dredging, and \$3,501,449.96 for plant, total \$10,709,993.46, and the total number of cubic yards dredged to be 61,767,292.

An outline of the projected work for the future shows the extent of dredging that will be required to complete the channel for the largest and deepest liners afloat. The national character of the project has long been recognized and the country has reaped the benefit from the amount of trade seeking an inlet and outlet by the St. Lawrence route. The rapid advance in the construction of vessels of the largest size engaged in ocean traffic and seeking the St. Lawrence route, will make a deeper channel imperative. The surest indication of the growing traffic, by large steamers, has been the establishment of several new lines of these vessels, some of which are the 10,000 and 15,000 ton ships that arrive at Montreal and leave day and night. These vessels after crossing the shortest track of the open ocean, have a sheltered waterway of 900 miles. The progress of deepening and widening the channel in certain localities, during the season of 1908, has been an important step in the continuous work towards carrying out the project between Montreal and Beaujeu bank below Quebec.

At the end of the season of 1908, there was a completed channel to a depth of 30 feet at extreme low water from Montreal to Cape Levrard, 4 miles below Batiscan, a distance of 104½ miles below Montreal. Below Batiscan, advantage is taken of the tide during low water season to obtain this depth to pass Cap à la Roche and St. Augustin bar. The available depth in the Cap à la Roche dredged channel is indicated by the St. Jean des Chaillons semaphore; this was put in operation for the season on June 17, 1908. The available depth over the undredged St. Augustin bar is indicated by the semaphore at St. Nicholas, which was started for the season on June 24, 1908. The datum adopted for low water is the stage of the lowest water in 1897 being the lowest on record for any season, but in the summer of 1908 the river was at low water. The depth in the channel, however, from Montreal to Batiscan was 30 feet and from Batiscan at extreme low tide it was the same. In the first part of the season the depth was from 36 to 42 feet. The water lowers in September and October; the highest water in 1908 was 42 feet 4 inches and the lowest 30 feet.

There has practically been no filling in of the ship channel since its commencement nor boulders and this has been ascertained by the practice of sweeping the channel. Mr. N. B. McLean, C.E., with an assistant, has been in charge of the sweeping plant, which consists of a twin-screw steamer and testing scow.

The work of deepening the St. Thomas channel, Quebec, was begun late in the autumn of 1907 and at the close of the season of 1908 good progress had been made. The St. Thomas flats consist of clay and sand and should be finished in about three or four years.

The work remaining to be done in the length of the channel is the dredging of about two miles of shale rock at Cap à la Roche; about one mile at Grondines; about one mile at St. Augustin bar, also about one mile of widening at St. Croix and 5½ miles of widening in Lake St. Peter. The widening in this lake will be completed, it is expected, in 1909; the work at Cap à la Roche will take from three to four years to finish. The dredged ship channel will then have a width, whole length, of 450 feet in the straight parts and from 500 to 750 feet at the bends, but at Beaujeu bank the width everywhere will be 1,000 feet and this part, it is expected, will be completed at the end of the season of 1909.

The plant available at present for work in the channel consists of two elevator dredges for soft clay, four for hard pan and shale rock; two hydraulic dredges for soft mud discharged by pipe; one sand pump hopper sea-going dredge; two stone lifters and a number of tugs, scows, &c. The sea-going hopper dredges are used below Quebec. An addition will be made to the plant by a large sized spoon dredge now under construction for the upper reaches of the river; a steel hull elevator dredge is authorized and a new stone lifter.

The marine signal service was especially useful during the latter part of the season of 1908 when so much fog and smoke prevailed. The smoke and fog were denser than at any previous time in the history of the work, causing suspension of operations for days at a time.

The annual inspection was made of the channel by the head of the department, being accompanied by a staff of the officers and the representatives of the Shipping Federation, Montreal Board of Trade, La Chambre de Commerce, the mayor of Quebec, representatives of the Montreal Harbour Commissioners and the Montreal and Quebec pilots. At the same time the inauguration of a new code of signals took place; the signals are to be used between stations and passing vessels, by flags in the day and lights at night.

Reference is made in the report of Mr. Forneret to the work of the *Montcalm*, in breaking and removing the ice bridge at Cap Rouge in the river, during the winter, enabling the ice to pass down with the current, causing the opening of navigation about three weeks earlier than would have been the case if naturally opened. The work of the *Montcalm* will form a separate subject of this report.

The report of the ship channel contains several carefully prepared tables showing in detail the amount of work performed. The dredges, tugs, scows, stone lifters, &c., needing extensive repairs during the summer were taken to the Sorel shipyard where the work was done. The whole plant, at the close of navigation, was put in winter quarters at the Sorel shipyard where the necessary overhauling and repairs, are now being completed and improvements made for next season's operations. The total number of yards dredged during the season, was 5,896,737 at a cost of \$479,686.03 or 8.44 cents per cubic yard.

The report on the ship channel work forms Appendix No. 3 of this report.

#### SOREL SHIPYARD.

The Sorel shipyard has been more immediately under the direction of Mr. L. G. Papineau, Assistant Director of the Shipyard. At the opening of the fiscal year, the yard was working to its fullest capacity completing repairs and improvements to the

St. Lawrence ship channel fleet. As usual all the dredges, tugs, stone lifters and scows were overhauled and made ready for the commencement of work. There were six elevator dredges, three suction dredges, nine tugs, three twin screw wooden boats, two stone lifters, fifteen dumping scows, four coal barges, one floating shop for minor repairs, three scows with houses on them for lodging spare crews. In addition the following vessels belonging to other branches of the Marine and Fisheries service were overhauled and made ready for the season's work, viz.: the Shamrock and barge Acetylene of the maintenance of lights branch; the La Canadienne and Maisonneuve of the lighthouse service; the Verchères, Hosanna and Alpha employed in the construction of lights.

The new vessels under construction at the same time were dipper dredge No. 19; dredge No. 24; tug No. 22 for lighthouse work in the upper lakes and one floating shop; stone lifter, No. 20; lighthouse tender, No. 21. This tender is of steel, length 222 feet over all, beam, 34.8 feet, depth moulded 22 feet, draught 15 feet, speed to be 11½ knots with triple expansion engines. The other construction was two flat scows 63 feet by 27 feet 8 inches; two dumping scows of a capacity of 200 cubic yards; construction No. 29, a wooden tug of light draft and construction, No. 30, a derrick scow for work on the Ottawa river.

Tug No. 22 was launched and named the *Lambton*, this vessel was about completed at the end of the fiscal year for work on the upper lakes; dipper dredge, No. 19, was launched in July and at the end of the fiscal year most of the machinery had been installed. The floating shop was completed and put in service in the ship channel in August, 1908.

During the summer the following vessels were hauled out on the slipway, viz.: the De Lévis for minor repairs, dredge No. 3 for extensive repairs, damage due to an accident; the tug Jessie Hume for painting and securing iron sheeting; the tug Montcalm, tug Hosanna, scow No. 9, tug Alpha, scow No. 14, tug Ottawa, tug Reserve, tug Champlain, tug Emilia, scow of St. Ours lock, tug Frontenac, tug Verchères, scow No. 10, and barge Acetylene, for repairs to propellers, rudders, shafting or hulls. In addition the Lady Grey, Maisonneuve, International (of the Public Works Department) and the Constance had repair work done. The last mentioned steamer had a new boiler built and installed. Three lightships wintered at the yard and were painted.

Work for other departments is often done at the Sorel shippard; the stone lifter of the Public Works Department was repaired.

Ordinary repairs were made to the buildings of the yard but building No. 4 had alterations which increased the space for offices; a set of powerful bending rollers was added to the plant, capable of bending boiler plate 1½ inches thick 14 feet in diameter and 12 feet 6 inches wide. Thirteen buildings were painted.

About 2,000 feet of new track were added to the shipyard narrow gauge railway, six new switches and two right angle crossings were made. Wharf No. 4 was enlarged by filling in at the rear.

Four new buildings were erected in the course of the year; one known as No. 22—50 by 32 feet with a plank platform 100 feet by 36, is a storehouse for castings; No. 23, is a dry kiln with two compartments, 60 by 18 feet; No. 20, used for storing dry lumber; No. 21, is a boiler room for heating the drying kiln, saw-mill, paint shop, asbestos shop and mould loft.

Seven hundred feet of main line pipe for water works was laid and four hydrants were placed and an earthenware drain pipe was laid for draining between the mould loft, drying kiln and lumber store.

The force employed varied from 623 to 920, average number of workmen was 729. The financial statement included in the report of the assistant director of the yard shows the expenditure to the end of March, 1909, to have been \$1,132,279.40. The report forms Appendix No. 4, of this report.

#### BUOYS AND BEACONS.

The buoys and beacons include those beacons which are not enumerated in the list of lights.

New buoys of several kinds were placed during the year. These buoys consisted of lighted buoys of different sizes and types, automatic whistling, bell, conical, spherical, can, platform, spars and barrel buoys. The highest type of buoy is the gas whistling and bell buoy, which shows its light a great distance and in thick and foggy weather is an effective warning buoy. Several gas and whistling buoys and several gas and bell buoys, were added to the number already in position on the Atlantic and Pacific coasts. The substitution of gas lighted buoys for unlighted buoys in many localities has taken place. This work has involved an increased expenditure. The total expenditure for buoy service for the Dominion during the fiscal year was \$161,838.25. The contract system for maintaining the small buoys in the numerous bays, inlets, rivers, lakes and harbours has been found to work most economically but not always as efficiently as desired. The inspection was performed by harbour masters in each locality and a general inspection was made by the inspectors of buoys or agents in each province.

Two derrick scows have been added to the equipment for handling heavy buoys, one in British Columbia and one in Georgian bay. These scows have been valuable auxiliaries in placing and taking up buoys and are towed by steamer or tug.

The expenditure in connection with each province for the fiscal year, was as follows:—

Nova Scotia	31,038	04
New Brunswick	27,496	10
Quebec	53,733	01
Ontario	19,242	16
British Columbia	26,969	93
Prince Edward Island	3,359	01

\$161,838 25

#### SESSIONAL PAPER No. 21 .

List of Buoys maintained by the Department of Marine and Fisheries in Canadian Waters in 1908.

#### ONTARIO.

	'	
No. of		No. of
Buoys.		Buoys.
Amherstburg, including Bois Blanc 46	Pointe au Baril, beacons	15
Bay of Quinte (two contracts) 19	Pointe au Baril, buoys	4
	Penetanguishene	4
Big Duck island, bell buoy 1	Port Arthur, gas buoys	3
Blind River 4	Port Rowan	12
	Rainy River, beacons, pairs	
Collingwood	Rainy River, buoys	14
Clapperton channel 9	River Thames, gas buoy	1
Georgian Bay	River Thames, buoys	8
Georgian Bay gas buoys 8	Rondeau	6
Green shoal 1	St. Lawrence river, Montreal to King-	
Godowich		
Goderich	ston, spars	
Goderich, gas-buoy	St. Lawrence River, Montreal to King-	
Gananoque, gas buoys	ston, can buoys	
	ston, can buoys	
Hawkesbury		
Kaministiquia 9	ton, and above, gas buoys	45
Lake Erie, gas buoys 4	Sault Ste. Marie	21
	Caralt Ct. Manie const opproaches	
Lake of the Woods, including bell	Sault Ste. Marie, canal approaches	
buoys	Sault Ste. Marie, gas buoys	2
Lake Simcoe 5	Seine River and Grassy lake, piles	
Take Superior including bell been		4.0
Lake Superior, including bell buoy 8	Seine river, buoys	
Little Current 8	South Baymouth	
Lone Rock, gas and bell buoy 1	Stokes Bay	
	Ct be were brown	
	Sturgeon bar, gas buoy	
Murray Canal and Presqu'île bay 23	Temagami lake, 4 beacons and	. 31
Lake Temiskaming 3	Theuton	13
	Thenton	3
Napanee		
Niagara, bell buoy 1	Waubashene	. 37
North Sisters rock 4	Winnipeg river	
	Commission	9
Orillia 18	Saugeen river	
Pancake shoal, bell buoy	Sturgeon river	26
Parry Sound	St Clair river, gas buov	. 1
Campbells rock	Sarnia, gas buoy	. 1
	Sarma, gas buoy	1
Pembroke	Southampton, gas buoy	
QUE	BEC.	
Agnes 1	Lake St. John—	
Amherst harbour 8	River Ashuapmuchuan	
	River Mistassini	
Anse à Beaufils	River Peribonka	
Barachois de Malbaie 1	Roberval harbour	
Bonaventure9	25 beacons and	
Cap Chat 1	Little river east	tree .
Cape Cove	Lachine rapids	. 6
Cap Meule 1	Maria	
Carleton point 1	Matane	
Chicoutimi	Mont Louis	. 1
	New Richmond	. 3
	North channel, Island of Orleans	
Chaudière basin	North channel, Island of Orleans	. 2
Cape Despair 1	Nouvelle	
	Paspebiac	. 1
Douthe's point	Pentecost	. 1
English bay 3	Tentecost	
Eschourie rock	Percé	
	Port Daniel	. 1
Fox river 1	Portneuf	
Gaspé 6		
Grand Entry	Restigouche river	. 10
Griffin Cove	Restigouche river, gas buoys	. 6
	Richelieu river, balises	
Gros Cap-aux-Os	Tittle vigon wort	. 1
House harbour, Magdalen.islands 7	Little river, we-t	
Trouble Hall body, sales	Petit Rocher	
Lake Temiskaming, viz:—	Richelieu river, St-Antoine to Chambl	
Schooner island 3	Richelieu river, above St. Johns	
o Principal and a second a second and a second a second and a second a second and a	Rigaud river	
Montreal river 3	Rivière à la Pipe, Lake St. John	. 8
North Temiskaming 9	Rivière des Prairies	. 10
	Ste. Adelaide de Pabos	
Couverette's Camp		
Brown's Point	Ste. Anne river	. 1

LIST of Buoys maintained by the Department of Marine and Fisheries, &c.—Con. QUEBEC—Con.

QUEE	sec—con.	
No.		No. of
St Thomas		uoys.
C4 C1 10	Maintained by Quebec agency, gas-	0.0
St. Lawrence river, between Platon and		30
Montreal, gas-buoys 63	Maintained by Quebec agency, unlighted buoys	15
St. Lawrence river, between Platon and	Maintained by Quebec agency below	10
Montréal, unlighted buoys	Quebec, bell-buoy	1
Serpent reef	l Maintained by Quebec agency below	
St. Placide	Quebec, Whistling-buoy	1
NEW I	BRUNSWICK.	
Bathurst		1
Baie Verte and Port Elgin 36		$\frac{1}{3}$
Bay du Vin	Northwest arm, Miramichi	6
Beaver and Blacks harbour	Northeast arm, 24 stakes and	8
Black brook, Miramichi river	3 Ox island, St. John river	5
Black Lands gully		$\frac{2}{2}$
Buctouche, 34 stakes and 29 Buctouche river, bushes and 260	Pisarinco	7
Bartibogue		3
Campobello 10		33
Caraquet		30
Cocagne, stakes, 30 and		18
Dalhousie and Restigouche 10	, , , , , , , , , , , , , , , , , , , ,	2
Digdequash		20 13
Dorchester		11
Grande Anse		77
Grand Lake and Salmon river bushing 73	St. Louis, 15 bushes and	2
Grand Manan, 1 spindle and 28		4
Great Shemogue 7		. 18
Hatfield point, bushes		5 <b>1</b> 1
Kouchibouguac and Black river, bushes	Tynemouth creek	5
Lepreau		2
Letite and Back bay, 1 spindle and 14	Waweig river	2
Little Shemogue, 1 beacon and 5		23
Little Shippigan		12
Magaguadavic	gas-buoys)	1
and 4		10
Miramichi, 9 winter buoys, 1 lightship	(can and conical buoys)	
and 22		
Miscou		• •
Musquash		• •
Neguac		• •
PRINCE EI	DWARD ISLAND.	
Bay Fortune 3		3
Beach point		7 41
Bedeque		41 9
Brae harbour 5 Brudenell river 4	0 11 1 177 ' 00 1 1	6
Cardigan, Lower	TO: 11 1 0 7 7 - 1	5
Cardigan, Upper 16		12
Cascumspec, 12 stakes 14		7
Charlottetown, 20 stakes 21		3
Cove head		5 2
Crapaud stakes and	C F	4
Egmont bay	Ch. Dahana hankona	10
Egmont south, 8 stakes and 2	Summerside	10
Georgetown	Tracadie	7
Goose harbour	West point	1 5
Grand river, 1 beacon and 12		4
Grand river, lot 14		4
Malpeque		5
Miminegash		

List of Buoys maintained by the Department of Marine and Fisheries, &c.—Con.

NOVA SCOTIA.

24	OTA SC	VIIA.	
	No. of		No. of
. I	Buoys.		Buoys.
Advocate harbour	6	Martine Brook	
Apple river	_	Martins Brook	6
		Meteghan river	2
Arichat	_	Northport.	11
Argyle river and sound		North Sydney	5
Avon river		Nells harbour	1
Amherst Basin		Parrsboro'	6
Barrington	. 31	Petit de gras	12
Bear river	. 17	Pictou	. 6
Beaver harbour		Pope's harbour	1
Blandford		Port Félix	11
Bridgewater		Port Hood.	11
		Port To Town	7
Brule		Port Le Tour	15
Canning or Habitant river		Port Medway	9
Canso and St. Andrew passage		Port Morien	2
Cape Negro or Northeast harbour		Port L'Hebert	12
Cariboo	. 6	Pubnico	18
Chester	25	Pugwash	9
Cheticamp	. 12	Prospect Lower	10
Chezzetcook and Petpiswick		Port Mouton	5
Christmas island and Barra strait		Port Bickerton	
		Ponnont harbour	5
Clarks Cove, West bay	40.000	Pennant harbour	8
Clarks harbour.		Pringle's harbour	4
Cockerwit pass and Woods harbour	4	River John (stakes)	3
Cooks cove, Toby cove		Roseway	3
Calf island bay	. 5	St. Anns	5
Crow harbour	. 3	St. Mary river	9
D'Escousse and Lennox passage	. 27	St. Mary river, up to Sherbrooke	
Digby and Annapolis, 5 winter buoys		St. Peter's bay	
Dover	. 4	St. Peters inlet	10
East Dover	. 3	Sambro	10
East bay, Bras d'Or		Shag harbour	12
East Day, Dras d Ol	11	Shag harbour	15
Fourchu harbour		Sheet harbour	9
French Village, St. Margarets Bay		Shelburne	25
Great Bras d'Or	. 8	Ship harbour	9
Gillis point, Boulaceet	. 1	Ship rock	1
Guysborough	. 3	Shulee	8
Glace bay		Smith's island	1
Hay cove	. 14	Sydney	2
Harbour au Bouche (6 stakes)		Shad bay	3
Ingonish, South bay	_	Sober island to Ecum Secum	0
		Some how	21
Isaacs harbour		Spry bay	6
Indian harbour		Tangier	4
Jeddore		Tatamagouche 46 stakes and	18
Judique		Terrence bay	13
Ketch harbour	. 6	Tor bay	19
L'Ardoise	. 5	Three fathom harbour	5
Lahave	. 12	Tidnish	5
Little Narrows	. 10	Tusket (two contracts), (3 spindles	) 30
Little Dover	9	Upper Prospect	4
Little Bras d'Or		Wallace	15
Timerrael	3	West hav	
Liverpool		West bay	3
Lockeport		West Dublin and Crooked channel	1 13
Lunenburg	. 8	Westport	3
Lunenburg, back cove	. 9	Weymouth	13
Lunenburg, middle south	. 16	Whitehead	Q
Louisburg	. 7	farmouth	50
Liscombe	6	Maintained by agency-	
Mabou	19	(whistling buoys)	10
Mahone bay and Chester	12	(bell-buoys)	13
Main-à-Dieu	6	(steel conical and can beauty	35
Vargaroo harbour	. 6	(steel conical and can-buoys)	190
Margaree harbour	. 9	(gas-buoys)	4
Merigomish.	. 6	(combined gas and bell-buoys)	5
Marie Joseph	. 13	(combined gas and whistling)	. 27
Monsellier	. 10	(light vessels)	9
Jegogin	. 7	Submarine Bell signal stations	3
McKinnon harbour	. 6	Submarine Bells attached to gas-buoy	rs. 1
Musquodoboit	. 7	Walten harbour	1

## LIST of Buoys in the Waters of British Columbia.

(GAS-LIGHTED BUOYS EXCEPTED.)

Arrow lakes. In the Narrows. 7 spar buoys. Praser river In the Channels. 13 can buoys. Hesquiat Fairway harbour entrance Whistle, steel, black and white stripes. Half-tide rock. Hecate passage, Clayoquot sound North bank " " " bull, red. Wargas rock " " " bull, red. Mearcs spit. Deception channel " " bull, red. Mearcs spit. Stubbs spit " " " " bull, red. Mearcs spit. Stubbs spit " " " " " " bull, red. Mearcs spit. Stubbs spit " " " " " " " " " bull, red. Mearcs spit. Stubbs spit " " " " " " " " " " " " " " " " " " "			==
Arrow lakes. In the Narrows. 7 spar buoys. Fraser river In the Channels. 13 can buoys. Kootenay lake At different points. 9 platform buoys. Hesquiat. Fairway harbour entrance stripes. 9 platform buoys. Half-tide rock. Hecate passage, Clayoquot sound North bank. """ stripes. Platform, ball, red. ball, red. Wargas rock Deception channel bank black. West end of pass black. Browning passage. West end of pass Stubbs spit. Browning passage. West end of pass Spar, red. Middle bank Spar, red. Hankin rock Mosquito harbour Platform, red and black, hor. black. Templar channel Village island Sund Spar, plack. Spar, plack. Spar, red. Whale rock. Ucluelet harbour Spar, black. Spar, lack. Whale rock. Esquimalt harbour Platform, red and black, hor. black. Whale rock. Esquimalt harbour Platform, red and black, hor. black. Whale rock. Besquimalt harbour Platform, red and black, hor. black. Whale rock. Spar, black. Spar, red. Whale rock Spar, black. Spar, red. Platform, ball, black, hor. black. Whale rock Spar, black. Spar, red and black, hor. black. Whale rock Besquimalt harbour Spar, red Spar, red. Platform, ball, black. Platform, ball, black. Spar, black. Spar, red and black, hor. black. Spar, red and black. Spar, red and black, hor. black. Spar, red and black. Spar, red an			
Fraser river. In the Channels. I3 can buoys. Kootenay lake At different points opints. 9 platform buoys. Hesquiat. Fairway harbour entrance. Whistle, steel, black and white stripes.  Half-tide rock Hecate passage, Clayoquot sound Vargas rock I wargas rock I wargas rock I back.  Meares spit. Deception channel I back.  Stubbs spit I black.  Stubbs spit I black.  Browning passage I West end of pass I Spar, red and black, horizontal browning passage I West end of pass I Spar, red and black, hor. browning passage I Spar, red and black hor. browning rock I Spar, red.  " Mosquito harbour I Platform, red and black, hor. browning in the stripes. Spar, red.  Templar channel Dank I Spar, red.  Sutton rock Ucluelet harbour I Steel can, drum, black.  Whale rock Darey shoal Steel can, drum, black, hor. browning in the steel of th	Name of Buoy.	Position. Description.	
Fraser river. In the Channels. Is can buoys. Kootenay lake At different points points platform buoys. Hesquiat. Fairway harbour entrance. Whistle, steel, black and white stripes. Vargas rock Bark. Deception channel bark. Stubbs spit. Spar, red. Mosquito harbour Bark. Spar, red. Mosquito harbour Bark. Spar, red. Spar, red. Stubbs spit. Spar, red. Steel can, drum, black. Spar, red. Steel can, drum, black. Spar, red. Steel can, drum, black. Mosquito harbour Barkley sound. Sutton rock. Ucluelet harbour Steel can, drum, black. Whistle steel, red. Platform, red and black, hor. It steel can, black. Spar, red. Steel can, black. Spar, red. Steel can, black. Spar, black. Platform, red. Platform, plate. Spar, black.	ary labor	7 spar bnovs.	
Kootenay lake	incom	ale 113 can buoys	
Half-tide rock	enay lake	oints 9 platform buoys.	
Half-tide rock.  Hecate passage, Clayoquot sound  Platform, ball, red.  Vargas rock	luiat	our entrance Whistle, steel, black and whit	e vert.
North bank " " " " " " " " " " " " " ball, red.  Wargas rock " " " " ball, red.  Stubbs spit Stubbs spit " " " black.  Stubbs spit Stubbs spit " " " black.  Stubbs spit Stubbs spit " " " black.  Spar, black.  Spar, red and black, horizontal to spar, black.  Spar, red.  Platform, red and black, hor. brack.  Spar, black.  Spar, red.  Platform, ped and black, hor. brack.  Spar, black.  Spar, red.  Platform, ped and black, hor. brack.  Steel can, black.  Spar, red.  Platform, ped and black, hor. brack.  Spar, black.  Spa	tide rock	e. Clayoquot sound Platform, ball, red.	
Stubbs spit. Browning passage. West end of pass "North shore bank "Spar, red and black, horizontal by Spar, black. "North shore bank "Spar, black. "Spar, black. "Spar, red and black, hor. by Spar, black. "Spar, b	h hank	" drum, black.	
Stubbs spit. Browning passage. West end of pass "North shore bank "Spar, red and black, horizontal by Spar, black. "North shore bank "Spar, black. "Spar, black. "Spar, red and black, hor. by Spar, black. "Spar, b	gas rock	n n ball, red.	
Sutton rock	res spit	nnel " " Diack.	
Sutton rock	vning passage	ass Spar, red and black, horizontal	bands.
Sutton rock	11	ank " Spar, black.	
Sutton rock	11	Spar, red.	hande
Sutton rock	nd island (north)	bank Spar, black.	Dajiids.
Sutton rock	(south)	nel bank " Spar, red.	
Sutton rock	plar channel	Steel can, drum, black.	
Rosedale rock	ohitrite point	our Platform red and black hor.	bands.
Whale rock Patterson rock   Esquimalt harbour   Spar, red and black, horizontal to Patterson rock   Platform, black.   Platform, red   Platform, ball, black   Songhies rock   Platform, ball, black   Spar, black   Platform, ball, black   Steel can, black   Steel can, black   Steel can, black   Steel can, black   Spar, red   Spar, black   Spar, black	adala rock	nan de ruca straitSteel can, black.	
Channel rock. Songhies rock.  Hospital rock  Johnstone reef. Darcy shoal Sidney spit (east). Sidney wharf (south). Sidney rock.  Colbourne (south). Colbourne passage (north). Celia reef. Entrance point (Kelp rock) Batt rock Hord rock Batt rock Trincomali channel Benmohr rock Governor rock Virago rock Virago rock Porlier pass Fairway Grappler reef. Houston passage Houston passage Graph Batt compassage Porlier pass Fairway Grappler reef. Houston passage Houston passage Full torin hall, black Spar, black Steel can, black Spar, red. Steel conical, red. Spar, red. Platform, drum, black Platform, ball, red. Steel conical, red. Steel can, black. Platform, ball, black, Platform, ball, bla	ale rock	rbour	bands.
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False reef.  White rock South east False narrows Spar, red. Spar, red. Spar, black Spar, black West Rosenfeld reef Strait of Georgia Steel can, red and black nor. ba	ite rock	nannelSteel conical, red.	
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West "Spar, black.	st	Spar, black.	
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(TOSSID FEELActive pass	ssip reei	oss Sandheads. 5 steel conical, black 8 steel con	ical red
Point every fairway Burrard inlet Ball, steel, red.	mt anor fairmar	t	
First parrows South side of Narrows Spar red.	of mamorite	NarrowsSpar red.	
Burnaby shoal Vancouver harbour.	rnaby shoal	arbour	
Welcome many		20	
Welcome point. Tattenham ledge. Snake island reef. Strait of Georgia Strait of Georgia Strait of Georgia	ttenham ledge	Spar, black.	
Snake island reef Strait of Georgia Steel comcal, red.	ake island reef	rgia Steel conical, red.	
Horswell reef.  Clarke rock  Inner channel  Platform, black.	rswell reel	Platform, black.	
Entrance	trance	bour Platform, triangle, black.	

## List of Buoys in the Waters of British Columbia—Con.

Name of Buoy.	Position.	Description.
South channel Middle bank South channel (west) Satellite reef. Middle bank (south-west).  (west).  Carpenter rock Mill stream Passage rock Departure bay reef. Dorcas rock. Hornby wharf reef. Reef bluff (south).  (west).  Village point. Kelp bar crossing (west).  " (east).  Atrevida reef. North reef Cortes island reef. Shark spit. Whaeton rock. Siwash rock.	Newcastle island passage.  Departure bay. Dorcas point, Vancouver island. Lambert channel. Baynes sound  Malaspina strait North end, Texada island. Baker passage Marina island. Whaleton bay. Johnstone strait	" diamond, black. " ball, red. " diamond, black. " ball, red. Spar, red. " black. " ball, red. Spar, black. " ball, red. Spar, black. " Steel conical, triangle, red. Spar, red. " Spar, red. " Spar, red. " Spar, red. " Spar, red. Spar, black. Steel conical, red.
Ripple reef	Addenbrooke point, Fitzhugh sound	bands.
Bloxam bank. Centre bank. Hazel point. Fairview reef. Tugwell reef. Harbour channel (west). (east). Sparrowhawk rock. Hankin reefs.	Telegraph passage, Skeena Skeena river Middle passage, Skeena Prince Rupert harbour Metlakatla  " Cunningham passage Port Simpson	bands. Spar, black. Steel nun, red. Spar, red. Steel conical, red. Spar, black. Platform, black. """ Steel can, red and black, horizonta bands. Platform, red. Spar, black.

## List of Gas Lighted Bell and Whistling Buoys established in British Columbia, 1908-9.

Name of Buoy.	Position.	Description.
Casey Point Spire Ledge Barrett Ledge Ellinor Rock Alford Reef Hodgson Reef Skidegate Bar New England Rock Stenhouse Shoal Vancouver Rock Dall Pach Haddington Reef Comox Bar Sturgeon Bank Swiftsure Bank	Gas and Whistle  Gas and Bell  Gas. White and Bell	Chartham Sound.  "Hecate Straits.  "Milbank Sound.  Broughton Straits. Gulf of Georgia.

Buoys in store. May 22, 1909-

- 2 can buoys, 5 feet diameter.
- 1 can buoy, 6 feet diameter.
- 3 can buoys, 5½ feet diameter with tripod.
- 1 can buoy, 6 feet diameter, with tripod.
- 1 conical buoy, 3-6 feet, large buoy.
- 1 conical buoy, 7 feet diameter.
- 1 nun buoy, 2 feet diameter.
- 3 conical buoys, 3 feet diameter.
- 1 whistling buoy (American pattern).
- 4 8½ combined gas and bell buoys.
- 3 9½ gas buoys.
- 2 11 gas buoys. Esquimalt.

Beacons, &c., in store.

- 2 beacons with tripod complete.
- 1 bell and whistle tripod.
- 2 tripods.

#### HYDROGRAPHIC SURVEY.

The hydrographic survey work is in charge of Mr. W. J. Stewart who has reported upon the work in the various waters, where the hydrographic survey staff has been employed.

Lake Superior survey was conducted in the Bayfield under command of Captain F. Anderson. The vessel left Owen Sound on May 10, 1908, proceeded to Nipigon bay on the north shore of Lake Superior and took up the survey work in the eastern approach to the bay and continued there until August 1. From that date the Bayfield was employed from Simmons harbour to Isacor Point to obtain a more correct delineation than is shown on existing charts. The work was completed and the vessel proceeded to Owen Sound and was put in winter quarters on November 23. The north shore of Lake Superior from Pigeon river to the eastern entrance of Nipigon bay, with the exception of Nipigon and Black bays, has been accurately and carefully surveyed and charted. Fifty miles between Simmons harbour and Isacor Point, has been traversed and plotted in detail but no sounding has been done in this stretch. On June 23, the Bayfield struck a rock and was damaged, repairs costing \$5,884.13.

The survey in the Atlantic coast division was performed in the *La Canadienne*, in command of Captain Irving Miles. The vessel left Sorel on May 18, 1908, and continued the survey of the mouth of the Saguenay river and the St. Lawrence river between Red island and Razade islands. A large scale plan of the mouth of the Saguenay river was completed showing accurately the many shoals and banks in the Saguenay. The general work of charting the St. Lawrence river was carried on for the purpose of acquiring greater accuracy of detail for the new charts.

In May, 1908, a small party in charge of Mr. Chas. McGreevy was engaged in surveying Cumberland basin, Nova Scotia, with a view of supplying charts more in detail.

On Lake of the Two Mountains, Ottawa river, the survey party under charge of Mr. A. J. Pinet, resumed operations on May 1, 1908, using the yacht *Josephine*. Fair progress was made, advancing the survey to a stage where completion is expected in 1909.

The Pacific coast survey was continued on April 3, 1908, by a party in charge of Captain P. C. Musgrave, in the southern approach to Prince Rupert harbour and the mouth of Skeena river. On June 10, the new hydrographic steamer Lillooet was put in commission under the command of Captain Musgrave and completed a survey in Chatham Sound, east of Lucy and Rachal islands, and from Tree bluff to Island point. An important result of the survey at entrance to Prince Rupert harbour was the finding of a shoal head of eleven feet upon Alexandra patch where it was supposed that a depth of ten fathoms existed.

All of the eastern officers of the survey staff were engaged in the office at Ottawa plotting the season's notes and preparing for charts engraving. The work upon Lake St. Francis charts made some progress.

The charts issued to the public were the following: Lake St. Peter, White island to Orignaux point, Lake St. Louis and Key harbour, Georgian bay.

In connection with the St. Lawrence river charts, the services of Captain J. G. Boulton, retired naval officer of Quebec, were secured to assist the officers in preparing sailing directions for the river between Quebec and Kingston.

The report of Mr. Stewart forms Appendix No. 8 of this report.

#### DOMINION STEAMERS.

#### 'MINTO.'

The C.G.S. Minto is a single screw vessel specially designed for ice-breaking in the Strait of Northumberland.

She was built in Dundee, Scotland, in 1899 and is 225 feet long, 32 feet 8 inches br ad, 18 deep, 372 net, 1,090 gross tonnage, and 216 nominal horse-power.

At the beginning of the fiscal year 1908 she was plying between Pictou and Charlottetown in conjunction with the s.s. Stanley until April 25, when she was put on the marine slip at Pictou, had her bottom examined and painted and on May 5 came off the slip. Her topsides were then caulked, cleaned and painted, and she left for Quebec on June 23. After fitting out there, she sailed down the Gulf of St. Lawrence, called at St. John, N.B., Mingan and other points, returned to Quebec, went to Montreal and reached Charlottetown on July 28. Here the usual number of her crew were paid off and she remained at the Marine wharf, undergoing general repairs preparatory to the winter service, which she resumed on December 14.

When five miles out of Charlottetown harbour, she sighted the schooner Jasson loaded with coal and in distress, went to her relief and towed her into Charlottetown harbour.

The Minto remained on the Charlottetown-Pictou route until December 26, when she was transferred to the Georgetown-Pictou route, where, with the exception of delays caused by heavy ice, from January 30 to February 3, and on February 25, from March 23 to 27, made regular trips on this route until the end of the fiscal year.

In the winter service, the *Minto* made 49 round trips, carried 84,469 packages of freight weighing in all 4.468\(^3\) tons; freight earnings were \(^6\),171.99; carried 2,401 passengers; earnings \(^3\),274; provided 1,457 meals to passengers, \(^2\)206.10, and 487 berths, \(^4\)487; total earnings, \(^5\)10,139.09.

#### STANLEY.

The C.G.S. Stanley is a steel single screw ice-breaker, built in Govan, G.B., in 1888. She is 207.8 feet long, 32.00 feet wide, 17:9 feet deep; is 397 net, 914 gross tonnage, 300 nominal horse-power.

She was on the Charlottetown-Pictou route on April 1, 1908, and from that date until the 23rd, continued to make tri-weekly trips there.

Her boilers being then cleaned, she began the buoy service on the second of May and placed buoys at Rifleman Reef, Fitzroy Rock, Cape Bear, Farras Shoal, Jourimain island Shoal, Zephyr Rock and West Point.

Anchoring in the Strait of Northumberland all night, of May 8, on account of dense fog, her anchor fouled the Anglo-American telegraph cable and so injured it as to interrupt telegraphic communication between the Island and the mainland. Completing the buoy service on May 13, she was sent, on the 15th, to help repair the damage done the cable. It was raised and spliced, after which the Stanley returned to Charlottetown on May 17. The following day, she sailed for Pictou where she was put on the marine slip. Returning to Charlottetown on June 17, she was caulked, cleaned and painted, left for Pictou for bunker coal and sailed for Quebec on July 14 to take part, with other departmental steamers, in the Tercentenary celebration and returned to Charlottetown and Pictou on August 3 to undergo general repairs for the approaching winter service; made necessary preparations and sailed to Summerside to carry freight and passengers when the Steam Navigation Company's steamers stopped. She made return trips daily, between Summerside and Pointe du Chene till the 21st, when she was put on the Charlottetown-Pictou route, remaining there till the 25th, and then went on the Georgetown-Pictou route where she was plying at the end of the fie cal year.

During the winter service, the *Stanley* made 50 round trips, carried 93,002 packages of freight weighing in all 1,620.81 tons; 2,223 passengers; provided 1,495 meals, and 589 berths.

#### Her earnings were:

For freight	\$6,443 97
For carrying passengers	2,884 00
For meals	263 50
For berths	589 00
-	
Total earnings	\$10,180 47

#### BRANT.

The crew joined the *Brant* at Charlottetown on April 13, 1908. She was thoroughly fitted out. scraped, caulked, cleaned and painted. She then towed the tug *Prince Edward* to Crapaud and placed a conical buoy on Brackley Point reef. She then placed the Charlottetown harbour buoys. Arrangements were made on May 6 with the

Prince Edward Island Tug Company to charter the *Brant* for passenger and freight service and she remained in their employ until June 5. From that date to August 26, she was engaged conveying coal to East Point fog alarm and supplies to light-stations. She was engaged in wharf inspection until September the 22nd, and in the lighthouse and buoy service until the close of navigation. Her crew was paid off on September 30.

#### Receipts-

From	Department of Public Works	\$ 35 00
66	Prince Edward Island Tug Company	450 00
66	Buoy contractor, Foster	80 00
	Total receipts	\$565 00

#### LANSDOWNE.

The Lansdowne is a wooden steamer 188 feet long, 32 feet wide, 15 feet deep, and 680 gross tonnage. She is employed in the lighthouse and buoy service of the New Brunswick agency of this department.

On April 1, she was employed in delivering supplies to lighthouses under the superintendent of lights. On the 8th, she succeeded, after considerable difficulty, in landing building material at Machias. The vessel was then employed in placing gas buoys until April 16, and after that date supplied coal to the lightship *Lurcher* and to fogalarm stations. On May 6, the *Lansdowne* was put on Hilyard's blocks, part of the stem, cut-water, main keel, false keel, and planking were renewed, caulking and painting done, all at a cost of about \$2,000.

During the month of June and part of July, the vessel was employed in delivering supplies for the maintenance of lights, raising and placing gas and other buoys; and on July 16, left St. John with supplies for lighthouses along the northwestern shore of the Bay of Fundy, in charge of her first officer. She returned to St. John on July 27; on August 1, resumed the delivering of coal, oil and other supplies to, practically the same light stations in the Bay of Fundy. During the months of September and October she attended to the buoy service in the Bay of Fundy and landed supplies.

The month of November was stormy and the Lansdowne had much difficulty in locating buoys which had drifted from their position and in supplying the lightships.

On her return to St. John, she was placed on Hilyard's blocks for repairs which cost about \$500. These being completed on December 16, the steamer was employed for the balance of the month in the buoy service.

On January 1, 1909, the vessel was at Yarmouth, N.S., and from there proceeded to some gas buoys, the lights of which were extinguished, relit them and went to the assistance of the Lurcher lightship which had left her moorings. The Lurcher, however, did not require assistance; the Lansdowne then proceeded to St. John to recover the Partridge Island bell boat. After this, the steamer endeavoured to recover some of the gas buoys which had drifted in the storm; the steamer arrived at Yarmouth on February 10. From that date she was engaged, until March 10, in replacing and recharging gas buoys, which was accomplished with great difficulty, owing to severe

storms and unfavourable weather. Some large automatic and gas buoys were recovered and replaced; and the balance of the month was occupied in saving some valuable buoys which had been injured and had drifted from their moorings.

### 'QUADRA.'

The Quadra is an iron steamer, 174 feet long, 31 feet beam, 13 feet 6 inches deep and 573 gross tonnage. She is employed in the British Columbia agency of this department. She was repaired and went into commission on the 13th of April. During the rest of the month she was employed in transporting materials for Pachena wireless telegraph station and in delivering stores to the west coast stations. The Quadra was in the buoy service in May and moved the automatic beacon from Green Top island to Holland Rock. From the 1st of June to the 15th of September she was employed in the lighthouse and buoy service, and from the latter date to the 30th of September was on a tour of inspection in the northern waters of the province, after which she recharged buoys and beacons with carbide.

The Quadra was then put on the slip of the Victoria Machinery Company, where she was cleaned and painted, and during the rest of the fiscal year was employed in lighthouse and buoy service.

#### WILLIAM JOLIFFE.

This vessel was chartered to assist the *Quadra* in replacing buoys that had been moved from their moorings by winter storms. Her services were dispensed with on the 27th of April, 1908, but she was again chartered for buoy service from the 12th to the 27th of October.

#### LEEBRO.

The Leebro was employed in coaling fog alarm stations and transporting fog alarm machinery to Pachena and Estevan stations, B.C. She then delivered coal to the gulf stations and oil, in the general lighthouse service, up to the 30th of September. From the 1st of October the Leebro was employed in the west coast telegraph service and the removal of workmen. In November she was engaged in the transportation of lighthouse supplies and in the recovery of the Swiftsure Bank gas buoy until the 9th, when her services were dispensed with.

#### CASCADE.

This vessel was chartered on the 20th of April, 1908, and was employed in the buoy service until the 25th, and conveyed men and supplies for the west coast trail until the 7th May. She resumed the lighthouse and buoy service until the 4th of July, when her services were dispensed with.

#### MONTCALM.

The *Montcalm* is a steel twin screw vessel, 245 feet long, 40.6 feet wide, 15.7 feet deep; 526 net, 1,432 gross tonnage, 406 nominal and 4,250 indicated horse-power at a steam pressure of 220 pounds.

This powerful icebreaker was built at Yoker, G.B., in 1904, for the St. Lawrence winter service, for which purpose she has proved very effective.

During the season of navigation, she was employed in the delivering of supplies to lighthouses and in carrying material for and workmen employed at the construc-

tion of lighthouses and fog-alarms in the Gulf of St. Lawrence and Straits of Belle Isle.

In the spring she rendered assistance in the ice to vessels employed in the St. Lawrence trade, and in winter in breaking the ice-bridge at Cap Rouge.

Returning from her cruise in Cabot strait, and while rendering assistance through the ice to incoming vessels, she was struck, in Quebec harbour, by the *Milwaukee*, of the Canadian Pacific steamship line, about 9.30 p.m. of the 7th of May. She sank at Pointe-a-Carcy wharf during the night, was floated on the 16th, taken to the graving dock for repairs and was put in commission on the 30th of June. The repairs, made by George T. Davis & Son and the staff of the Quebec agency, cost about \$33,000.

From the 1st of July to the 1st of October she was in the light and buoy service in the Gulf of St. Lawrence and Straits of Belle Isle, and on her way back from a 'supply' trip brought back Marconi operators from Whistle Rock and Heath Point, the workmen from the Straits of Belle Isle and landed the crew of the wrecked schooner Blanche Alma at Father Point.

The Montcalm sailed for Seven Islands on the 28th of December and found half the bay covered with ice; she broke through ice ten inches thick for two and one half miles to Clarke City wharf then returned to Quebec on the 31st.

On January 12, 1909, the Montcalm began cutting the icebridge which had formed at Cap Rouge. This accumulation of ice was from fifteen to forty feet thick in some places. A channel 1,200 feet wide was made; and as the ice was loosened it floated down the river. The work was continued until the middle of April and the channel kept open as far as Quebec. The steamer's operations, not only opened navigation about three weeks earlier than it naturally would open, but also prevented the usual flooding of certain places along the banks of the river. By continued efforts, she was able to reach Lake St. Peter on April 19. Representatives of the Quebec legislature, the boards of trade of Quebec and Lévis, and of Laval University, were, on three occasions, on board the steamer and witnessed with satisfaction, her icebreaking operations.

The opening of the channel and the steady removal of the icebridge proved the utility of the undertaking and the fitness of the *Montcalm* for that particular kind of icebreaking.

#### DRUID.

The *Druid* is a single screw steel vessel of 59 nominal horse-power; 160 feet long, 30 feet beam, 12 feet 5 inches deep; 149 net and 503 gross tonnage.

With one interruption, this vessel was employed in the lighthouse and buoy service from Portneuf to Father Point, a distance of 185 miles, under the control of the Quebec agency of the Department of Marine and Fisheries. In this service, she placed, kept in position and raised the gas buoys, maintained the beacons, towed the three lightships to and from their stations, carried workmen, coal and supplies.

In December, she made a special trip to Ste. Anne-des-Monts with provisions, the schooner *Marie Blanche* with provisions for that place having, previously, been wrecked.

#### ARCTIC.

The Arctic is a single screw, wooden steamer built in Keil, Germany, in 1901 and bought by this department in 1904. She is 161.4 feet long, 37.2 feet wide and 20.2 feet deep, is 518 net, 762 gross tonnage and 44 nominal horse-power.

In command of Captain Bernier, she left Quebec about July 25, 1908, with full provisions, outfit and crew for a two-years' cruise in the Arctic waters.

#### ABERDEEN

The Aberdeen is a single screw steel vessel built in Paisley, Scotland, in 1894. She is 180 feet long, 31·1 feet wide, 16·9 feet deep; is 266 net, 674 gross tonnage and 200 nominal horse-power. She is in the lighthouse and buoy service of the Halifax agency of this department.

The Aberdeen loaded machinery and building materials at Halifax for Clark's Harbour and Cape Fourchu. From April 22 she was engaged in the buoy service, returned to Halifax and was employed in that harbour buoy service until the 28th. She then loaded machinery for Clark's Harbour and on the 30th, landed carbide and explosives at Sambro and returned to Halifax. The Aberdeen left Halifax on May 1, landed machinery and materials at Clark's Harbour, buoys and machinery at Yarmouth; was employed in the buoy service for some time and sailed for St. John, N.B., for lighthouse supplies where she remained until the 6th. She left with supplies for lighthouses and fog alarms. From the 12th to the 30th she supplied the Lurcher with coal and oil and attended to lights and buoys until August 16. From that date until the 24th she was laid up for repairs at Halifax and resumed the lighthouse and buoy service till September 19, when she was ordered to go into quarantine, remaining there four days.

She resumed her usual lighthouse and buoy service in Nova Scotia until November 26, when she began picking up buoys in Prince Edward Island waters. The Aberdeen left Souris, P.E.I., for the Magdalen Islands on December 3, raised the buoys there and returned to Nova Scotia waters where she operated until the end of the fiscal year.

#### LADY LAURIER.

The Lady Laurier is a twin screw, steel vessel, 214.9 feet long, 34.2 feet wide, 17.2 feet deep; 413 net, 1,051 gross tonnage and 186 nominal horse power. She was built at Paisley, Scotland, in 1902, and is employed in the lighthouse and buoy service of this department in Nova Scotia.

The Lady Lourier had a very successful year in the service. No casualty has been reported. She was in quarantine at Lawler Island from the 1st to the 5th of April, and from that date to June 16, was constantly employed in the lighthouse and buoy service. On the 22nd, she landed materials for the dog-fish reduction plant at Clarke's Harbour and during the month of August, delivered supplies at East Cranberry Island, Sable Island, Cape Race, Newfoundland and other stations along the coast of Nova Scotia, and on September 1, sailed to Sable Island, took 49 ponies on board and sailed for Halifax.

She attended the work at Cape Fourchu submarine bells, searched for the South West Ledge buoy which went adrift and after much difficulty, caused by unfavourable weather, placed it in position, on September 30.

The Lady Laurier supplied lighthouses between Halifax and Cape Sable during the month of October, returned to Halifax where her bottom was scraped and the ship repaired, cleaned and painted and on December 1, resumed the buoy service, ending the year's operations by taking boilers from Halifax to Cape Ray.

#### CONSTANCE.

The Constance is a composite single screw steamer 115.6 feet long, 19.6 feet wide, 11.2 feet deep; 126 net, 185 gross tonnage and 50 nominal horse-power. She was built at Owen Sound by the Polson Iron Works in 1891.

She was transferred from the Customs service to the Fisheries Protection service.

#### 'EUREKA.'

The Eureka is a steel, single screw vessel, 94.7 feet long, 22 feet wide, 11.9 feet deep; 170 gross, 91 net registered tonnage and 40 horse-power. She was built in Glasgow, Scotland, in 1893, for the Department of Public Works, is now in the pilot service of this department, and commanded by Captain F. X. Pouliot.

While wintering in the Louise Basin, Quebec, alterations and repairs were made preparatory to the approaching season's operations.

#### 'SIMCOE.'

The Simcoe is a steel, twin screw vessel of 217 horse-power. She was built by Swan, Hunter and Wingham Richardson, Limited, Wallsend-on-Tyne, England, and launched in 1909, is 180 feet long, 35.2 feet wide, 15.2 deep; 913.8 gross, 437.63 net tonnage

The Simcoe is completed and will sail from Great Britain to take up the light-house service above Montreal and the buoy service in the Georgian bay.

#### 'LILLOOET.'

The Lillooet is a twin screw steel steamer, 170 feet long, 27 beam, 15 feet deep, and has a displacement of 760 tons with 800 indicated horse-power. She is employed in the hydrographic survey in British Columbia and was built and equipped with the latest surveying devices for this service.

#### 'BAYFIELD,'

The Bayfield is a steel screw vessel built at Meadowside, Patrick, G.B., in 1889. She is 140 feet long, 24.1 feet wide, 11.3 feet deep; 86 net, 276 gross tonnage and 160 horse-power.

She was engaged in the hydrographic survey in Lake Superior during the season of 1908. She left Owen Sound on May 10, and returned on November 23, 1908.

#### 'GULNARE,'

The Gulnare is a screw steel vessel, 137 feet long. 20.5 feet wide, 13.6 feet deep; 106 net, 262 gross tonnage and of 64 horse-power. She was built at Scotstoun, Glasgow, Scotland, in 1893, and is employed in the tidal survey service of this department.

During the season of 1908, she was employed in the Strait of Northumberland.

#### SHAMROCK.

The Shamrock is a single screw wooden vessel, built in Quebec in 1898. She is 117.3 feet long, 25 feet wide and 9.7 feet deep, 161 net, 237 gross tonnage and 61 nominal horse-power. She is employed in the lighthouse and buoy service of the Montreal agency of this department.

#### SCOUT.

The Scout is a wooden, single screw vessel of 27 nominal horse power, built in Cardinal, Ontario, in 1900. She is 103.6 feet long, 25.6 feet wide, 9.2 feet deep, 70 net and 176 gross tonage. She is fitted with powerful search and electric lights and was used in the buoy service between Montreal and Kingston during the fiscal year.

#### LAMBTON.

The Lambton is a steel, single screw vessel of 89 horsepower, built at the government shippards Sorel, P.Q., in 1908-9. She is 108 feet long, 25.1 feet wide, 12.7 feet deep; 323 gross and 182 net tonnage.

Her engines are triple expansion, inverted, direct acting, with working pressure of 170 lbs. to the square inch, and built by Flemming and Ferguson, Limited, Paisley, Scotland.

She is intended for the lighthouse construction and superintendence service of this department.

#### RESERVE.

The Reserve is a screw, wooden vessel, built in Buffalo, N.Y., in 1884. She is 61.8 feet long, 15.3 feet wide, 4.8 feet deep; 36 net, 49 gross tonnage and 30 horsepower. She is engaged in sweeping the channel, towing and attending the buoys under the control of the lighthouse depot, Prescott.

#### LA CANADIENNE.

The La Canadienne is a single screw iron vessel, built in Glasgow, Scotland, in 1880. She is 154.3 feet long, 22.7 wide, 10.9 deep; 227 net, 372 gross tonnage, and of 60 horse-power.

She was employed during the season of 1908 in the hydrographic survey in the St. Lawrence river.

#### LADY GREY.

The Lady Grey is a twin screw, steel vessel, built at Barrow, G.B., in 1906. She is 172 feet long, 32.2 feet wide, 15.9 deep; 65 net, 733 gross tonnage and of 353 nominal horse-power. She is fitted with sweeping apparatus for ship channel work and two 12-inch salvage pumps, each of which has a capacity of 2,500 gallons per minute.

Her powerful engines, twin screws and other equipment, render this steamer very useful for icebreaking, towing, sweeping and wrecking purposes. She was employed during the season of 1908 in the ship channel service.

#### ROUVILLE.

The Rouville is in the construction of lights service in the lower St. Lawrence river.

The fisheries cruisers are:—The Canada, the Petrel, Curlew, Ostrea and Constance in the waters of the maritime provinces; Kestrel, Falcon, Georgia in the waters of British Columbia; Viligant in Ontario waters; Princess in Quebec waters.

#### LIGHTSHIPS.

#### THE LURCHER LIGHTSHIP.

The Lurcher lightship is 121 feet 3 inches long, 24 feet 7 inches wide, 19 feet deep; 269 net and 396 gross tonnage. Her station is near the Lurcher shoal, Bay of Fundy. The vessel is fitted with boilers and engine to enable her to steam to port in the event of dragging her anchor or breaking from her moorings in a storm. This lightship was on the station from the 1st of April until the 6th of January, 1909, when she lost her moorings in a heavy storm, but was replaced on the 9th of the same month. The Lurcher was taken from her station on 24th January and replaced by the Anticosti. In the meantime extensive repairs are being made to the Lurcher.

#### THE ANTICOSTI LIGHTSHIP.

The Anticosti is 121 feet 3 inches long, 24.7 feet wide, 19 feet deep; 269 net and 396 gross tonnage.

The Anticosti is stationed off Anticosti island in the gulf of St. Lawrence. This lightship was placed upon her station in the spring and remained there until November. It was decided to place the Anticosti on the station of the Lurcher lightship in the Bay of Fundy. On the way to that station the Anticosti struck the ledges off Canso while in charge of a pilot, and was injured to such an extent that it was necessary to take her to Halifax, where repairs were made to the hull. Upon completion of these repairs the Anticosti proceeded to Yarmouth and from there to the Lurcher station, where the vessel was moored on the 24th January, 1909, and remained there until the 18th of February. In a heavy gale the Anticosti broke from her moorings, but was replaced on the 22nd of February. She remained on the Lurcher station until the end of the fiscal year, and was finally replaced by Lurcher lightship.

The Prince shoal, Red island and White island lightships are under the Quebec agency and are kept in position under contract by keepers who receive the sum of \$3,000 for the season for providing and maintaining crews. Fuel, light and engine supplies are furnished and repairs made by the department. A small light boat is maintained on the Restigouche river under the Quebec agency.

The Miramichi lightship is in charge of a light-keeper under the control of the New Brunswick agency. This vessel was placed in position and taken back to winter quarters by the harbour master at Chatham.

The Barrington lightship is maintained in Barrington east bay, Nova Scotia.

The Sand Heads, British Columbia light broke from her moorings and drifted on the Sand Heads. She was assisted off and repaired.

The three lightships maintained on Lake St. Louis above Montreal were overhauled, placed in position and taken back to Lachine to winter quarters at the close of navigation. The Lake St. Peter lightship was painted and the usual repairs made before being put in position and wintered at Sorel.

# ICE FORMATION IN THE ST. LAWRENCE RIVER AND STRAIT OF NORTHUMBERLAND.

An investigation of the conditions governing the formation and disintegration of river ice in the St. Lawrence river and salt water ice in the Strait of Northumberland, on a large scale, was undertaken by H. F. Barnes, D.Sc., F.R.S.C., F.R. Met. Soc., Macdonald professor of Physics, McGill University, during the months of January, February, March and part of April, 1909. Professor Barnes was assisted by Mr. Jas. B. Woodyatt, B.Sc. Two months were spent on board the *Stanley* in the Strait of Northumberland and two months in the *Montcalm*, on the St. Lawrence river at Cap Rouge and above.

· A report of the icebreaking observations has been received from Prof. Barnes which contains detailed information of each day's observations. The space in this report will not allow of the reproduction of Prof. Barnes' report in full, but the subject being one of great interest considerable space is here given to extracts.

'Through the kind assistance of the Department of Marine and Fisheries of Canada it has been possible for the writer to extend his studies of natural ice phenomena to include an investigation of the conditions governing the formation and disintegration of river ice on a large scale. It is a pleasure here to record great indebtedness to the minister, Hon. L. P. Brodeur, and to the deputy minister, G. J. Desbarats, for their unfailing interest in the work and their ready help on all occasions. An assistant was provided, Mr. Jas. B. Woodyatt, B.Sc., who devoted four months to the study; and it is a pleasure to mention his faithfulness and industry in collecting the observations under the writer's direction. Two months were spent on board the Canadian government icebreaker Stanley doing duty in the Northumberland straits, and two months were spent on the icebreaker Montcalm, which did such excellent work this year at Quebec. In this way the ice conditions were studied in two widely different localities. The one dealing with salt water ice where the problem is one of continually changing conditions, shifting with wind and tide, while the other dealt with the immense accumulation of ice at Cap Rouge and above, representing by its solidity the very opposite.

'From the point of view of possible winter navigation of the St. Lawrence, a study such as the present, is of the greatest importance. Information must be obtained by those skilled in scientific observation before anything very definite can be stated as to the feasibility of winter navigation. The present investigation, while not overlooking this point was undertaken primarily for scientific investigation. The result of this study shows where improvements can be made in order to lengthen the navigable season as far as the port of Montreal. This was partially demonstrated this year by the performance of the C.G.S. Montcalm. In treating the ice problem even those with the oldest experience are inclined to regard the task of ice breaking from the wrong end. Any one who views the ice accumulation in the river towards the end of the winter thinks rightly of the impossibility of coping with such masses. Where ice is prevented from accumulating, and usually the task of prevention is not an insurmountable one, these large masses cannot form. It is the work of but a few days or less for the formation of the famous ice bridge at Cap Rouge and yet it is the work of two months to break it down again, whereas the presence of an ice breaker during the first few days and after would prevent the bridge from forming altogether and make the task of keeping the river clear at that point, a simple one.'

## WORK AT THE NORTHUMBERLAND STRAITS.

'Observations on the formation and action of salt water ice are of great interest. It is quite unlike fresh water ice, being so very variable in composition and different in appearance.

'Prof. Otto Pettersson of Stockholm, President of the International Commission for the study of the sea, has made an extended study of salt water ice. As a result of his inquiry he finds that ocean water is divided on freezing, not into pure ice and a more or less concentrated solution of ordinary sea salt, but into two saliniferous parts, one liquid and one solid, which are of different chemical composition. It is found that the formation of sea ice is chemically a selective process. Some of the elements of the salt water are more fit than others to enter into the solid state by freezing; those that are rejected by the ice will preponderate in the brine, and vice versa. As a rule the ice is richer in sulphate, the brine in chlorides. With time the ice appears to give up more and more of its chlorides and to retain its sulphates. The general opinion has been that pure ice was formed at the freezing of sea water. The small impurities always present in sea ice were accounted for by adherent sea water, but it has been conclusively shown that the freezing of sea wrter involves a separation of its chemical constituents of which one part enters into the composition of the solid another into that of the liquid water. The actual salinity of the ice is of course small and was found to diminish with the age of the ice. Immediately after its formation sea ice contains a noticeable quantity of salt, chlorides as well as sulphates, carbonates and Such ice is very different from fresh water ice in its physical properties. It melts below zero, and begins to show signs of melting by contraction of volume at temperatures far below zero. Thus ice which contained as much chlorine as 2.73 parts per thousand commenced to contract at 14°C. (6.8° F.) and continued to do so up to the melting point. Ice formed by freezing at low temperatures of arctic sea water which contained 3:49 parts per thousand of chlorine began to contract in volume at 18° C. (o° F.) This phenomenon is, however, a relative one so far as any ice is concerned. Even fresh water ice contains small traces of impurities which cause a contraction of volume before the actual melting occurs. The purer the ice the sharper is the change from solid to liquid differentiated. E. V. Drygalski has found in his study of polar ice for the Berlin Geographical Society that the salinity of newly formed sea ice is from four to five parts of salt per thousand. He found what is very important, that the salt is not confined to the uppermost layer of the ice. The salt was found to be almost equally distributed in every layer of the sea ice from the surface to 68.4 cms. depth, where the salinity was four parts per thousand. But after two months the salinity in all layers decreased from four or five parts per thousand to one or two parts per thousand.

'A very interesting characteristic of the thin layers of salt water ice is their great mobility. It is entirely different in appearance to fresh water ice being white and the top layers seemingly full of mechanically suspended salt. Extreme brittleness which characterizes the fresh water ice is entirely wanting. A small wave set up in the water travels through it without breaking it, the thin layers rising and falling and

exhibiting great plasticity.

'The observations made by Mr. Woodyatt were accurate temperatures of the water and air, the humidity, barometric pressure and the determination of the strength of the various forms of ice met with in the straits. A close watch was kept of any relation between air and water temperature and the effect of other meteorological conditions including the tides on the ice conditions. It was clear that the chief factors in the ice conditions in the straits were wind and tide. The temperature of the water remained very constant everywhere at 30° C. The severity of the air temperature had an influence on the quantity of ice formed, but the greatest difficulties in ice breaking were always experienced in the milder weather especially after a period of great cold. The intense frost appeared to hold the ice which was afterwards let free to be carried from immense distances by wind and tide.'

Mr. Woodyatt's notes to Prof. Barnes, of his observations on board the *Stanley* during each trip made between Georgetown and Pictou from December 31, 1908, to February 20, 1909, contain information respecting the ice conditions and the manner

in which the *Stanley* behaved in the various formations of ice. The temperature, tides, winds, snow storms and rain all had their effect upon the progress of the steamer. On some trips the natural forces greatly retarded the progress of the steamer, in other cases the *Stanley* made her way across the strait with surprising ease. The following quotations taken from the notes of Mr. Woodyatt will serve to show the nature of the ice and afford a pretty accurate conception of the work which this fine little steamer has been engaged in during the winter season since 1888:—

'December 31, 1908.—We made the passage without much trouble, but struck several large pieces of "pan" ice. ("Pan" ice is the name given to the large rafts of hard firm surface ice which drift about with the wind). There was a clear sea along the southeast of Prince Edward Island and in Georgetown harbour.'

'Saturday, January 2, 1909.—Left Georgetown 7.00. Arrived Pictou 10.30. Sun very bright with practically no breeze. We struck hard ice south of Pictou island, and were delayed about 20 minutes getting through one big "pan." The boat could not split this, but had to pound through it. Sometimes the boat almost came to a standstill. All this ice had come down by the tide, as the *Minto*, which passed the same spot an hour before, reported no ice worth speaking of. The ice was about one foot thick, but very hard, owing to the low temperature. The shoving of the wind and tide piles the ice up in even layers, making a very solid mass.'

'Friday, January 15.-The partially formed ice came down with the tide this' morning, and although we struck very little ice with any solidity, we ran through this slushy formation (known as "lolly") most of the trip. It forms in flat disks of varying diameters from 3 or 4 inches up to as many feet. These are about  $\frac{1}{2}$  inch thick. The space between the disks is filled with slush. In some cases the slush has cemented them together, but a very slight movement of the water breaks them apart. The continual movement of the water piles these disks on top of each other, and joins others on, always increasing the size of the pan, and this process forms what the captain and others describe as bad ice, but at present it has practically no effect on the speed of the ship. At first there appears a sort of thin slush on the surface. Its appearance resembles oil on water when some distance away. It has a surface tension, however, as shown from the fact that the sea from the ship does not break it up as it does the solid ice. This slush forms into little disks about 4 inches in diameter, which gradually grow in diameter. These disks have no power of cohesion, and the wind and movements of the water push them all around until several are piled half on top of each other, making pieces about 2 feet in diameter, the intervening spaces between them being filled with the slush. The water lapping up against these deposits the slush along the sides, making little ridges on top and along the borders. With these slushy edges the little clumpets seem to cohere, and as they are continually on the move, more and more pieces come together and stick, but a small wave will pull them apart or slide them on top of each other. The intervening slush hardens and cements the surface, giving the ice a chance to grow, which it apparently does very rapidly once this stage is reached. The tide is very strong in the strait and the ice is moved about continually, which keeps the cakes broken up into small areas, which it is no trouble to the boat to split, acting as a wedge.

'Tuesday, January 19.—The wind was very cold to-day, and though most of the trip was through open waters, we had to break through several large pans. The ice was clearer and more brittle. It appears to be of the lightest green in colour, and cleaves perpendicularly to the surface. This ice is evidently not joined in the method described before, as it is more glassy and less powdery, but it is the result of very cold weather on still water. We got jammed twice in "pans" of hard ice, there was apparently no give at all; the ship pushed in and forced the ice down, but gradually lost headway and stopped. A second trial after going astern a hundred yards'

or so was all that was necessary in each case. This was the first real ice crushing that has been done so far. The pans were large enough to resist splitting, that is, the ship could not start a crack that would extend to the border and thus divide the pan, so the boat had to crowd through. The stern tanks were filled, lowering the stern deck below the wave set by the wheel, the bow thus elevated rode up into the ice and cracked it. It would crack off a piece on either side about twenty feet back. The edge of this piece in this position took up much less horizontal space, leaving an amount of open water for the boat to float on, while the main body of the pan remained intact. This and the splitting are the only two natural ways of the ships obtaining a free surface of water. After the ship passes the pieces right themselves, and 50 yards astern the path is completely blocked. Once we ran far enough in to be squeezed so tight that it took some little time to loosen.'

'Monday, January 25.—The winds of the last couple of days had jammed the ice in betweeen Pictou island and Pictou harbour, and yesterday's cold weather cemented it. We ran about two miles out of the harbour and then came up solid. The ice was piled high, big cakes on top of each other, and these were impassable. There were large pans of ice of diameters varying from a few feet to a quarter of a mile; these were flat, but at their edges where they had been grinding each other big pieces were broken off and turned up, giving the pack the appearance of a lot of fields divided by rough fences. The pans themselves, though sometimes two and three feet thick, were not so hard to negotiate, but the barriers, consisting of ice "rafted" high above water, and very deep below, were simply impossible. The air was very cold and the ice brittle, but it was too solidly jammed by the rising tide for a crack to extend very far. The tide on the rise was making the ice run and carrying us with the ice. The ice at the edge of the fields could be seen "rafting" over and under the surface and piling up, the process being accompanied by very loud groans and the movement and sounds causing a very weird effect. Sometimes the ship would get caught in between two of the fields, then the ice would pile up against the side and jam her so that she could not move either ahead or astern until the ice shifted again. Finally the fires were burned down to wait for the tide to change. Until 1.00 this rafting and groaning kept on, and the ship wedged tightly in the packed ice was moved around it. At 1.00 the tide commenced to ebb, and then, as if by magic, big stretches of clear water opened out of the solid ice, and by skilfully taking advantage of these leads we rounded Pictou island and were past the worst part.'

'The wonderful effect of the tide upon the ice was the most interesting part of the day's experiences. It was hard to believe, after observing the ship make so little effect on the ice, to see the ice suddenly and silently disappear from sight, and disclose big stretches of clear water. The tide runs very fast at this point and the ice is carried three or four hundred yards in a very short time. The silent disappearance or rather opening up of the ice with the tide in the ebb stands out in contrast with the roaring and jostling of the ice when the tide is coming in. We arrived in Georgetown at 4.20, making the longest run of the season.'

'Wednesday, January 27.—The snowstorm ceased, and the day became clear. The wind was still strong from northwest, which was very unfavourable for us. We got under way on the beginning of a favourable tide. A favourable tide is one which tries to drive the ice against the wind, the result being a loosening of the pack. The Stanley did splendid work. Through 8 inches of hard, clear pan ice, she could make from four to five miles an hour. This ice was turned under to make way. In the softer lolly, there was more trouble. Great areas of lolly would cling to the sides and greatly impede progress. Sometimes as much as two feet of the ice on her side would be coming along with us. This clinging is not as if the lolly were frozen to the sides, but is more like the adhesion of packing snow. The snow that had fallen made the going bad, especially in the looser parts, where the water had washed it and turned it into slush. In the afternoon we were fighting westward about two miles north of Pictou island, trying to make the east end of it. We struck a big pan of ice extend-

ing right up to the Island shore. This ice was about 10 inches thick. After driving through it for a quarter of a mile, we started a crack that ran ahead as far as could be seen (three-quarters of a mile at least).'

'Thursday, January 28.—The ice was clear and hard, but as before the ship made far better progress in the clear hard pans than in the broken lolly-covered debris.'

'Friday, January 29.—The Stanley has never done better work. With no open water in sight she battered along, through pans, barriers, and lolly, backing, turning and manoeuvring, but always getting on. She turned down three feet of solid, hard ice from the big pans and went rapidly through anything under a foot at a good five miles an hour. We were smashing through an 18-inch pan (extending for about two miles) when the tide started to move the ice. The pan we were in came together and nipped us, so that we could not move an inch either ahead or astern. This jamming is wonderful. The ice lifts the ship and presses until you can feel the plates springing.'

'Wednes lay, February 3, 1909.—The ice was rafted up and grounded at the sides making a solid mass. It was all made up of broken pieces, turned and thrown into every position and cemented together. It thus had no lines of cleavage, and there was no splitting it. It just had to be knocked away, and ground up little by little, until finally a path was knocked through it, and the ship passed. Once past this barrier we found the ice opened up in a most unaccountable way. The ice was very heavy and covered with snow, making it very hard to get through, but the fields had been so divided by the strong flood tides that we had no trouble at all, following the leads, until we struck the open water off Cape Bear, when it was clear sailing into Georgetown where we arrived at 12.30.'

In the summing up of the notes of observations in the Strait of Northumberland, Prof. Barnes furnishes some valuable information upon the coming together and parting of the ice, the effect of higher and lower temperature upon the movements of the ice and the cause of the formation of lolly which accompanies hard ice. Some thermograph records are given and the effects of sudden changes in the weather are described. He states that, 'The ice troubles experienced by the Stanley were found to invariably occur on days of higher temperature following a period of colder weather. Prolonged cold weather had little or no influence when compared to the effect of a rise of temperature. This is what might be expected, for it is during the cold weather that the ice is formed, extending out from the shores and remaining securely frozen so long as the temperature is low. When, however, mild weather followed, this ice became loosened and was carried about by wind and tide. Prolonged mild weather cleared away the ice by rotting and melting it until no ice was found. which is an accompaniment of the hard ice is formed by spray and wind agitation on the surface in the proximity of the large fields of ice when the presence of the ice keeps the water at or near the freezing point. During very cold weather with no sun the lolly is formed everywhere on the surface and mixed with snow, is blown together in large masses. From the thermograph records obtained by Mr. Woodyatt, it is found that after the mild weather of January 10, 11 and 12, when the temperature was almost entirely above the freezing point, the colder weather of January 13 and 14, found no ice at all in the straits. On the 14th, a sudden rise of temperature from a minimum of 15° F. the day previous to 42° F. brought out masses of lolly and field ice. A second cold dip to O° F, on the 17th followed by a rise to 43° F, on the 18th produced large pans of ice on the 19th when the temperature fell again. Cold weather with a strong wind from the north on the 19th made the 'pan' ice very brittle and difficult to split and produced lolly in such quantities as to stop the ship entirely on

the 20th during a rise of temperature to the freezing point. The north wind is always accompanied by great dryness which produces a marked influence on the strength of the ice. Open water was experienced on January 23, although the temperature was 10° F. owing to the effect of two days of mild weather, when the temperature reached as high as 48° F. on the 22nd. Increasing cold weather followed from the 23rd to the 25th, but no trouble was experienced until milder weather which commenced at noon on the 25th and remained just below freezing until February 6. During this time a small rise and fall in temperature formed and again loosened the ice until the conditions became so bad, accompanied by adverse wind and tides, that the Stanley was very irregular in the trips. On February 8, after two days of mild weather above freezing no ice was found in the straits. A cold dip on the 8th, 9th and 10th followed by a rapid rise at noon on the 10th caused much trouble. Very mild weather on the 11th found no ice at all. On February 17, a rapid rise of temperature after cold weather caused a great deal of trouble again from masses of lolly so great as to stop the ship. On February 20, mild weather following a cold dip again caused much trouble from lolly.'

## ICE-BREAKING IN THE ST. LAWRENCE RIVER.

The work of the *Montcalm* at what is termed the ice bridge at Cap Rouge in the St. Lawrence river, is described in the report of Prof. Barnes. Mr. Woodyatt, his assistant, began his observations on February 20. The steamer commenced at the ice bridge on January 12, and up to February 26, had made considerable headway in the heavy ice which had accumulated at Cap Rouge. A few extracts from notes of Mr. Woodyatt will convey a pretty general knowledge of the work of the *Montcalm*, the nature of the ice and show that the conditions were quite different from those which existed in the Northumberland strait. The work of the *Montcalm* was remarkable for the immense quantity of ice removed. Each day's work was similar to the one preceding with the exception of interruptions caused by the wind, weather and tides. The channel cut was about 1,200 feet wide which gave the steamer room to work and permitted the ice as it was detached from the main body, to float down stream.

'Friday, February 26.—The Montcalm left dock at 11,00, just at high water, and proceeded up the river to the ice bridge. When she started work at the beginning of the season the bridge extended down as far as the piers of the Quebec bridge. The Montcalm has been cutting a channel about 1,200 feet wide through the centre of it. The ice we were working in this morning was about three feet above the surface, and from 15 to 20 feet below. It consists of a tightly jammed mass of broken ice and snow. The ice is a great deal glassier than the salt water ice, and much more brittle. It parts or cracks with a report, and the thin shell ice, as it is borken by our sea, sets up a rattle which is entirely missing from the salt water ice of the same kind. The Montcalm bangs at the ice and, on hitting fresh unbroken stuff, goes into it for about 30 feet. If no large crack appears, another drive is taken in the same place but if a crack appears, the next drive is taken so as to shake the piece off. The size of the pieces separated vary, up to about 30 feet across. The ice floats away with the ebb tide and does not bother us any more. The Montcalm has been handicapped considerably so far this season by the fact that her boilers have been undergoing repairs, so that she has never had more than three out of the four in service at one time. At the first of the bridge the ice was about 15 feet out of water in a great many places and progress was slow, at the rate of about 50 feet per day (1,200 feet wide), but now we are doing between 200 and 300 feet per day. The fore tanks are all filled and the

bow well down, in contrast with the fighting trim of the Stanley. They are afraid to run up on the ice as it might be too thick to crush, in which case she would stick until they could shift the water ballast. She does not turn the ice under, but rather crushes it sideways, the ice crumbling into snow and piling up on each side of the bow. On reversing she slides away without any sticking, other than a slight mechanical one when she runs up a little too far.'

'Monday, April 5.—Left at 6 a.m. The sun became very hot. The river in front of Quebec was full of ice, the remains of the bridge and the battures. We found the ice loose up to Cap Rouge and from there up to a point about four miles below Pointeaux-Trembles, the river was clear. At this point we ran into the board ice about one foot thick and floating about one inch above the water. The stream is covered with this kind of ice as far up as the Richelieu Rapids where there is a clear space. ice is covered with alternate patches of thin snow and water (probably from the melting of the snow). It is very clear and glassy and has all the colours from green to light blue. In some places it is honeycombed. The Montcalm is altogether unsuitable for this kind of ice. She crowds into it for distances varying from 150 to 400 feet, according to headway and steam and brings up solid. The Stanley would travel through this at from four to five miles an hour. However, there is a very strong current, five or six miles an hour, and that holds her back considerably. She does not crush the ice as the Stanley does, but tries to split it, and as there is no give to the ice, it being solid to both shores, she wedges herself into it. Instead of the ice turning down as it did when the Stanley got into a pan it rises and squeezes the ship. By backing and driving all the time we cut a passage our own width up to a point about a mile above St. Antoine church and then turned back. We found clear water on our way back until we got below Quebec bridge when we found the river still full of large pieces of floating ice, as in the morning.'

In summing up the work of the Montcalm at Cap Rouge, Prof. Barnes describes the manner in which the steamer negotiated the immense jam of ice and the cause or causes of the accumulation. Frazil is referred to and its action upon the steamer when endeavouring to force her way through it. He describes its formation, the great quantity, elasticity and adhesiveness of this troublesome ice and indicates a method by which a steamer may overcome it and clear herself. He states, 'It is sufficiently evident that the performance of the Montcalm was very satisfactory, and that she succeeded in enabling the ice to move out of the river much earlier than usual. No trouble to speak of was experienced at any point below where the ship was working. The only trouble was from the large pieces of ice cut off being blown back by wind and carried by the tides. This condition need not have occurred had the Montcalm been put to work earlier in the winter, before the ice jam at the narrow part of the river below Cap Rouge had formed. It was but the work of a few days for this jam to form and during that time the ship was not at work. It seems highly probable that the ship could have prevented the bridge from forming and thus allowed the masses of ice coming down from above, to be carried down the river. The ship had no trouble in keeping the river clear below the cut. There seems to be little reason why one or two powerful ice-breakers should not be able to keep the river clear from Quebec to Lake St. Peter at least. One difficulty might be encountered in the masses of frazil that would be forced in the open water. No form of ice gives the ice-breaker so much trouble as frazil or lolly ice. The ship is practically helpless when surrounded by masses of this material, chiefly from the difficulty of gaining sufficient water to float. It masses under the ship and by its buoyancy, and in cold weather its adhesiveness, pushes up and sticks to the plates. In the Northumber-

land straits the *Stanley* was time and again completely stopped from the clinging of this ice. An observation made by Mr. Woodyatt on April 10, when stuck in the frazil, may help to indicate a way in which a ship may get free of this ice.'

'The presence of the frazil is always observed to lift up the surface ice. As soon as the surface sheet was carried off by the blow of the ship the frazil rapidly floated up and filled the opening. In so doing it surrounds the ship and squeezes out the water necessary for the ship to float. When in this condition it was observed that the frazil became rapidly melted and loosened on each side just at the point where the circulating water was discharged. The writer has shown elsewhere that frazil is easily disintegrated by a very minute temperature elevation in the water, which is so small as to have absolutely no effect on an ordinary thermometer. With the discharge water at 60° F. it was evident at once that this was sufficient to raise the temperature of the water high enough to disintegrate the frazil at and below the point of discharge. Had the circulating water been carried up to the bow of the ship and discharged there it is evident that the frazil from the bow aft would have been rapidly loosened and sufficient water available to float the ship away. The writer feels that an ice-breaker equipped with steam injectors at the bow would always be in a position to loosen the lolly or frazil and never be seriously impeded by it.

'The hydrograph records made by Mr. Woodyatt seem to indicate on a day of low relative humidity, when the evaporation of the ice and water is rapid that the ice is more resistant. At present, however, there is not sufficient data to definitely prove this point. It is a most unexpected phenomenon and deserves more careful investigation. A very large amount of heat is absorbed in the evaporation of a pound of ice or water at the freezing point, considerably more than the evaporation of a pound of water at the boiling point. Hence when evaporation is rapid as we know it to be over the surface of ice and water, the ice is more easily cemented together and the water is more rapidly congealed.'

# LIFE SAVING SERVICE.

Monthly reports from the coxswains in charge of the life saving stations were received and the number of drills indicated. There were no casualties of importance reported, consequently the boats were used only for drilling purposes.

The motor life boat stationed at Banfield on the west coast of British Columbia broke from her moorings in a storm and became a total wreck on Robber island, Barkley Sound. It was determined to withdraw the crew from the station, but before they left they were instrumental with the assistance of the crews of the *Leebro* and *Tees*, in saving the lives of nine of the crew of the American schooner *Sequel* on January 24, 1909.

The surf boat belonging to Clo-oose station was sent to Banfield station and is in charge of a keeper.

Work was resumed on the west coast trails by a force of twenty men who were engaged in constructing the road and building bridges over the ravines. Twelve miles of road were completed during the year.

There are now 34 stations in the Dominion and they will be found enumerated with the kind of boats used, as usual, in the statement now in the report of Admiral Kingsmill, which forms Appendix No. 19 of this report.

## WRECKING PLANT.

The yearly subsidies were paid to contractors when they became due and proof shown of the maintenance of the plant, in readiness to render assistance in cases of casualties to vessels. The amount of the subsidy to each contractor is \$10,000 per annum, paid semi-annually.

The contracts were made for a period of five years with each contractor. For the Lower St. Lawrence the contract was made with Messrs. Geo. T. Davie & Sons, Lévis, P.Q.; headquarters of the salvage plant, at Quebec; for the maritime provinces with the Dominion Coal Company, headquarters of the salvage plant, North Sydney, C.B.; for British Columbia, the British Columbia Salvage Company, headquarters for the salvage plant Victoria.

The following is a list of vessels assisted or salved by the plant of Messrs. Davie & Sons during 1908.

May 12, towed ss. Ottawa into graving dock after collision on the way between Quebec and Montreal. May 19, salved the D.G.S. Montcalm, sunk at Pointe-a-Carcy wharf after collision with the Milwaukee, and towed the vessel to graving dock; July 1, assisted ss. Amethyst which had been ashore at Goose island, to Quebec; August 15 salved ss. Portsmouth, ashore at Cap Chatte and towed her to Quebec; August 30, towed steamer Murray Bay from Tadousac to Sorel. September 6, salved ss. Gustaff Adolphe and towed her to Quebec from Goose island where she had stranded; September 13, salved ss. Malin Head, ashore Orleans island after colliding with the Corinthian and towed her to port; October 12, salved the ss. Inishowen Head, ashore at Wolfe's Cove; October 6, escorted ss. Ashanti from Madam island to Quebec; November 10, salved bark Cambria, ashore at Ste. Anne-des-Monts, and towed her to Quebec; November 20, proceeded from Quebec to ss. King Edward, ashore at Anticosti, but owing to lateness of season it was decided to let wreck remain until spring of 1909. December 1, proceeded to bark Signi ashore at Anticosti, with surveyors who found vessel submerged and condemned her.

The services rendered by the Dominion Coal Company's wrecking plant is reported as follows:—

February 17 and 18, ss. Louisburg assisted the ss. Mount Temple at Ironbound island. Made three unsuccessful attempts to float the Mount Temple.

April 14 to 20, ss. Cacouna trying to pick up ss. Britz Huel near Cape Sable spent six days searching.

April 20, tug *Douglas H. Thomas* with fire pump extinguished fire on board schooner *Davis* at Louisburg after she was abandoned by crew. Vessel had number of tanks of gasoline on board.

April 15, tug Douglas H. Thomas, went in search of missing vessels after a severe gale. All the missing vessels were located.

April 30 to May 3. Tug Douglas H. Thomas searched for the ss. Norwood, abandoned by crew near St. Pierre.

May 1. Tug C. M. Winch went to the assistance of schooner Ronald L. Smith which was ashore at Flat Point.

May 9. Tug C. M. Winch went to the assistance of the ss. Weymouth which was ashore at Petries Ledge, but the steamer floated before tug's arrival.

May 11. Tug Douglas H. Thomas, towed schooner Pleasantville from Canso to Louisburg. This schooner had become disabled.

May 18 to June 3. Tug Douglas H. Thomas assisted ss. Trold which had been in collision with the ss. Ottawa, from Gaspé to Three Rivers.

July 9. ss. Coban proceeded from Chatham, tug Douglas H. Thomas from Louisburg and ss. Cabot with wrecking outfit from Sydney to the assistance of the ss. Arcola, ashore at St. Paul's island, but steamer was in such a condition that nothing could be done with her.

July 29, ss. Cabot went to the assistance of the schooner Milo at Richibucto.

August 3.—Went to the assistance of the ss. Pors, which was high and dry on the beach at Port Hood. She was floated with the assistance of the wrecking pumps. Tug Douglas H. Thomas, steamers Coban and Cape Breton and a dredge which we had on hire.

August 15.—Tug Douglas H. Thomas went to the assistance of the ss. Bruce, which was ashore at Port au Basque and also offered the Bruce owners the services of the ss. Louisburg, which was then at Sydney. but services were declined.

August 26.—Offered schooner Evande, which grounded near schooner Pond. the services of our tug, but the same was declined, the captain preferring the tug Merrimas, as the same owners were interested in both vessels.

October 5 to 7.—Tug Douglas H. Thomas was in search of the water-logged schooner George Sturges, which was reported near the Magdalen islands, but failed to locate her.

October 27 — Sent tugs C. M. Winch and Douglas H. Thomas to the assistance of the ss. Pors, which was ashore on Petrie's ledge.

December 3 to 7.—Tug Douglas H. Thomas went to the assistance of the Elder-Dempster steamer Bornu, which was ashore at Gaspé.

The report of the work done by the British Columbia Salvage Company contains the number of vessels assisted or salved during the year 1908.

Five days' searching for ss. Otter, reported ashore off the west coast of Vancouver island, with broken tail shaft.

SS. Vadso ashore at Cape Lazo. Arrived at Vadso, January 18, 1908, returned to Victoria with vessel January 27. She was stranded N. 58 E. three-quarters of a mile distant from Cape Lazo, and was full of water; passengers taken off and landed at Union and sent from there to Victoria.

SS. Iroquois ashore at Jack's Point, near Nanaimo, vessel being full of water, was raised, pumped out and brought to Victoria, working four days, from October 27 to 30.

Steamer Owen, sunk at Cowichan gap, raised vessel, pumped out and brought to Victoria, working five days, from November 16 to 20.

SS. Charmer, ashore Vancouver narrows, near Brockton point December 3 to 5, inclusive, dense fog, vessel patched, pumped out and conveyed to Victoria.

Tug Hope, ashore at Boat Harbour from December 5 to December 8. Vessel full of water, was raised, pumped out, patched and towed to Victoria.

SS. Northland ashore at Enterprise Reef, November 27 and 28. Steamer hauled off rocks and towed to Seattle.

# HALIFAX DOCKYARD.

The admiralty dismantled the dockyard and for some time it had received no attention in the way of keeping it trim. The agent of the department recommended 21-3;

improvements in the yard and repairs to the wharfs. For this purpose a number of men were employed in putting the yard in order, removing trees, and mending roadways. Several miles of submarine cable was stored in tanks. Wharf No. 4 was repaired by the removal of decayed portions and a new top put on it.

No. 3 pier has the heavy lifting crane upon it by which the heaviest buoys, moorings and materials are handled in connection with the buoy and lighthouse service. Upon this wharf, einder covering to the depth of 6 inches was placed. His Majesty's naval ships bunker their coal at this wharf from the Welsh coal stored in the sheds. The appearance of the grounds has been greatly improved as the result of the labour employed and the work done.

## INVESTIGATION INTO WRECKS.

The investigations into the cause of wrecks and casualties in 1908 were held as usual, but up to the time of the preparing of this annual report no report containing the judgments of the former Wrecks Commissioner and Assessors has reached the department. The list of casualties into which investigations were held forms Appendix No. 16 of this report.

## WRECKS AND CASUALTIES.

Of sea going vessels 278 Canadian registered vessels with a tonnage of 16,571 were partially wrecked or totally lost and 26 foreign vessels were partially wrecked or totally lost in Dominion waters. Thirty-eight lives were lost and the value of property destroyed was \$1,222,976.

Of inland vessels 27 Canadian registered vessels were partially wrecked or totally lost, with a tonnage of 9,096, and 7 foreign vessels in Dominion waters. Total value of property destroyed, \$340,910.

# METEOROLOGICAL SERVICE AND MAGNETIC OBSERVATORY.

The Meteorological Service and Magnetic Observatory are under the direction of Mr. R. F. Stupart, who has reported upon the operations of the fiscal year ending March 31, 1908.

There are now 445 stations more or less completely equipped for meteorological observations; 410 observers have furnished daily, weekly or monthly reports to the central office. The number of persons receiving pay in connection with the services is 238, of this number 24 are permanently employed in the Central Office, Toronto. At outside stations a few officers devoted the whole of their time to the service, others were employed during a portion of each day and some were employed only to display storm signals. The observers at 39 stations were paid salaries for two or more observations daily and telegraphed to Toronto. At 58 other stations, chiefly in outlying districts, the observers received remuneration for a more or less extended series of observations. Special observations during the summer months were collected at Winnipeg from 25 stations in the western provinces and embodied in a bulletin widely disseminated westward; for this bulletin service remuneration was allowed. Eighty-five persons were paid as storm signal agents and seven for special duties in connection with the time service. Over 200 observers report voluntarily, thereby contributing valuable information regarding the climate of the Dominion.

The work at the Central Office was carried on under difficulties, in temporary quarters, pending the completion of the new meteorological building.

Weather forecasts covering 36 hours in advance and sometimes a longer interval, were issued twice daily, throughout the year. The weather charts on which the forecasts are based have information telegraphed from 37 stations in Canada, 64 stations in the United States and from St. John's, Newfoundland, and Bermuda. Morning forecasts were sent to the ports of the maritime provinces and to the western provinces and then followed a forecast for Ontario and Quebec and published widely in the press as well as being posted at post offices, telegraph offices and other frequented places. The evening weather chart is prepared and a bulletin issued for the press throughout the Dominion except British Columbia, in which province a local officer issues the forecasts, under the direction of the superintendent at Toronto.

During the winter months, a large number of special forecasts were made for shippers of perishable goods. Special warnings of snow and drift were issued to all Canadian railways and electric railways, for night service, in connection with snow blockades. Owners and masters of vessels consult the central office in the fall of the year.

Between April 1, 1908, and March 31, 1909, 1,555 warnings were issued to Canadian ports, 89.8 per cent of which were verified. The number of storm signal stations has been increased. There were fewer storms than in the preceding year, but many gales of more or less severity; 102 out of a total of 131 being in November, December, January, February and March.

Arrangements have been made to supply forecasts and storm warnings to the government of Newfoundland. Full meteorological equipment has been furnished six stations between the Athabaska river and the Arctic sea, namely at Fort McMurray, Hay river, Fort Norman, Fort Good Hope, Fort Simpson and Fort Macpherson. From reports recently received it is evident that valuable data will be furnished regarding the path of storms across America and respecting the mean distribution of pressure in high latitudes.

Tables of predictions and verifications are included in the report of Director Stupart, also the report relating to the Magnetic Observatory at Toronto and Appendices A and B, from the observers at St. John and Quebec and tables showing the difference of times between Quebec, Montreal, St. John and Toronto.

The report contains information respecting solar work, seismology, time service and inspection of stations. It forms Appendix No. 7 of this report. The expenditure for this service was \$124,717.06 for the fiscal year.

# STEAMBOAT INSPECTION.

Canadian registered vessels inspected during the fiscal year numbered 1,680; gross tonnage, 382,170. Vessels inspected, but not registered in the Dominion, numbered 184; gross tonnage, 282,275 tons. The amount of fees collected for inspection was \$7,927.54.

The total expenditure in connection with inspection amounted to \$41,226.47, but part of this expenditure was for Dominion steamers and fog-alarms. The report of the chairman of steamboat inspection forms Appendix No. 9.

#### NAMES OF INSPECTORS.

Name.		 Position.	Residence
Edward Adams			 11
[. J. Olive		0	 St. John, N.B.
Chas. W. Sealey	11	Ð	 Halifax, N.S.
William Evans		11	 Toronto, Unt.
I. R. Davis		0	
Philippe Duclos		11	 Quebec, P.Q.
tephen D. Andrews		11	 Collingwood.
ohn Dodds		11	 Toronto, Ont.
C. W. McKean	11	11	
. B. Stewart	11	H .	
T. P. Thompson		11	 Kingston, Ont.
Vm. Laurie	11	11	 Montreal, P.Q.
. Arpin	11	H	
F. X. Hamelin		11	 Sorel, P.Q.
. Samson		11	 Quebec, P.Q.
P. Esdaile	11	11	 Halifax, N.S.
C. E. Dalton	11	11	 St. John, N.B.
. A. Thompson	11	11	
F. P. Phillips	11	н	
rank M. Richardson	11	11	 Vancouver, B.C.
C. T. Schmidt	11	11	 Halifax, N.S.

## MASTERS AND MATES.

The number of applicants for masters' sea-going certificates who passed examinations were 8; mates, 15, and 8 failed to pass; second mates, 12 passed and 8 failed. Of the applicants for inland and coasting and minor waters certificates 70 masters passed, 21 failed; 93 mates passed and 25 failed; 4 sea-going certificates of competency to masters were issued, 8 certificates to masters inland and coasting, and 2 to mates; 2 service certificates to masters and 4 temporary certificates were issued.

The expenditure during the year for this service was \$8,244.56, and total amount of fees \$4,192.50, showing an excess of expenditure over receipts of \$4,052.06.

The following statement shows the total receipts and expenditure on account of masters and mates since 1900.

			Expenditure.	Receipts.
			\$ ets.	\$ cts
for fiscal year	ended June 3	0, 1900	3,750 69	4,221 50
11	II	1901	3,720 25	4,808 24
		1902	3,305 59	5,288 52
11	11	1903	4,968 36	5,790 50
**	11	1904	7,761 17	4,795 00
н	11	1905	5,884 74	4,643 85
0	11	1906	7,068 15	5,526 00
н	March 31,	1907-8	5,934 16	2,294 50
11	11	1908	11,508 31	4,306 05
11	11	1909	8,244 56	4,192 50
			62,145 98	45,866 16
			45,886 16	
			16,279 82	

The report of Capt. L. A. Demers, chief examiner of masters and mates, forms Appendix No. 14.

## MARINE SCHOOLS.

The report of Capt. Demers, chief examiner of masters and mates, upon marine schools furnishes information respecting the number of lectures delivered and the attendance of seafaring men. Nine examiners of masters and mates delivered 284 lectures and the attendance was 3,998. The lecturers are men of experience in navigation and their lectures contain instruction of a valuable nature to men who purpose undergoing examinations for certificates. The report on marine schools forms Appendix No. 15.

### SICK AND DISTRESSED MARINERS.

Under the provision of the Canadian Shipping Act, chapter 113, part V., s. 384, R.S., dues of 1½ cents per ton, registered tonnage, are levied on every vessel entering any port of the province of Quebec, Nova Scotia, New Brunswick, Prince Edward Island and British Columbia. The money thus collected forme the 'Sick Mariners Fund.' Vessels of the burden of 100 tons and less pay the duty once in each calendar year, and vessels of more than 100 tons registered tonnage three times in each year.

The officers and seamen of all fishing vessels not registered in Canada, do not pay sick mariners' dues nor participate in the benefits accruing therefrom, but such vessels registered in Canada may pay dues and participate in the benefits, and if more than 100 tons, only for the voyage at the beginning of which payment has been made, but vessels shall enjoy the same rights and benefits as are enjoyed by vessels which pay dues but are not engaged in fishing.

The receipts for the fiscal year ended March 31 last, amounted to \$67,483.46; the expenditure for the several provinces for sick seamen amounted to \$54,989.85, and for distressed seamen \$2,004.02; total, \$56,993.87.

The receipts of sick mariners' dues from each of the provinces are as follows:—Quebec, \$17,072.10; New Brunswick, \$10,258.37; Nova Scotia, \$20,108.06; British Columbia, \$19,725.09; Prince Edward Island, \$314.04.

The expenditure for each of the provinces is as follows:-

General account\$ 1,297	29
Nova Scotia	07
Prince Edward Island	58
New Brunswick	09
Quebec	
British Columbia	82
	—
Total expenditure	85

The 'Sick Mariners' Act' does not apply to the province of Ontario, so no dues are collected from vessels in that province.

At the port of Quebec, sick mariners are cared for at the Jeffrey Hale and the Hotel Dieu hospitals, at a per diem allowance of \$1.50 per seaman, including medical attendance and board.

At the port of Montreal, sick seamen are cared for at the General Hospital and at Notre Dame Hospital. The charge per diem for each seaman, including board and medical attendance, was \$1.50.

Marine hospitals are maintained in Louisbourg, Yarmouth. Pictou, Sydney, Lunenburg and Point Tupper, in the province of Nova Scotia; and the sick seamen at Halifax, N.S., are cared for in the Victoria General Hospital for \$1.50 per diem per man, including board and medical attendance.

At Charlottetown, Prince Edward Island, sick seamen are cared for at the Charlottetown and the Prince Edward Island hospitals under arrangements made by the department with the managers of those institutions, \$1.50 per day, same as others.

The marine hospital at Victoria, British Columbia, has a medical superintendent who receives \$600 per annum and a keeper whose salary is \$600 per annum. He is also allowed \$5 per week for the board and attendance of each sick mariner.

At Vancouver, sick seamen are attended at St. Paul's hospital at a cost of \$1.50 per day each.

At St. John, N.B., sick seamen are attended at a cost of \$1.50 per day each.

Where no hospital is maintained in the maritime provinces, Quebec and British Columbia, the collectors of customs are authorized to care for sick seamen when the vessels to which they belong have paid sick mariners' dues.

Statement of receipts and expenditure on account of 'Sick Mariners' and 'Distressed Seamen' from the fiscal year 1900 to 1908, both inclusive:—

Year.	Receipts.	Expenditure.
1900	\$59,971 84	\$32,743 30
1901	59,783 34	34,944 93
1902	65,853 S3	51,827 12
1903	64,851 55	48,151 48
1904	61,778 29	50,801 78
1905	58,372 34	51,000 18
1906	60,183 90	50,120 42
1907	44,704 59	37,362 11
1908	69,364 45	59,957 92

The report of C. H. Godin, M.D., medical superintendent of marine hospital service forms Appendix No. 13.

# INSPECTION OF LIVE STOCK SHIPMENTS.

The inspectors of live stock shipments have reported regularly and furnished a statement of cattle, sheep, horses, hay and grain shipped to the United Kingdom from the ports of Montreal, St. John, N.B., and Halifax.

It will be seen that the total number of cattle, sheep and horses shipped was greater than last year but much less than previous years going as far back as 1902-3.

The shipments from Montreal were as follows:—Cattle, 99,830; sheep, 10,111 and 116 horses. The United States cattle shipped via Montreal were 10,398, but that number is included in the total of 99,830.

The shipments from St. John, N.B., were 22,923 cattle, 151 sheep and 65 horses; of the cattle 220 were United States cattle.

The shipments from Halifax were 3,097 cattle.

The statement of live stock shipments forms Appendix No. 12 to this report.

# REPORTS OF AGENTS OF THE DEPARTMENT.

The reports of the agents of the department at Halifax. N.S.. St. John, N.B., Quebec, Charlottetown, P.E.I., Victoria, B.C., and Montreal were received. These reports contain information relating to the construction of lighthouses, the moving of the steamers under the control of the agents, particulars relating to repairs to lighthouses, the placing of new buoys and maintaining the system of buoys. The works in the agencies where workshops are established are reported upon, also the delivery of lighthouse supplies to the various lighthouses by the agents or superintendents of lighthouses, where there are superintendents. Much detailed information is furnished respecting the operations in these agencies. The correspondence between the department and the agents was large for the year 1908. Instructions were given directly to the agents relating to the carrying out of the work and matters of importance which arose in the agencies were referred to the department for decision.

Attached to each agency are superintendents of lights who inspect the lighthouses and buoys, deliver supplies of oil and other material required for the maintenance of the lights. The Superintendent of Lights for Ontario confines his inspection to the condition of lighthouses and the delivery of supplies above Montreal. His office is at Ottawa.

# LIGHTHOUSE BOARD.

Five meetings were held during the fiscal year and applications and recommendations for aids to navigation in the provinces of British Columbia. Quebec, Manitoba, Nova Scotia, New Brunswick, Ontario and Prince Edward Island were considered. The aids to navigation most urgently needed were recommended for approval.

## MERCHANT SHIPPING.

The regulations with respect to ship's names which came into force on the 1st January, 1908, have been strictly carried out, and the name of every ship registered during the year has been submitted to this department for approval.

Supplements to the 'List of Shipping' were published every month, and those affecting this list and issued up to date are bound with this volume.

The total number of vessels remaining on the register books of the Dominion on the 31st December, 1908, was 7,602, measuring 702,324 tons, being an increase of 74 vessels and 3,636 tons as compared with 1907. The number of steamers on the register books on the same date was 3,084, with a gross tonnage of 483,031 tons. Assuming the average value to be \$30 per ton, the value of the registered tonnage of Canada on the 31st December, 1908, would be \$21,069,720.

The number of new vessels built and registered in the Dominion of Canada during the last year was 304, measuring 28,983 tons register. Estimating the value of new tonnage at \$45 per ton, gives a total value of \$1,304.235 for new vessels. This shows a slight falling off as compared with last year, but the year 1908 was not remarkable for its shipbuilding activity, not as regards Canada alone, but throughout

the whole maritime world. However, despite this, the tonnage on the register books at the close of 1908 shows that Canada maintains her place amongst the maritime states of the world.

The list of vessels is published in the report called 'List of Shipping.' In that report is a statement showing the tonnage of each of the maritime states of the world, and that Canada ranks tenth in the list of countries, but the registered tonnage of the Dominion is not given, owing to the fact that Canadian shipping is included in the tonnage of Great Britain.

# LIGHTHOUSE KEEPERS.

During the year the lightkeepers were classified and the salaries for the last quarter of the fiscal year were paid in accordance with the new classification. The list of light-keepers has been revised and is published in Appendix No. 10 of this report.

# PORT WARDENS.

The port wardens of the Dominion reported at the end of the calendar year. Their reports will be found in supplement No. 1 to this report.

## PILOTAGE.

The reports of the different pilotage authorities for the calendar year 1908 were received. These reports contain statements of the number of vessels piloted within the pilotage districts in and out of port, also financial statements of receipts and expenditures in connection with each district. The rates of pilotage charges under the by-laws will be found in these reports, which are published in Supplement No. 1 to this report.

# MONTREAL HARBOUR COMMISSIONERS.

The report of the Harbour Commissioners, for the calendar year ending 31st December, was forwarded to the department as required by law. The report contains valuable information respecting improvements made during the year in the harbour. The harbour was extended to embrace the water front as far as the end of Montreal island. The total sea-going and inland tonnage of vessels which entered and cleared during 1908 was 5,548,028, being the largest in the history of the port, and 1,092 tons greater than in 1907. The increase in tonnage has been attributed to the improvements in the piers, sheds and in the St. Lawrence river ship channel. The facilities for loading and unloading large steamers embrace all modern improvements. While the average length of time taken in European ports for loading and discharging cargo is 10,000 tons in 14 days, in Montreal 13,750 tons have been handled in three days.

The Canadian Pacific liner Mount Royal discharged 4,250 tons inward and took on 9,500 outward of general cargo in 53 hours. The Allan line Hesperien has been unloaded and loaded in 40 hours. The saving effected by the new facilites has been 22 cents per ton. A floating crane has been added to the equipment for handling heavy machinery.

The financial statement of the commission is included in the report, which will be found in supplement No. 1 of this report.

## TORONTO HARBOUR COMMISSIONERS.

The number of vessels which entered Toronto harbour during the season of 1908 was 3,330, registered tonnage, 1,521,165. The report of the Toronto Harbour Comnissioners is published in Supplement No. 1 of this report.

# QUEBEC HARBOUR COMMISSION.

The Quebec Harbour Commissioners have reported respecting the improvements in the harbour. Three hundred and four vessels of a registered tonnage of 1,335,460 entered the harbour and discharged 206,459 tons of freight, 57,023 tons of coal, and 146,632 tons of grain; 72 vessels of 197,872 tons loaded 72,488 tons of cargo, 70,900 immigrants were landed from the different ocean liners at the immigration station. No records were kept of the cabin passengers. The report and financial statement of the commissioners is published in Supplement No. 1 of this report.

# THREE RIVERS HARBOUR COMMISSION.

The number of ocean going steamers which entered the harbour of Three Rivers was 44 of a tonnage of \$6,000 register, but a large number of barges, canal boats and tugs entered and cleared, amounting to about 160,000 tons. The report of the commissioners is published in Supplement No. 1 of this report.

## SYDNEY AND NORTH SYDNEY HARBOUR COMMISSION.

The number of vessels which entered the ports of Sydney and North Sydney was 2,084, of a registered tonnage of 1,211,557. From these ports were shipped 2,203,298 tons of coal and 22,163 tons of steel rails by water to points outside of Canada. The receipts and expenditure will be found in the report of the commissioners, which is published in Supplement No. 1 of this report.

#### CORRESPONDENCE.

About 43,705 letters were received in the department during the twelve months ended March 31, 1909. The correspondence was carefully filed and replies sent as far is necessary. About 28,000 letters were sent out during the same period. Registered letters inclosing cheques sent out by the accountant's branch, forms, reports, circular letters and notices inviting tenders are not included in the number of letters enumerated, simply the letters inclosing them.

The forms are numerous and require special attention as the matters to which they refer are important. The tenders received are entered and passed upon and tenderers notified.

There has been an increase of about 5,000 letters received and about 8,000 sent out. In the records branch the letters received are carefully examined, entered and placed on file, and the copy of the reply attached so that the letters and replies can readily be seen and any subject easily followed up.

## WIRELESS TELEGRAPHY.

Twenty wireless stations were operated by the department during the year, all of which worked satisfactorily.

The report of the superintendent of wireless stations forms Appendix No. 17.

## SABLE ISLAND.

The annual report of Mr. R. J. Boutillier, superintendent of Sable island, was included in the report of the agent of the department at Halifax.

No known wrecks occurred in the vicinity of Sable island during the year, but White point and Sambro automatic gas buoys drifted ashore in January. The buoys were shipped on board the *Lady Laurier* early in the season.

The life-saving boats and equipment were in good condition. The island was patrolled forty-two times in day and thirteen times at night.

The men's quarters were removed a distance of 100 feet farther south and an addition of seven rooms and concrete cellar walls were built under the main building and the addition. Concrete walls were placed underneath the cattle barn and a concrete floor and other improvements and repairs to buildings were made.

The farming was carried on as usual, but owing to the unusually dry season, the results were not equal to previous years.

The live stock on hand consists of 70 head of cattle, 30 trained ponics, 3 imported stallions, 5 imported mares and 5 hogs. Of the wild ponies, 49 were shipped and 200 remain on the island.

The Sable island staff, consisting of Superintendent Boutillier, keepers of light stations and their families, life boat keepers, wireless telegraphy staff and surfmen, number 41.

The report of Superintendent Boutillier forms Appendix No. 18.

## LEGISLATION.

Section 16 of the Government Harbours and Piers Act, Chapter 112 of the Revised Statutes of 1906, is repealed and a new section substituted relating to leasing to any provincial government, municipal council, harbour commission, shipping company or railway company, any wharf, pier or breakwater under the control of the Minister of Marine and Fisheries.

Section 1 of chapter 30 of the Statutes of 1907, An Act to provide for further advances to the Harbour Commissioners of Montreal, is amended by adding thereto subsections 2 and 3, relating to the interest on advances and time limit for construction.

Section 5 of the Montreal Harbour Commissioners Act, 1894, chapter 48 of the Statutes of 1894, is repealed and a new section substituted defining the port of Montreal; section 2 of the same Act places the port under the jurisdiction of the Minister of Marine and Fisheries.

Section 6 of the same Act is repealed and a new section substituted, defining the harbour of Montreal and limiting the jurisdiction of the corporation.

Section 7 of the same Act was amended by striking out the words, of the port of Montreal and.

Section 19 of the same Act is repealed and another section substituted, relating to the jurisdiction over the harbour.

Paragraph 3, of subsection 2, of section 22, of the same Act is repealed and paragraphs 3, 3A and 3B, substituted relating to the powers of the corporation.

Paragraph (b) of section 26 of the same Act is amended by striking out the word, 'port' and substituting the word 'harbour,' relating to rules for navigation.

Paragraph (c) of the said section of the same Act is repealed.

Paragraph (e) of the said section of the same Act is amended by striking out the word 'port' and substituting the word 'harbour.'

Paragraph (r) of the said section of the same Act is amended, relating to procedure.

Subsection 1, of section 38, of the same Act, is amended, relating to pilotage dues.

Paragraph (a) of section 39, of the same Act, is repealed and another paragraph substituted, relating to seizure for unpaid rates.

Subsection 4, of section 41, of the same Act, is amended by striking out the words, 'for pilotage dues, or is due.'

Subsection 1, of section 44, of the same Act, is repealed and another subsection substituted, relating to special jurisdiction of corporation.

Paragraph (b) of section 13, of the Navigable Waters Protection Act, Chapter 115 of the Revised Statutes, 1906, is amended; section 14 of the same Act is amended; section 16 of the same Act is amended, relating to removal of obstructions; paragraph (b of the same Act is amended; section 18 is amended by adding Part III, Interpretation and General.

The French version of section 851 of the Canada Shipping Act, Chapter 113 of the Revised Statutes, 1906, is amended by adding at the end thereof the words, 'et il peut aussi nommer des adjoints du maître de havre à tout tel port.'

G. J. DESBARATS.

Acting Deputy Minister of Marine and Fisheries.



## APPENDIX No. 1.

# ANNUAL REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT OF MARINE AND FISHERIES.

The Acting Deputy Minister of Marine and Fisheries, Ottawa,

SIR,—I have the honour to submit the following report of the work done in the several services under the supervision of this office during the twelve months ended March 31, 1909.

This embraces work done at departmental headquarters on the construction of lighthouses, lightships and fog-alarms, the supervision of construction and repairs of lifeboats; the administration of the vote for the removal of wrecks and obstructions in navigable waters; tidal and current surveys; and the publication, examination and correction of hydrographic charts; construction of and repairs to fish hatcheries and refrigerators; engineering points in connection with the construction and maintenance of fish-passes; supervision of surveys of oyster beds; examination of applications for foreshore, wharf and other water lots as they affect the interests of navigation; preparation and publication of notices to mariners and hydrographic notes, &c.

#### STAFF.

There is a special staff appointed for the tidal and current survey work; the remainder of the work of the branch is attended to by the general staff of the office.

The following changes have been made during the year in the staff of my office: On September 19, 1908, Mr. F. P. Jennings was appointed a draughtsman at \$75 per month.

On July 20, 1908, Mr. E. M. Longtin, formerly an assistant engineer in my branch, was appointed to succeed Mr. O. Arcand as district engineer for the Montreal district, at a salary of \$1,400.

During the year assistants from the office were sent out to supervise works of construction as follows:—M. de Miffonis, building reinforced concrete lighthouse towers at Cap Anguille, Newfoundland, Father Point, P.Q., and Estevan Point, B.C.; Mr. W. C. Surtees, superintending construction of reinforced concrete beacon at Spruce Shoal, Ont., and reinforced concrete lighthouse tower at Cape Croker, Ont.; and Mr. F. P. Jennings, examining site for construction of a new pier at the Lower Traverse, P.Q.

The assistant engineers appointed to attend to details of construction in the several outlying portions of the Dominion have rendered me valuable assistance, and I wish again to bear testimony to the efficient work done by Mr. Légère in the maritime provinces, Mr. P. E. Parent in the Gulf of St. Lawrence and Mr. J. F. Murphy on the upper lakes; also to the fact that since Mr. Légère was appointed acting agent at St. John Mr. Fosbery has been acting as assistant engineer in Halifax and doing very acceptable work. In consequence of the very great quantity of construction work in contemplation this coming season in British Columbia. it will be absolutely essential that there should be an engineer resident in that province next summer,

and I propose sending my chief assistant, Mr. B. H. Fraser, to the Pacific coast at an

early day to organize the season's work.

Mr. F. McDonnell, of my office, is employed as assistant inspector of fog alarms, and has during the past season been sent to the several stations on the great lakes to make a thorough inspection of the machinery with a view to later overhaul, to bring these stations up to the standard of modern requirements.

#### PERSONAL INSPECTIONS.

Personal inspections of construction work in progress have frequently been made during the year by Mr. Fraser and myself, and it is very desirable that such personal supervision of work should be extended as much as possible in the interests of efficiency. Examination of localities where work is proposed should always be made before the plans are prepared, and in the interests of both efficiency and economy it is to be regretted that the work, lately, has often been so much rushed as to prevent such preliminary inspections.

The principal inspection trips made by me during the past year were to Quebec in April and May last to inaugurate the season's active field work in the lower river; through the Rideau canal route in May to report on an extension of the system of lighting the more intricate stretches by stake lights; to the Georgian bay in June to inspect large repair works required; to the North channel and Lake Superior in August to arrange for new work and report on applications for new aids, and to Detroit in January to arrange for changes in lighting in Lake Erie and Detroit river.

In September I joined Rear Amiral Kingsmill in a tour of inspection of British Columbia waters, when a very thorough examination was made of all localities where aids to navigation had been asked for, where water lots were applied for, and where other interests requiring the care of the Minister of Marine were involved. A large

number of reports have been submitted and acted upon.

On this trip Bela Kula was examined for the first time in my many visits to the Pacific coast, and a varied stock of information accumulated respecting many little known localities on the northern portion of the British Columbia coast. Special attention was given to the needs of navigation in the Grand Trunk Pacific terminus of Prince Rupert, and in its approaches from the Pacific through Brown and Edye passages, and all details are now on hand for placing aids to navigation when the completion of the transcontinental road will bring ocean traffic to this new northern port.

Triangle island was visited and selected as the site of a first-class lighthouse and wireless telegraph station, being the last of a line following up the Pacific coast of Vancouver island. It is a most interesting spot, rising 700 feet out of the open Pacific, perfectly bare, with the rocks surrounding the main island swarming with sea lions. The lighthouse to be built on its summit ought to be the most powerful, as it will be one of the highest, in the world.

## OFFICE WORK.

A large proportion of the work done by the general staff of the branch consists in the construction, repair or improvement of light buildings, fog-alarms, beacons and other aids to navigation. Full details of the work done in this connection during the past twelve months are contained in a separate report which is attached hereto. (In-

Plans and specifications for all important new buildings and repairs, new vessels, &c., are made or approved in this office.

The following table indicates the work done in the drafting office during the twelve months ended March 31, 1909:-

Description of Work.	Plans	Plans	Copies
	Designed.	Received.	Made.
Lighthouse towers and dwellings Fog alarm buildings Details Wharfs, piers, &c Outbuildings Machinery Lanterns and illuminating apparatus Buoys and apparatus Marine hospitals Steamers Land surveys Plans relating to foreshore Miscellaneous	10 42 1 3 - - - - 5	2 1 10 1 3 13 3 1 3 5 26 170 145	185 31 212 9 41 25 2 44 2 2 48 55 255

Total plans for twelve months from April 1, 1903, to March 31, 1909	1,416
Charts received and recorded	
Charts received and entered in chart books	
Photographs received and recorded	347
	35
Notices to mariners issued (comprising 321 subjects)	127

#### PUBLICATIONS.

The work of preparing and issuing notices to mariners continues to be heavy and urgent; during the past twelve months 127 notices, covering 321 subjects, having been published. Amongst important notices, involving considerable labour in compilation, and representing useful work done in the department, are:—

An index to last year's notices; description, plan, sailing directions and list buoys and beacons, Key Inlet, Ont.; description aids to navigation in vicinity of St. Andrews, Passamaquoddy bay, N.B.; hydrographic notes and descriptions of approaches to Prince Rupert, B.C.; position, lights and beacons, North arm, Fraser river, B.C.; and description of islets, shoals, and sailing directions, Brown passage, Chatham Sound, B.C.

During the past twelve months notices relating to waters outside of Canada were issued, covering 14 items relating to Newfoundland and Labrador, 1 item relating to the Atlantic, 15 to the inland, and 4 to the Pacific waters of the United States, as well as 10 notices referring to transatlantic and 3 notices referring to transpacific subjects. No attempt is made to issue a complete synopsis of British or foreign notices, but merely to republish items likely to be of immediate interest to Canadian vessels, or to vessels leaving Canadian ports for the more important or frequented foreign ports.

#### REMOVAL OF OBSTRUCTIONS.

During the past twelve months the following work has been done, under the annual appropriation for the removal of wrecks and obstructions:—

The schooner George G. Houghton, which sank in the month of the Detroit river, about 300 feet north of Bar point lightship, was removed by contract, by the Reid Wrecking Company, Ltd., of Sarnia, Ont., for \$1,975.

The schooner Armenia, which was sunk, in 1906, off Pelee island, Lake Erie, was removed by contract, by the Midland Towing and Wrecking Company. Ltd., of Midland, Ont., for \$5,850.

## HYDROGRAPHIC WORK.

The hydrographic surveys of this department are now in charge of Mr. W. J. Stewart, who will make a special report of the year's progress.

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All hydrographic notes reaching the department are prepared for publication in this office, and embodied in notices to mariners.

In preparing notices to mariners, special attention has been paid to publishing all information obtainable respecting the hydrography of Canada, and the fullest possible sailing directions have been appended to all descriptions of aids to navigation, so as to increase the value of these notices. During the past twelve months the following hydrographic notes were published:—

Affecting the Atlantic Coast.—Derelict reported in Atlantic ocean; description of buoyage in vicinity of St. Andrews, N.B.; local magnetic disturbance Grand Manan island, N.B.; government survey steamer at work in Northumberland strait; experimental fog signal buoys in Halifax harbour approach, N.S.; description of dredging in St. Mary river, N.S.; depth of Green island bank shoal, N.S.; and uncharted rock reported in Lockeport harbour, N.S.

Gulf and River St. Lawrence.—Publication by department of hydrographic charts, St. Lawrence river, No. 9 (Lake St. Peter); No. 17 (Portneuf to Cap Santé); and No. 18 (Ste. Croix to St. Antoine); buoyage alterations in ship channel between Quebec and Montreal; and hydrographic information respecting Red islet bank.

Inland Waters.—Publication by department of new edition of Canadian list of lights and fog signals; publication by department of hydrographic charts No. 101 (Head of Thunder bay to Pigeon river); and No. 102 (Lamb island to Thunder cape); dates to which lights on great lakes will be kept in operation; description of buoyage in Toronto harbour; uncharted rock reported in St. Clair river; improvements and lighting arrangements Meaford harbour; removal of wreck of Armenia off Pelee island, Lake Erie; removal of wreck George G. Houghton from Detroit river; construction of tunnel between Detroit and Windsor; description, plan and sailing directions of Key inlet; and local magnetic disturbance in Lake Superior.

Pacific Coast.—Chart issued of southern approaches to Prince Rupert harbour; position of lights and beacons, and alterations to buoyage in Fraser river; description of buoyage, Nanaimo harbour; hydrographic information respecting Khutze arm, middle and north passages, Skeena river and Prince Rupert harbour; description of Stenhouse shoal and Celestial reef; anchorage notes of Bela Kula; and uncharted rocks and shoals reported off Lawn point; Frederick island; Brown passage; Schooner passage; Table island, and Gabriola reefs.

The usual annual edition of the list of lights and fog alarms in the Dominion, corrected up to April 1, 1908, was issued during the summer, with reprints of the portions relating to the Great Lakes and British Columbia bound separately for the use of mariners in those waters. This list has now become so bulky that it ought to be permanently divided into three portions, and printed only in that form.

I took advantage of my visit to British Columbia in the autumn of 1908 to revise and check the list of buoys, beacons and day marks on the Pacific coast, and found so many changes that it was necessary to rewrite the book. The work, which proved exceedingly heavy, was done during the winter, and the manuscript is now in the printer's hands.

I would again draw attention to the fact that there are no lists of buoys of eastern waters published, and that the time has long since passed when complete lists should be in the hands of mariners for their guidance. The work is a very large one, and I fear that our existing staffs are not sufficiently large to overtake it. To prepare correct lists would require the aid of surveyors with special hydrographic training. Lists

have been printed from time to time of the buoys in the more important waterways, but it seems impossible to obtain precise information respecting the smaller harbours where the buoys are maintained under the contract system.

### ICE-BREAKING.

The work of ice-breaking in Thunder bay and vicinity was continued during the past year. Contracts for the work were awarded, as in previous years, and the work was carried out in a satisfactory manner.

- (1) The Canadian Towing and Wrecking Company, Limited, of Port Arthur, entered upon the second year's term of their three years' contract with the department to keep the harbours of Port Arthur, Fort William and West Fort William open for navigation until December 17, in each year, and to open those harbours each spring in time to admit upward bound vessels to enter the harbours as soon as Sault Ste. Marie canal should be opened for navigation. The contract price is \$30,000 per season, which includes an agreement to remove all lightkeepers in the vicinity from their stations at the close of navigation in each year.
- (2) A contract was entered into with the Midland Towing and Wrecking Company, Limited, of Midland, to keep the harbours of Midland and Tiffin open until the close of navigation of 1908, for \$3,200.
- (3) A contract was entered into with Mr. C. E. Pratt, of Parry Sound, to keep the harbours of Parry Sound and Depot Harbour open until the close of navigation of 1908, for \$300.
- (4) A contract was entered into with Messrs. R. S. Fisher and A. Montgomery, of Collingwood, to keep the harbour of Collingwood open until the close of navigation of 1908, for \$300.

In each of the above cases the work was satisfactorily done, under the supervision of the harbour masters of the respective ports.

#### TIDAL AND CURRENT SURVEY.

This survey, of which Dr. W. B. Dawson is superintendent, has made substantial progress in the tidal branch as well as in the investigation of the currents, and I desire to draw attention in the strongest possible manner to the great practical value to the mariner of the results of the work so ably conducted by this indefatigable officer and his efficient assistants. The work proposed for the summer season was fully carried out. It included the investigation of the currents in Northumberland strait, which is the last extensive area which had not been examined, as well as tidal work at various points of special importance in different regions.

In addition to publications, which are widely distributed, and information sent on request, this survey contributes much assistance to other departments in the government service, and much extra work is done to put information into the special shape required for their purpose. Among the departments thus assisted are the Public Works, the Interior, the Dominion observatory and the Hydrographic branch of the Marine Department.

On the other hand, a quantity of tidal observations taken during surveys made by the Public Works Department or obtained by the hydrographic branch, are worked up by this survey and incorporated in the tide tables where they become available for the use of navigation.

Investigation of the currents.—At this juncture it may be well to sum up concisely what has been accomplished in this branch of the work, in view of the programme originally proposed when the survey was inaugurated, which was the examination of the currents on the leading steamship routes which run so great a distance through Canadian waters before reaching the open Atlantic. This pro-

gramme has now been carried out successfully for practical purposes. Meanwhile the trade of Canada has increased more than 85 per cent the tonnage of ocean-going vessels at our ports having risen from 18,539,534 in 1893 to 34,732,172 tons in 1906. The information obtained has thus become of much greater value than could have been anticipated. The regions examined, with the seasons given to each, may be concisely stated as below, together with the publications that sum up the results, without mentioning the reports of progress in which more detail is given.

Gulf of St. Lawrence. Three seasons of 1894, 1895 and 1896, given to Cabot strait at the entrance to the gulf, the Anticosti region at the mouth of the St. Lawrence and the northeastern angle of the gulf leading to Belle Isle strait. Publication: 'The Currents in the Gulf of St. Lawrence,' describing the currents and explaining

the general circulation of the water in the gulf.

Belle Isle strait; part of 1894 and the season of 1906. Publication: 'The Currents in Belle Isle strait,' with a chart and three plates illustrating the character of the current.

The steamship route south of Newfoundland, season of 1903. Publication: 'The currents on the southeastern coasts of Newfoundland and the indraught into the

larger bays on the South Coast,' with a general chart and eight plates.

Bay of Fundy. Two seasons of 1904 and 1907, given to the lower part of the bay below St. John, N.B., and the steamship routes in its approaches off southern Nova Scotia. Publication: 'Tables of the Currents in the Bay of Fundy,' giving the direction and velocity of the currents, hour by hour, and the time of slack water throughout the region, and a chart of the currents.

Northumberland strait, in the season of 1908. An examination was made at seven points in the strait, and more specially at the three principal narrows where the current is strongest. The surveying steamer *Gulnare* was employed in this investigation, which was carried on for a month longer than the usual season to obtain more complete information.

In addition to these investigations with the surveying steamer, observations in the Traverse on the lower St. Lawrence were obtained from the lightships; during 1896 and 1897 in the upper traverse and during 1900 in the lower traverse. From these observations tables of slack water are published in the tide tables.

By means of the tidal observations of 1900 in the lower St. Lawrence, the former admiralty determinations of the relation between the turn of the current and the tide were reduced to a practical form by bringing them into relation with the tide tables. Special observations of the turn of the current were also taken at L'Islet and Rivière du Loup to check the results. Observations from the White island lightship, obtained by the Hydrographic Survey in 1907, have been treated in the same way.

In British Columbia observations of the turn of the current in the leading passes and narrows have been taken from shore for not less than one complete year; the periods of observation extending from 16 to 22 months. From these a special method of calculation enables tables of slack water to be published for First narrows, Active pass and Porlier pass.

For Seymour narrows, the only observations are those obtained by the United States Coast Survey in 1897. By calculating tide tables for Port Simpson for that year the relation of slack water to the time of the tide has been determined, which gives the best results yet available.

Tidal observations.—The principal tidal stations on the St. Lawrence and Atlantic coasts, including the new station at Charlottetown, have been maintained in continuous operation throughout the year. The Halifax station has been discontinued, as tidal record for thirteen years in all, has been obtained there, which is considerably longer than for any port in the United States. One tidal station on Anticosti island, commanding the mouth of the St. Lawrence, it has been found possible to dispense with. There will thus be in all seven principal stations in eastern Canada; and for six of these

tide tables require to be calculated; namely, for Quebec, Father Point, St. Paul island, Halifax, St. John and Charlottetown. It will undoubtedly be possible to refer all the harbours of eastern Canada to these stations as ports of reference, as the regions commanded by each station have now been defined sufficiently closely to make this clear. The need for so many principal stations results from the complexity of the tides themselves.

During last season, the following additional information was obtained: On the lower St. Lawrence, at Crane island wharf and L'Islet, above and below the Beaujeu channel; the observations being simultaneous with Quebec. These have afforded a much improved basis for the tide tables for this channel, which is the shallowest point below Quebec. Also, further observations at Tadoussac and at Trois Pistoles, in connection with the hydrographic survey. In the Miramichi region, observations at Chatham and Oak point enable data obtained on public works surveys for Newcastle and other points to be utilized. In Chaleur bay, some further information was obtained. Observations were taken at Georgetown, P.E.I., for the benefit of the winter navigation; and further observations were obtained at Pictou for comparison with the movement of the currents in Northumberland strait. Some preliminary observations were obtained in the upper reaches of the St. John river, which will give an indication of value for future work there.

All these observations were taken by means of registering tide gauges, in continuous operation day and night. Several short periods of tidal observations by the Public Works Department were also worked out; and complete information was obtained regarding their bench marks in New Brunswick. The only set of these observations that proved long enough to be serviceable, was for St. Andrews, N.B.

Tide Tables.—The data for the calculation of the tide tables for the St. Lawrence and the Miramichi region have been completely revised, in view of the further observations obtained. For the tide tables for 1910, two additional tables have been prepared; the turn of the current in the Traverse, and tide tables for Prince Rupert, B.C. Also, the pocket editions for Quebec and St. John have been extended, and a new table showing the arrival of the bore at Moncton has been added, as this is much desired. These pocket editions, which were published chiefly for the convenience of the pilot service, have met with much wider appreciation. The edition of the tide tables has now reached a total of 14,000.

The Great Lakes.—A beginning in observations on the lakes has been made, at the mouth of the Go-home river, on Georgian bay. This work will be supervised by Prof. Loudon of Toronto University without remuneration; a small grant for expenses being made by this survey and some special instruments being provided. The record of the water level in Lake Ontario, as recorded at Toronto by the harbour master, is now forwarded regularly to this survey.

It is not expected that a tide of any practical importance will be found on the lakes; but observations of the amount of wind disturbance will be valuable. The wind occasions a wide oscillation or seiche, which is of importance to shipping; as it affects the depth of the water in harbours during storms, to the extent of several feet in some localities. It is thus a question of the reduction of the available depth and even the grounding of vessels; or on the other hand the flooding of wharfs.

Staff.—The investigations of the currents in Northumberland strait were begun under the personal direction of the superintendent, and were left in charge of Mr. S. C. Hayden with the help of an assistant engaged temporarily, as the observations were continuous day and night. Captain T. G. Taylor, the master of the Gulnare, gave valuable co-operation in the work, in addition to his ordinary duties. Mr. H. W. Jones was engaged in the erection and supervision of summer tidal stations. In the winter season, the reduction of the observations and the calculation of the tide tables are made by the same staff; with the addition of Mr. P. M. H. Leblanc, recently appointed.

who assists in the office work. The various members of the staff have often responsible work to do at a distance, in the erection, inspection and repair of tidal stations.

Proposed work.—It is proposed during the coming season to carry forward the tidal investigations in British Columbia, and to obtain further data which are much desired on that coast. In order to leave the staff free for this work, arrangements are being made to utilize the Gulnare in the lighthouse service during the coming season; to assist in overtaking the press of work in that branch.

Respectfully submitted,

WM. P. ANDERSON, M. Inst. C.E., Chief Engineer.

Chief Engineer's Office,

Department of Marine and Fisheries,

Ottawa, Canada, April 1, 1909.

# (Inclosure A.)

DETAILED REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT OF MARINE AND FISHERIES ON CONSTRUCTION, ESTABLISHMENT AND IMPROVEMENT OF LIGHTHOUSES AND OTHER AIDS TO NAVIGATION UP TO MARCH 31, 1909.

To the Acting Deputy Minister,
Department of Marine and Fisheries,
Ottawa.

SR,—I have the honour to submit a detailed report on work done in the construction and establishment of aids to navigation for the twelve months ending March 31, 1909.

# NOVA SCOTIA.

## NEW AIDS TO NAVIGATION.

Amherst Point.—A light was established on the outer end of the government wharf It consists of a Chance anchor lens lantern, elevated on a mast 26 feet above high water, and visible from all points of approach seaward. The work was done by day labour, at a cost of \$124.10.

Eatonville.—A small wooden lighthouse was erected near the government wharf in the harbour. The tower is square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. The tower is 22 feet high from its base to the ventilator on the lantern, and the fixed red dioptric, 5th order, light is elevated 24 feet above high water, and is visible six miles from all points of approach seaward. The work was performed by contract, by Mr. A. H. Dyas, of Parrsboro, Nova Scotia, for \$675.

Mitchener Point.—A lighthouse was established on the marsh south of the point. It is a wooden tower, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. It stands on a square cribwork foundation, and is 42 feet high from base to top of ventilator on lantern. The illuminating apparatus is fixed white dioptric, of the sixth order. The tower was erected by contract, by Mr. L. Mury, of West Arichat, N.S., for \$2,050.

Parker Cove.—A lighthouse was erected on the government wharf, at a point 57 feet from the outer end. It is a wooden tower, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white; and is 22 feet high from base to top of ventilator on lantern. The light is fixed red dioptric, of the sixth order, visible from all points of approach by water. The tower was erected by contract, by Mr. John P. Rooney, of Granville Ferry, N.S., for \$365; and an additional sum of \$45 was allowed him for protection work in front of the tower.

Beaver Island.—A 3-inch duplicate low pressure diaphone plant, operated by two 6-H.P. oil engines, was installed in a wooden fog-alarm building, rectangular in plan, on concrete foundations. The plant was purchased from the Canadian Fog Signal Company, Toronto, for \$2,424, being the price agreed upon for exchanging an old style for a new style plant. The machinery was installed and building erected by day's labour, at a cost of \$3,919.18.

Flint Island.—A 3-inch duplicate diaphone plant, operated by two 12-H.P. oil engines, is being installed in a wooden fog alarm building, rectangular in plan, on concrete foundations. The plant was purchased from the Canadian Fog Signal Company, of Toronto, for \$8,100; the fog alarm building is being erected by day's labour, at a cost to date of \$3,225.72. In addition to above, a reinforced steel concrete tower will be erected next season.

Pugwash Harbour.—Two sets of range lights were established; one at Biglow point, and the other at Steven point. The range lights at Biglow point, in one, lead into Pugwash road to the intersection of their alignment with that of Steven point range. Both towers are wooden buildings, square in plan, with sloping sides, surmounted by square wooden lanterns, the whole painted white. The lights are fixed white, and are shown from catoptric reflectors. The front tower is 22 feet and the back tower 33 feet high from base to top of ventilator on lantern. The Steven point range lead up, from the intersection of their alignment with that of the Biglow point range, to the turn in the channel to the southward, inside the harbour. Both towers are wooden buildings, square in plan, with sloping sides, surmounted by square wooden lanterns, the whole painted white. The lights are fixed white, catoptric. Each tower is 22 feet high from base to top of ventilator on lantern. The work was done by contract, by Mr. L. Mury, of West Arichat, N.S., for \$1,990.

## CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Apple River.—The fog alarm machinery was overhauled and partly renewed, and the old horn was replaced by a diaphone. Two new Robb-Mumford boilers were installed, and a reservoir tank, 20 feet square, built. The work was done by day's labour, at a cost of \$752.35.

Brier Island.—It was found that by placing the diaphone above the building, on a level with the whistle much better results were obtained. The room was, therefore, extended up to encase the diaphone, and a heating pipe installed. The work was done by day's labour, at a cost of \$326.35.

Cape Fourchu.—A new boiler, purchased from the New Burrell-Johnson Iron Co., of Yarmouth, N.S., for \$425, was installed in the fog-alarm building.

Cape Roseway.—The fog-alarm machinery is undergoing repairs, and several of the parts are being renewed. The fog horn engine, recently removed from Cranberry island, was repaired and installed; and the work is being done by day's labour, at a cost, to date, of \$300.

Little Hope.—The steel framed concrete dwelling for the lightkeeper, in course of construction last year, was completed, and other improvements carried out. The work was done by day's labour, at a cost of \$1,357.97.

Mauger Beach.—Extensive repairs were made; 225 feet of cribwork were renewed on the north side of the lighthouse, and several tons of stone ballast placed as riprap; the plank walk between the tower and dwelling was also renewed. The work was done by day's labour, at a cost of \$863.37.

Wedge Island.—About 150 feet retaining cribwork were constructed on southwest side of island, as a protection to the lighthouse tower; the work being done by day's labour, at a cost of \$889.53.

Cap la Ronde.—About 400 feet of retaining cribwork were constructed, as a protection to the lighthouse tower. The work was done by day's labour, at a cost of \$1.194.67.

Ouetique.—Cribwork protection work was placed around the lighthouse tower; the work being done by day's labour, at a cost of \$400.15.

Flat Point.—The lighthouse tower deck was replaced by a new lantern platform, and other changes made to the top framing, to accommodate the new illuminating apparatus. A test is now being made at the station of one of the standard diaphone plants, with a view of deciding on the desirability of installing such a plant in place of the fog whistle now in operation. For this purpose, a temporary building is being erected, and the necessary air compressors and machinery parts installed. The work is being done by day's labour, at a cost to date of \$940.83.

McKenzie Point.—The rebuilding of the lighthouse tower, and repairs to light-keeper's dwelling house in course of construction last year, were completed by day's labour, at a cost of \$579.18.

Cape North.—The double dwelling for the fog-alarm engineer and lightkeeper, in course of construction last year, was completed by day's labour, at a cost of \$2,321.60.

Margaree.—The lighthouse tower and keeper's dwelling house were practically rebuilt, as the old buildings had become thoroughly dilapidated from age. The work was done by day's labour, at a cost of \$1,116.68.

Mabou.—The range mast lights hitherto shown were replaced by permanent towers. The front tower is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. It is 33 feet high from its base to the ventilator on lantern, and the light is elevated 30 feet above high water. The back tower is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. It is 47 feet high from base to top of ventilator on lantern, and the light is elevated 44 feet above high water. The buildings were erected by contract, by Mr. E. C. Embree, of Port Hawkesbury, N.S., for \$2,450.

Pictou Harbour.—The Fraser Farm range lighthouses were removed to new sites, a distance of about half a mile westerly from the old positions. The towers were replaced on concrete foundations and securely anchored. The work was done by contract by Mr. Jas. Arbuckle, of Pictou, N.S., for \$816.

Cape Race.—A new double dwelling for the fog-alarm engineers, in course of construction last year, was completed, and a new storehouse erected. The work was done by day's labour, at a cost of \$2,396.82.

St. Paul Island.—A new 3-inch duplicate fog-alarm plant was purchased from the Canadian Fog Signal Company, of Toronto, for \$3,594; the price agreed upon for exchanging an old style for a new style plant. This it is proposed to erect in a new building at the north end of the island, and to abolish the present fog-alarm, which is worn out, as soon as the new one is ready to operate.

In addition to the above, minor repairs were executed at the following stations:-

Eddy Point, cribwork repairs	\$174.23
George Cape, bracing tower	63 70
Cape d'Or, machinery repairs	107 41
Pubnico, cribwork repairs	256 41

## NEW BRUNSWICK.

#### NEW AIDS TO NAVIGATION.

Fort Monckton.—A lighthouse tower was erected in the old fort near the entrance to Gaspereau river. It is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, the whole painted white. The tower is 33 feet high from base to top of ventilator on lantern, and stands on a square cribwork foundation. The work was done by day labour at a cost of \$1,191.52.

Kouchibouguac.—Two sets of pole range lights were erected at the entrance to Kouchibouguac river. The lights are shown from Chance anchor lens lanterns, hoisted on poles, with small sheds at their bases. The front masts are 15 feet and the back masts 25 feet high. The work was done by day's labour at a cost of \$764.71.

Peck Point.—The wooden lighthouse tower formerly at Ward point was removed to Peck point. A wooden fog-alarm building was also erected there, and the 1-inch diaphone plant, purchased last year, installed. The building was erected by contract, by Mr. Amos Lawrence, of Sackville, N.B., for \$419, and the other work performed by day's labour at a cost of \$489.28.

Reid Point.—A mast light was established on the public wharf at this point on the Kennebekasis river. The light exhibited is fixed white, elevated 24 feet above high water, and is shown from a 7th order Chance anchor lens lantern. The work was performed by day's labour at a cost of \$59.63.

Richibucto.—Range mast lights were established on the north beach, replacing the inner range formerly maintained on the south beach. The front light is elevated 28 feet and the back light 44 feet above high water, both lights being fixed white. The work was done by day's labour at a cost of \$343.59.

Portage Island.—A mast light, to constitute the front light of a range when aligned with the old light, was established on the southern end of the island, and consists of a Chance anchor lens lantern, exhibiting a fixed white light, hoisted on a pole 27 feet high.

#### LIGHT DISCONTINUED.

Anderson Hollow.—The light formerly shown from the lighthouse tower on the shore north of the government breakwater was permanently discontinued.

# CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Machias Seal Island.—A 50-h.p. Robb-Mumford boiler, purchased from the Robb-Mumford Engineering Company, of Amherst, N.S., for \$1,365, was installed; some spare machinery parts were provided, the large reservoir repaired, and the tramway put into good order. The work was done by day's labour at a cost of \$996.S9.

Gannet Rock.—Considerable damage was done by storm to the tramway, which required to be practically renewed. The fog alarm building was also damaged through the same cause and repaired. The work was done by day's labour at a cost of \$775.36.

Swallowtail.—The tramway was repaired; about 75 feet of iron rails and wooden stringers were laid and a concrete bulkhead built at foot of tramway as a protection against storms. The work was done by day's labour at a cost of \$601.80.

Head Harbour.—The lighthouse tower was repaired, a new tramway built and the bridge between fog-alarm building and mainland completed by day labour at a cost of \$1,764.46.

Passamaquoddy Bay.—Further repairs were made to the St. Andrews east beacon pier. When the sheathing was stripped off the pier was found to be in a very bad condition, there being an absence of tie rods, which necessitated very heavy work in rebuilding. The work was done by day's labour at a cost of \$3,405.72.

Wilmott Bluff.—The new wooden lighthouse tower, in course of construction last year, was completed. It is square in plan, with sloping sides, surmounted by a square wooden lantern, and is 42 feet high from base to top of ventilator on lantern. It stands on a cribwork foundation, and was erected by contract by Mr. John C. Palmer, of Kars, N.B., for \$1,060.

Cape Spencer.—A new wooden dwelling for the fog alarm engineer was erected by contract by Mr. J. E. Kanes, of St. John, N.B., for \$1,840, and a coal and oil shed erected by contract by Mr. E. Rourke, of St. John, N.B., for \$340. In addition, 500 feet roadway were constructed between lighthouse and fog-alarm, and repairs made to tower. The roadway and repairs were performed by day's labour at a cost of \$835.92.

Letite.—A new boiler, purchased from the New Burrell-Johnson Iron Company, of Yarmouth, N.S., for \$580, was installed, and some repair parts for machinery provided.

Buctouche.—About 400 feet of close pilework were built as a protection to the lighthouse tower, and the boathouse moved back to a safer position. The work was done by day's labour, at a cost of \$549.39.

Escuminac.—The alterations to the fog alarm building, in progress last year, were completed, and the building resheathed. The work was done by day's labour, at a cost of \$571.64.

Miscou.—Repairs and alterations were made to the lighthouse tower, to accommodate the new illuminating apparatus; the work being done by day's labour, at a cost of \$757.89.

Little Belledune.—A wooden dwelling was erected for the lightkeeper, the work being done by contract, by Mr. S. Gammon, of Bathurst, N.B., for \$1,100.

In addition to the above, minor repairs were executed at the following stations:-

Grindstone island, machinery repairs	\$194 19
Lower Caraquet, additions to dwelling	212 06
Pokemouche, repairs	
Shippigan, cribwork repairs	372 S5

# PRINCE EDWARD ISLAND.

# CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

East Point.—A new wooden fog alarm building, rectangular in plan, on concrete foundations, with reinforced concrete chimney, was constructed; and the machinery erected therein, including the installation of two new 25-h.p. boilers, and several new

machinery parts and fittings. The work was done by day's labour, at a cost of \$5,072.35.

Panmure Island.—A new dwelling house for the fog alarm engineer is being erected by contract, by Mr. J. M. Clark, of Summerside, P.E.I., the contract price being \$1,900.

# QUEBEC.

#### NEW AIDS TO NAVIGATION.

Little Bonaventure.—A light was established three-quarters of a mile eastward of Little Bonaventure river. It consists of a Chance anchor lens lantern hoisted on a pole, 20 feet high, with shelter shed at base. The work was done by contract, by Mr. J. Bujold, of Bonaventure, P.Q., for \$127.

St. Godfroy.—A pole light was established on the outer end of the government wharf at this place, about 1 mile eastward of mouth of Nouvelle river; the light is shown from a Chance anchor lens lantern, hoisted on a pole 20 feet high. The work was done by contract, by Mr. S. Grenier, of St. Godfroy, P.Q., for \$103.

Cap Anguille.—The reinforced steel concrete tower, and wooden fog alarm building, in course of construction last year, were completed, and the 5-inch diaphone plant installed. A large coal shed and boathouse were also erected, and other improvements executed. The work was performed by day's labour, at a cost, this year, of \$6,941.91.

Cape Dogs.—It is the intention to erect, during the coming season, a reinforced steel concrete lighthouse tower, wooden fog alarm building, and double dwelling house. To expedite the hauling of materials, &c., from a very difficult landing place, roadways were blasted from the shore to the sites, and an inclined railway constructed on trestlework. A power-house, for running trams and derrick, was erected, and a concrete wall built at the month of a large gorge, to permit the gathering of fresh water when required. In addition, some of the material for fog-alarm building was purchased, as also the machinery for running the fog alarm plant. The work is being done by day's labour, and the expenditure to date is \$6,433.64.

Crane Island.—The 5-section steel lighthouse tower, in course of construction last year, was completed. (See illustration.) It is square in plan, with sloping sides, surmounted by a wooden watchroom, and an octagonal iron lantern. The tower is 90 feet high from base to top of ventilator on lantern. The old tower was cut down to one story, and capped by a pyramidal roof, to be used as one of the series of telephone stations now being established in ship channel. The new tower was purchased from the Goold, Shapley, Muir Co., of Brantford, Ont., for \$1,184, and was erected by day's labour; the expenditure this season being \$2,055.18.

Ste. Anne de Beaupré.—The two range lighthouse towers, in course of construction last year, were completed. They are wooden buildings, square in plan, with sloping sides, surmounted by square wooden lanterns, each tower being 32 feet high from base to top of ventilator on lantern. The work was done by day's labour, at a cost this season of \$268.93.

St. Pancras Point.—A combined lighthouse and keeper's dwelling house was established. It is a square wooden building with an octagonal wooden lantern rising from the middle of its hip roof, and is 37 feet high from base to top of ventilator on lantern. The light is fixed white dioptric, elevated 82 feet above high water, and visible 14 miles. A storehouse, shed and landing wharf were also erected; the work being done by day's labour, at a cost of \$6,139.30.

#### LIGHT DISCONTINUED.

Cap Charles.—The old lower back pole light was permanently discontinued.

#### CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Belle Isle (N.E. end.)—The cast-iron lighthouse tower was reinforced in concrete, and further strengthened by concrete flying buttresses. A large coal and oil shed was built, and hot air furnaces installed in the lightkeepers' dwelling houses. The work was done by day's labour, and the expenditure was \$8,550.56.

Belle Isle (S.W. end).—The wooden lighthouse tower, from which the low light was shown, was taken down; the old foundation raised 3 feet, and a new circular metal lantern placed thereon. The fog alarm machinery will be improved by the installation of a 12-H.P. Fairbanks-Morse kerosene engine, triplex pump, Clayton compressors, and other machinery parts, which were purchased from the General Supply Co. of Canada, Ltd., of Ottawa, Ont., for \$1,596. A coal and oil shed was also built, and foundations prepared for the new fog alarm building to be erected next season. The work was done by day's labour, at a cost of \$6,995.75.

Cape Bauld.—The new circular cast-iron lighthouse tower, in course of construction last year, was completed, and the illuminating apparatus placed thereon. A new brick chimney was added to lightkeeper's dwelling house, and minor repairs made to the fog alarm building. The work was done by day's labour, at a cost of \$3,255.32.

Cape Norman.—The new double dwelling for the lightkeeper and fog alarm engineer, in course of construction last year, was completed. The old lighthouse tower was razed to the first floor and converted into a storehouse; the fog alarm reservoir was repaired and the building drained. The work was done by day labour, at a cost of \$6,008.72.

Point Rich.—It was found necessary, in order to carry the new heavy illuminating apparatus, to build concrete foundations, on which wooden framework was erected, and carried up all around the outside of the lighthouse tower. The old lantern platform was then removed and new wall plates, &c. laid. A wooden dwelling for the lightkeeper was also erected. The work was done by day's labour, at a cost of \$8,170.05.

Cape Ray.—Repairs were made to the lightkeeper's dwelling house, and a wooden fence constructed around it. The foundations of the coal shed were strengthened, and a trench dug to drain water from fog alarm building. The work was done by day's labour, at a cost of \$2,166.11.

Bird Rocks.—The lighthouse tower was reinforced in concrete and increased 12 feet in height, to clear the obstruction caused by the new fog alarm building. An oil shed, blacksmith shop, and stables were also erected; the work was done by day's labour, at a cost of \$4,493.61.

Heath Point.—The lighthouse tower was increased 30 feet in height, in reinforced concrete, and the extension sheathed in wood. The height of the tower is now 133 feet from base to top of ventilator on lantern. The work was performed by contract, by The Steel Concrete Company, of Montreal, for \$6,095. The tower was hardly completed, however, when a heavy storm damaged the greater part of the sheathing on the old portion of the building, which necessitated resheathing and repainting the tower. The tower was further strengthened by fastening the concrete and stonework together by iron hoops. The repairs and improvements were carried out by contract, by the Steel Concrete Company, of Montreal, for \$2,350.

Cape Rosier.—The lightkeeper's dwelling house was thoroughly repaired, and water piping laid; the work being done by day's labour, at a cost of \$2,403.17.

Cape Magdalen.—The new 3-inch diaphone plant, purchased last year, was installed, and replaces the fog whistle formerly in operation. The work of installation was performed by day's labour, at a cost of \$1,218.99.

Rivière à la Martre.—The lightkeeper's dwelling house was thoroughly repaired, and a new coal and oil shed erected. The work was done by day's labour, at a cost of \$1,691.92.

Father Point.—A new lighthouse tower was erected. It is a reinforced concrete structure, octagonal in plan, reinforced by eight flying buttresses, and surmounted by a circular metal lantern. The tower is 97 feet high from base to vane on lantern, and the light is elevated 91 feet above high water, and visible fifteen miles from all points of approach seaward. The tower was erected by day's labour, at a cost of \$5,855.58.

Bicquette.—A new wooden fog-alarm building, rectangular in plan, was erected, and a 3-inch duplicate diaphone plant installed, which supersedes the steam horn formerly in operation. The diaphone plant was purchased from the Canadian Fog Signal Company, of Toronto, for \$8,500; the fog-alarm building being erected, and the machinery installed by day's labour, at a cost of \$6,662.41, which amount also includes repairs to the lightkeeper's dwelling house.

River Valin.—Two range lighthouse towers were erected, to take the place of masts formerly used to carry lights. The front tower is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, and is 32 feet high from base to top of ventilator on lantern. The back tower is a 4-section steel skeleton structure, square in plan, with sloping sides, surmounted by an enclosed wooden watchroom and square wooden lantern. It is 64 feet high from base to top of ventilator on lantern. The front tower was erected by contract, by Mr. N. Warren, of Chicoutimi, P.Q., for \$570. The back tower was purchased from the Goold, Shapley, Muir Company, of Brantford, Ont., for \$540, and erected by day's labour, at a cost of \$1,546.68, which includes cost of cutting trees and clearing land around front lighthouse.

Pilgrims.—A new dwelling house was erected for the lightkeeper, the work being done by day's labour, at a cost of \$3,534.62.

In addition to the above, minor expenditures were incurred at stations as follows:

Brandy Pots, building shed	\$272 05
Pte. à Bastile, tower repairs	358 12
Domaine, payment for sites, &c	212 30
Hospital Rock, for sites, &c	163 69
Little Metis, repairs	341 99

# MONTREAL AGENCY.

## LIGHT DISCONTINUED.

Ile à la Pierre.—The light formerly maintained on the pier was permanently discontinued.

#### CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Batiscan.—The range lights were moved to new positions, in the axis of the widened and improved channel. A new concrete pier was constructed for the front light. It is 40 feet square at bottom, with battered sides, and is surmounted by a small octagonal iron lantern. A new 3-section steel skeleton tower was provided for the back light. It is square in plan, with sloping sides, surmounted by an inclosed wooden watchroom and square wooden lantern. It is 62 feet high from base to top of ventilator on lantern. The work was done by day labour, at a cost of \$9,832.26.

Port St. Francis.—The steel skeleton tower, from which the back range light is shown, in course of construction last year, was completed by day's labour, at a cost this season of \$1,110.97.

No. 2 Curve, Lake St. Peter.—The rebuilding of piers, which was in progress last year, was completed. Both piers were strengthened by reinforced concrete and steel bars, and a concrete nosing built on upstream end of back pier; a large quantity of stone ballast being filled in around them. The middle pier was rebuilt in concrete to a height of 8 feet above low water, and stone ballast filled in around it. Cast-iron anchor locks were sunk in cement for holding anchors of steel tower which will be erected during the coming season. The work was done by day's labour, at a cost during the present season of \$74,080.46.

Gallia Bay.—Owing to the soft bottom at the sites, the front and back piers of the upper range and the front pier of the lower range settled unevenly. Pilework was driven in around them, the old concrete work picked and reinforced with steel bars, a reinforced concrete belt, 2 feet thick, placed around pilework, and heavy boulders piled around outside of all, to act as a further protection. The work was done by day's labour at a cost of \$6,775.58.

Ile de Grace.—The water having undermined the front pier, pilework was driven around it and riprap placed between piles. The work was done by day's labour at a cost of \$537.30.

Ste. Anne de Sorel.—The water having undermined the front pier, pilework was driven around it and riprap placed between piles. The work was done by day labour at a cost of \$1,193.35.

Sorel.—Water piping and fixtures were laid from the water works to the government wharf and buildings, the work being done by contract, by Mr. W. Coté, of Sorel, P.Q., for \$1,290.

Ile Deslauriers.—A new 4-section steel skeleton tower was erected to replace the back range tower of this range, on the eastern shore of Ile Ste. Thérèse, for the purpose of increasing the difference in height between the front and back light. It is square in plan, with sloping sides, surmounted by an inclosed wooden watch-room and square wooden lantern. The tower is 82 feet high from base to top of ventilator on lantern, and was purchased from the Goold, Shapley & Muir Company, of Brantford, Ont., for \$668.50. It was erected by day's labour at a cost of \$704.76. The old three-section tower has been taken down and will be utilized elsewhere.

Ile à la Bague.—The old octagonal wooden lighthouse tower was pulled down and a new two-section steel skeleton tower erected. It is square in plan, with sloping sides, surmounted by an octagonal wooden lantern, and stands on a square concrete pier with battered sides. This tower was formerly in use at Port St. Francis and is designed for removal every winter. The work was done by day labour at a cost of \$1,107.60.

Varennes.—The concrete wall supporting the steel tower of the back light became unstable, seriously endangering the stability of the tower. Temporary repairs were, therefore, carried out to hold the tower sufficiently until next season, when repairs of a more permanent character will be executed. The work was done by day's labour at a cost of \$946.95.

In addition to the above, minor repairs were executed at the following stations:—

Guard pier, shelter shed	\$	84 39
Ile aux Raisins, repairs to dwellings		
Lake St. Peter lightship, repairs		96 64
Pointe du Lac, purchase of site		75 00
Repentigny, repairs to back tower	1	183 75

## ONTARIO.

#### NEW AIDS TO NAVIGATION.

Rideau Canal.—Lights and day beacons were established on several stretches of the Rideau canal, as follows: 20 lights on River Styx, 10 above Poonamalee, and 4 at Chaffey lock, 13 tripod day beacons below Catchall island, and 4 at Mud island. The lights are exhibited from hand lanterns hung inside tripods at an elevation of from 4 to 6 feet above the water. The lanterns on the starboard hand show fixed red lights, and those on the port hand fixed white, visible at least half a mile in all directions except where obscured by the legs of the tripods. The tripods consist of cedar poles driven in shallow water, with the heads bound together. The tripods were supplied by contract by the Rideau Lakes Navigation Company, Ltd., of Kingston, Ont., for \$1,942.25, which amount included the placing of the lights in their proper positions.

Port Stanley.—A reinforced steel concrete tower is in course of erection on the government breakwater, the work being done by contract by Mr. F. R. Miller, of Port Stanley, Ont., for \$3,850.

Chenal Ecarté.—Two range lights were established on the northern end of Walpole island to lead into this channel. The lights are fixed white, shown from pressed lens lanterns hoisted on poles. The front pole is 8 and the back pole 20 feet high, with small shed attached. The work was done by day's labour at a cost of \$248.46.

Flowerpot Island.—A fog-alarm was established at this light station. It consists of a 4-h.p. standard 1½-inch diaphone plant, purchased from the Canadian Fog Signal Company, of Toronto, for \$2,400. A rectangular wooden fog-alarm building was erected by day's labour, and, with the installation of machinery, cost \$2,010.65.

Hope Island.—The 3-inch duplicate diaphone plant, purchased last year, was installed by day labour, at a cost of \$1,647.40.

Parry Sound.—The departmental wharf for the storing of buoys, &c., and berthing of government steamers, in course of construction last year, was completed, the work being done by contract, by Messrs. Pratt & McDougall. of Midland. Ont., for \$39,700. In addition to above, the ground alongside the departmental agency building was filled in, the work extending some 50 feet into the water, and a small railroad track laid for the purpose of transporting material about the wharf and store. The work was done by day labour at a cost of \$6,046.58.

Spruce Shoal.—The reinforced concrete beacon, in course of construction last year, was completed, the work being done by contract, by Mr. T. A. White, of Parry Sound, Ont., for \$13,373.38. The beacon is octagonal in plan, sloping up from the water to a central tower which holds a gas tank surmounted by a small steel frame with lens lantern; the height of gallery of tower above water is 21 feet.

Point Porphyry.—The installation of the new 3-inch duplicate diaphone plant with two 6-h.p. kerosene engines was completed by day's labour at a cost of \$294.S4.

Welcome Islands.—The new 1½-inch diaphone plant was installed by day's labour, at a cost of \$402.85.

## LIGHTS DISCONTINUED.

Britannia.—The light formerly maintained on the Electric Railway Company's pier was permanently discontinued.

East Neebish.—The upper range lights formerly maintained in the eastern channel of River St. Mary were permanently discontinued.

Footes Dock.—The fixed red light formerly maintained on this dock was permanently discontinued.

Goderich.—The fixed green light formerly shown on the north pier was permanently discontinued.

Meaford.—The fixed white light formerly shown from a lantern on a pole, on outer end of east pier, was permanently discontinued.

Weller Bay.—The back range light, at southwestern end of Quinte carrying place, was permanently discontinued.

## CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Nine-Mile Point.—Alterations were made to the fog alarm boiler room to accommodate an extra 25-h.p. Robb-Mumford boiler, which was installed. A reinforced concrete chimney was erected at the fog alarm building; repairs made to breakwater, and drainage improvements executed to dwelling house of fog alarm engineer. The work was done by day's labour, at a cost of \$2,108.11.

Pigeon Island.—The old combined lighthouse and dwelling was pulled down and replaced by a specially designed 4-section steel skeleton tower, and a separate dwelling. The new tower is square in plan, with sloping sides, surmounted by an inclosed wooden watchroom, and has a spiral staircase, inclosed in cylindrical steel form, constructed from base of tower to watchroom floor. The new dwelling house is a neat wooden building. A new boathouse was also built, as well as cribwork protection work. The steel tower was purchased from the Goold, Shapley & Muir Co., of Brantford, Ont., for \$1,677, and the construction work was carried out by day's labour at a cost of \$3,591.84.

Wicked Point.—Two hundred feet of cribwork was constructed at the northwest end of breakwater, and the breakwater repaired. Minor repairs were also executed to lighthouse tower and keeper's dwelling. The work was done by day's labour at a cost of \$788.95.

Toronto.—A wooden dwelling house was erected for the fog alarm engineer at the East gap station; the work being done by contract, by Messrs. J. D. Young & Son, of Toronto, for \$3,295.78. Protection work was also executed at the east breakwater to ensure the safety of the fog alarm building. The work was done by day's labour, at a cost of \$214.75.

Port Dalhousie.—The back light pier was repaired and foundations of lighthouse tower renovated. The work was done by day labour, at a cost of \$801.25.

Port Colborne.—The interior of the fog alarm building was sheathed, and a wooden floor laid; an oil shed was erected, and some machinery fittings supplied to the fog alarm plant. The work was done by day labour, at a cost of \$713.98.

Stag Island.—A lighthouse tower was erected on the southern end of Stag island shoal, replacing the pole light formerly exhibited. It is a wooden building, square in plan, with sloping sides, surmounted by a square wooden lantern, and is 22 feet high from base to top of ventilator on lantern. The tower stands upon a reinforced concrete pier, square in plan, with battered sides. The work was done by day's labour, at a cost of \$3,403.06. (See illustration.)

Goderich.—The pole and lantern from which the back range light was formerly exhibited were replaced by a 3-section steel skeleton tower. It is square in plan, with sloping sides, surmounted by an inclosed wooden watchroom and square wooden lantern, and is 64 feet high from base to top of ventilator on lantern. The tower was purchased from the Goold, Shapley & Muir Co., of Brantford, Ont., for \$502.80,

and was erected by day's labour, at a cost of \$686.11. An oil shed was also erected by day's labour, at a cost of \$97.54.

Cabot Head.—The fog alarm building and plant were destroyed by fire, in August, 1907. A new wooden rectangular fog alarm building was, therefore, erected, and a duplicate 12-h. p. 3-inch diaphone plant, purchased from the Canadian Fog Signal Company, of Toronto, for \$8,100, installed. The fog alarm building was erected by contract, by Mr. J. C. Kennedy, of Owen Sound, Ont., for \$2,463.

Cape Croker.—A new lighthouse tower was erected. It is an octagonal reinforced concrete structure, surmounted by a circular metal lantern, and is 53 feet high from base to vane on lantern. The work was done by contract, by The Forest City Paving and Construction Company, of London, Ont., for \$1,820.

Owen Sound.—Two new range lighthouse towers were erected, both towers being steel skeleton structures, square in plan, with sloping sides, surmounted by inclosed wooden watchrooms and octagonal iron lanterns. The front tower is 50 feet high from base to top of vane on lantern, and was formerly in use at Point au Baril. The back tower (see illustration) is 82 feet high from base to top of vane on lantern, and was purchased from the Goold, Shapley, Muir Company, of Brantford, Ont., for \$668.50. The towers were erected by day's labour, at a cost of \$1,637.86.

Point au Baril.—The old back lighthouse tower was taken down and removed to Owen Sound, where it now forms the front tower of that range. It was replaced by a new 4-section steel skeleton tower, square in plan, with sloping sides, surmounted by an inclosed wooden watchroom and square wooden lantern, and has the side of the framework facing the channel covered with wooden slatwork. The lantern is painted white; and the watchroom and slats are painted white with a vertical black stripe on the front face. The height of the tower from its base to the ventilator in the lantern is 81 feet. The fixed red catoptric light is elevated 93 feet above the water, and should be visible ten miles. The work was done under contract by Mr. Geo. W. White, of Parry Sound, at a cost of \$570. The steel framework of the lighthouse was provided under contract by the Goold, Shapley, Muir Company, of Brantford, for \$668.50. The total cost of the work to date was \$1,237.

The higher tower was erected here because it was difficult to see the old light when approaching outside the reefs lining the channel in from Georgian bay, and a higher light could be seen over the point of woods and more easily aligned with the front light.

Sailors Encampment.—The two range mast lights were replaced by inclosed wooden towers, square in plan, with sloping sides, surmounted by square wooden lanterns, each tower being 33 feet high from base to the top of ventilator on lantern. The work was done by day's labour, at a cost of \$1,686.71.

Coppermine Point.—A new lighthouse tower was erected, replacing the lantern on open framed pyramid formerly exhibited. It is a wooden building, square in plan, with sloping sides, surmounted by an octagonal iron lantern, and is 32 feet high from base to top of ventilator on lantern. The tower was erected by contract, by Mr. J. C. Kennedy, of Owen Sound, Ont., for \$1,200.

In addition to the above, minor repairs were executed at the following stations:-

Buckom Point, new pier	\$350 00
Collingwood, boathouse	317 5S
Fort William, temporary pole lights	322 02
Lonely Island, tower repairs	. 351 16
Port Burwell, tower repairs	113 62

Red Rock, tower repairs	243	66
Thessalon, oil store	212	79
Victoria Island, tower repairs	284	30
West Sister Rock, repairs to dwelling	298	94
Thames River, boathouse	250	00
Shoal Point, tower repairs	197	51

## BRITISH COLUMBIA.

#### NEW AIDS TO NAVIGATION.

Estevan Point.—A 5-inch duplicate 12-horse-power diaphone plant, purchased from the Canadian Fog Signal Company, of Toronto, for \$12,500, was installed in the new fog-alarm building erected last year. A 100-foot reinforced steel concrete lighthouse tower will be erected next season, and a portion of the steel and other material for this have already been purchased. The work is being done by day's labour, and the expenditure this year, exclusive of cost of diaphone plant, was \$5,833.35.

Cape Beale.—The 3-inch duplicate diaphone plant, purchased last year, was installed, the work being done by day labour, at a cost of \$523.44.

West Coast Trails.—Last year a special appropriation was made in the departmental estimates for establishing and maintaining life saving stations and constructing a pack-horse trail along the west shore of Vancouver Island, between Barkley sound and Port San Juan, and about twenty-two miles of trail were completed. This year the work was continued and the trail extended a farther distance of about eight miles. Owing to the great depth of vegetable matter lying under several portions of the trail cut last year, the road became so soft in places during wet weather that pack horses were unable to travel over it. The trail was, therefore, gone over again, and, wherever necessary, an extra bedding of brush and gravel was laid to remedy the defect. The route of the trail follows the coast line generally, but occasionally strikes off inland where necessary to avoid rocky country or ground over which a trail could not be constructed. The work is being done by day's labour, and the total expenditure to date has been \$93,446.65.

Scarlett Point.—A fog-bell was established. It is suspended in a small wooden tower which was erected by day's labour, at a cost of \$269.75.

Ivory Island.—The installation of the 1½-inch diaphone plant was completed, and several extra fittings and spare parts supplied; the work being done by day's labour, and the total expenditure being \$2,222.39.

Gas-lighted Beacons.—Gas-lighted beacons were established by the Commissioner of Lights' Branch at the following places:—(1) Look-out Island, Halibut channel; (2) Helen point, Mayne island; (3) Walker rock, Trincomali channel; (4) Coffin islet, Oyster harbour; (5) First Narrows, Burrard inlet; (6) White islet, Seechelt peninsula; (7) Ragged island, Lund; (8) Chatham point, Discovery passage. These beacons consist of steel cylindrical tanks, standing on steel framework, surmounted by pyramidal steel frames supporting lanterns. The illuminant is acetylene, generated automatically, and the lights are unwatched lights. No special account was kept of the actual cost of each of these beacons, as the labour on them was performed by the crews of the C.G.S. Quadra and the hired steamer Cascade, as opportunity offered, and took a longer or shorter time as local conditions prevailed. The cost is, therefore, partly included in the payments made for the steamer Cascade and in the wages of the crew of the Quadra, but the cost of the materials used in the construction of these beacons was \$1,623.44.

#### CHANGES AND IMPROVEMENTS IN EXISTING AIDS.

Lennard Island.—Repairs and improvements were executed to the fog-alarm building; the work being done by day's labour, at a cost of \$742.58.

Trial Island.—A new lantern platform was erected on the light house tower and an improved lantern erected, the work being done by day's labour at a cost of \$356.64.

In addition to the above, minor repairs were executed at the following stations:-

Ballenas Islands, machinery fittings	\$51 22
Pine Island, clearing land	60 00
Sisters Island, machinery fittings	51 22
Yellow Island, machinery fittings	51 22

The whole respectfully submitted.

WM. P. ANDERSON, M. Inst. C.E., Chief Engineer.

Chief Engineer's Office, Department of Marine and Fisheries,

Ottawa, Canada, April 1, 1909.

## APPENDIX No. 2.

# ANNUAL REPORT OF THE COMMISSIONER OF LIGHTS BRANCH.

To the Acting Deputy Minister of Marine and Fisheries,

SIR,—I have the honour to submit the sixth annual report of this branch. The principal work performed has been the substitution of modern dioptric apparatus in a number of major coast lights, the improvement of minor coast lights by the installation of petroleum vapour as an illuminant, an extension of the gas buoy and beacon service throughout the various provinces and the maintenance of lights and other aids to navigation throughout the Dominion, together with the installation of what new apparatus was required at new stations.

The gas buoys and beacons have given general satisfaction. Two losses have occurred with regard to gas buoys, one in New Brunswick and one in Ontario. In the New Brunswick district, a No. 11 gas and whistling buoy, serial No. 575, which was stationed at Northwest Ledge, Brier island, broke from its moorings and drifted ashore. The lantern and superstructure were saved, but the buoy sank in three fathoms of water. It is hoped that the buoy can be recovered and repaired. In Ontario a No. 11 gas whistling buoy, serial No. 569, which was stationed at Lone Rock, Georgian bay, disappeared during a storm on November 15, 1908, and has not been recovered.

The submarine bells have given excellent service. When these aids to navigation were first established, some difficulty was experienced in obtaining a serviceable bell, but an improved type of bell was established in the summer of 1907. These bells have been in service since that time and have not required any attention though the submarine cable leading to one of the bells at Negro Head, N.B., failed. This cable will be raised and repaired as soon as weather permits. Four shore stations are in operation—Negro Head, Yarmouth, Chebucto Head and Louisburg—and five lightship stations—Lurcher, Anticosti, White island, Red island and Prince Shoal.

In the Nova Scotia agency the Lady Laurier and Aberdeen have been in use in connection with the lighthouse and buoy service. The buoys on the Bay of Fundy coast of Nova Scotia, from Cape Sable inward, are under the control of the New Brunswick agency.

In the New Brunswick agency, it has not yet been possible to provide a permanent base of operations but it is hoped that this will be accomplished in the near future. Owing to the large amount of work to be carried out, it was necessary to utilize the services of the chartered steamer *Restigouche* for some time in connection with buoy work.

In the Prince Edward Island agency the C.G.S. *Brant* is useful in delivering lighthouse supplies, but is not large enough to handle the larger buoys. The gas buoys were placed in the spring by the *Stanley* and raised in the fall by the *Aberdeen*.

In the Quebec agency facilities for handling lighthouse supplies and buoys are satisfactory. The whistling buoy and bell buoy at the Magdalen islands, which have hitherto been under the control of the Quebec agency, have been put under the care of the Prince Edward Island agency, and a suitable derrick has been erected on the government wharf at Grindstone island for the purpose of handling the buoys.

The Dominion lighthouse depot at Prescott still continues to be an establishment of great usefulness. From the depot is administered the buoy service between Montreal and Kingston. The depot is also a distributing point for apparatus throughout the Dominion, likewise a manufacturing centre for lighthouse apparatus of a special nature. Photometric and other tests are performed from time to time in order to

determine the usefulness of new apparatus or to establish a comparison between various types of apparatus. In connection with the experimenting and manufacturing work, an important advance has been made in the development of a revolving mercurial joint, which makes possible the use of petroleum vapour as an illuminant in conjunction with revolving reflectors. By this means a light of as high power as 48,000 candles can be manufactured at a moderate cost. See plates 1 and 2. Plate 1 shows an elevation of a high power catoptric revolving light in a lantern 10 feet diameter. This arrangement has been rendered successful by the use of the high pressure frictionless mercurial joint shown in plate 2. This revolving joint differs entirely from the familiar mercury seal in that it consists of a series of annular cells containing mercury, the pressure being transmitted outward from one cell to the next through the medium of another liquid of low specific gravity (oil) until the pressure is reduced to atmospheric. A 'six-series' joint, two feet long, is approximately equivalent to an ordinary mercury seal 12 feet long.

The work in the Parry Sound agency consists particularly in the maintenance of the gas buoys and acetylene lights on the Georgian bay. The service is handled by the aid of a derrick scow and chartered tug. The construction of a suitable steamer for this agency is nearing completion in England and it is expected that she will reach I'arry Sound in the course of two months. This steamer will be available for handling lighthouse supplies for the Ontario district. Hitherto these supplies have been

delivered by chartered vessels..

In the British Columbia agency, there has been considerable development. Hitherto only one vessel, the C.G.S. Quadra, has been available and owing to the extensive coast line has proved entirely inadequate. For this reason, it was necessary to charter other vessels for various periods of time. The derrick scow is a useful auxiliary and especially so now that the Newington has been purchased for service in this agency. By reason of the extensive coast line and the rapidly increasing service, the day is not far distant when it will be necessary to add another steamer to the department's fleet in British Columbia.

Please find herewith inclosures as follow:-

Inclosure 1. Statement by provinces showing new aids to navigation established throughout the Dominion, also improvements effected in existing lights in the fiscal year 1908-9.

Inclosure 2. Statement by provinces showing the number of lightstations, lights,

fog alarms and warning buoys in service during the fiscal year 1908-9.

Inclosure 3. Statement by divisions showing the number of gas buoys in service throughout the Dominion during the fiscal year 1908-9.

Inclosure 4. Statement giving complete list of stations at which gas buoys were

in operation throughout the Dominion during the fiscal year 1908-9.

Inclosure 5. Outline chart Atlantic coast of Canada showing quick flashing lights of the hyper-radial, 1st order, 2nd order, 3rd order, 3rd order small model and 4th order in operation during the fiscal year 1908-9.

In conclusion, I desire to express and record my appreciation of the able assistance rendered by my staff and the untiring application to duty exhibited by each member. It would not have been possible to carry out the large and increasing amount of work which is devolving upon this branch without the co-operation of all the officers connected with it.

I have the honour to be, sir, Your obedient servant.

J. G. MACPHAIL,
Acting Commissioner of Lights.

Commissioner of Lights Office,
Department of Marine and

Department of Marine and Fisheries, Canada.

March 31, 1909.

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#### INCLOSURE NO. 1.

Statement by provinces showing new aids to navigation established throughout the Dominion, also improvements effected in existing aids during the fiscal year 1908-9.

#### NOVA SCOTIA.

# New Lights.

Amherst Point.—360° 5th order French lens with brass stand and ring, duplex lamp.

Biglow Point, Pugwash Harbour, Front Light.—240° Chance lens with brass plate and support and Diamond gas automatic occulting machine.

Biglow Point, Pugwash Harbour, Back Light.—Constant level lamp with 20-inch silvered copper reflector.

Eatonville.—5th order 360° French lens with brass stand and ring and duplex lamp.

Maitland.—360° Chance anchor lantern.

 $Mitchener\ Point.$ —360° 5th order French lens with brass stand and ring, duplex lamp.

Stevens Point, Pugwash Harbour, Front Light.—Constant level lamp and reflector.

Stevens Point, Pugwash Harbour, Back Light.—Constant level lamp and 20-inch silvered copper reflector.

## Improvements.

Beach Point, Pubnico Harbour.—A 4th order dioptric occulting white light and new lantern, visible for six seconds and eclipsed for four seconds, alternately, has been substituted for the fixed white, 7th order dioptric light. The illuminant is petroleum vapour burned under an incandescent mantle.

Cape Fourchu.—A 2nd order dioptric single flashing light and lantern, giving one flash every two and one-half seconds, thus:—

Flash	$\cdot 25$	seconds.
Eclipse	2.25	"

replaces the revolving white catoptric light. The illuminant is petroleum vapour burned under an incandescent mantle. Candle power 270,000.

Cape George, Northumberland Strait.—The Catoptric revolving white light has been discontinued and replaced by a third order dioptric triple flashing light having the following characteristic:—

Flash	25 second
Eclipse 1-	00 "
Flash	25 "
Eclipse	00 "
Flash	25 "
Eclipse	75 "

The total period being 7.50 seconds. The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 55,000.

Little Hope.—A 2nd order dioptric double flashing light and lantern has been exected in the new tower, replacing the dioptric 6th order occulting white light which

was placed temporarily. The light is flashing white, having the following characteristic:—

Flash	 	 	 	 	 . $\cdot 4$ seconds.
Eclipse	 	 	 	 	 . 1.6
Flash	 	 	 	 	 4 "
Eclipse	 	 	 	 	 . 7.6 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle-power 270,000.

St. Paul's Island, S.W.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp.

Sambro.—An 85 mm. Chance vapour installation replaces the acetylene light.

Low Point, Sydney Harbour.—The fixed white catoptric light has been replaced by a 3rd order double flashing light and lantern, showing two bright flashes of .25 seconds duration, separated by an eclipse of .75 seconds, followed by an eclipse of 3.75 seconds, the total period being 5 seconds, thus:—

Flash	·25 seconds.
Eclipse	
Flash	.25 "
Eclipse	3.75 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 100,000.

Westport.—The catoptric fixed white light has been replaced by a 5th order 360° Chance lens and 25 mm. Diamond vapour installation with brass and iron stand.

Wilmot Bluff.—A 5th order fixed white light supersedes the old catoptric light.

## Gas Buoy Services.

The following new buoys have been placed:-

Low Point, Liverpool Harbour.—Gas and bell buoy.

Pubnico.—Gas and whistling buoy.

Shelbourne.—Gas and whistling buoy.

Sydney.—Gas and whistling buoy.

South East Bay, Sydney Harbour.—Gas buoy.

# Other Aids to Navigation.

Berry Head.-Hand fog horn.

Bon Portage Island.—The bell buoy hitherto maintained at this point has been superseded by a whistling buoy.

Horseshoe Ledge, St. Margaret Bay.—Bell buoy established.

Fishery Point, Sheet Harbour Passage.—Bell buoy established.

Kingsport.—Hand fog horn.

Lockwood Rock, South Coast.—Whistling buoy.

McMillan Point .- Hand fog-horn.

Mad Dick Shoal, Main-à-Dieu Bay.—A bell buoy replaces the steel conical buoy heretofore moored at this point.

Malone Shoal, Spry Bay.—Iron can buoy.

Mad Moll Reef, Spry Bay .-- Iron conical buoy.

Musquodoboit Shoal, off Harbour Island.—Whistling buoy. Iron can buoy has been established half- mile s. 62 w. from Harbour island.

Nixonmate Shoal.—Bell buoy.

Port Latour.—Fairway bell buoy.

Stonehouse.—Iron can buoy.

#### NEW BRUNSWICK.

# New Lights.

Fort Moncton.—7th order 240° Chance lens and brass stand with duplex lamp. Kouchibouguac Ranges.—Front light, anchor lantern; back light, anchor lantern; front light, anchor lantern; back light, anchor lantern.

Portage Island.—240° Chance anchor lantern.

Reid Point.—240° Chance anchor lantern.

Richibucto, Front Light .- 180° Chance anchor lantern.

Richibucto, Back Light.—180° Chance anchor lantern.

# Improvements.

Escuminac.—A 55 mm. Diamond vapour installation replaces the duplex lamp. Caraquet.—The catoptric light has been replaced by a 360° 5th order French lens, and 25 mm. Diamond vapour installation.

Heron Island, Chaleur Bay.—A new lantern and 5th order 360° French lens and a petroleum vapour light has been substituted for the catoptric apparatus heretofore in use.

McMann Point.—6th order dioptric illuminating apparatus replaces the catoptric light.

Machias, Seal Island, near middle of island.—A 55 mm. Diamond vapour installation replaces the duplex lamp.

Machias, Seal Island, S.E. from North Northwesterly light.—A 55 mm. Diamond vapour installation replaces the duplex lamp.

Miscou Island, Chaleur Bay.—A 3rd order dioptric double flashing light and lantern superseded the group revolving white catoptric light. The new light gives two flashes every 7½ seconds, thus:—

Flash	.5	seconds.
Eclipse	1.00	"
Flash	.5	66
Eclipse		

The illumination is petroleum vapour burned under an incandescent mantle. Candle power, 100,000.

Pecks Point, Chicgneto Channel.—The lighthouse formerly at Wards point has been moved here and a 7th order dioptric fixed white light has been established.

Portage Island, Miramichi Bay.—A 4th order dioptric occulting white light and new lantern replaces the old fixed white catoptric light. The new light is visible for 7 seconds with an eclipse of two seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

Swallowtail, Grand Manan.—The 4th order dioptric fixed white light has been replaced with a 4th order dioptric occulting white light, visible for 4 seconds and eclipsed for 2 seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

## Other Aids to Navigation.

Cranberry Point, Lepreau Bay.—A bell buoy replaces the spar buoy heretofore moored at this point.

Prangle Point, Whitehead Island.—A bell buoy replaces the black can buoy hitherto moored at this point.

Gas Buoy Service.

The following new buoys have been placed:-

Quaco Ledge.—Gas and whistling buoy.

Young's Point, Caraquet River .- Gas buoy.

Grassy Point, Caraquet River .- Gas buoy.

#### PRINCE EDWARD ISLAND.

## Improvements.

Blockhouse Point.—The catoptric light heretofore in operation has been replaced by a 360° 4th order French lens, and 35 mm. Diamond vapour installation with adjustable brass and iron stand.

Brighton Beach, Front Light.—A 25 mm. Diamond vapour installation replaces the duplex lamp formerly used.

Brighton Beach, Back Light.—A 25 mm. Diamond vapour installation replaces the duplex lamp formerly used.

Cascumpeque.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp formerly used.

Fish Island, Main Light.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp formerly used.

Indian Point.—A 35 mm. Diamond vapour installation replaces the duplex lamp formerly used.

Point Prim.—The catoptric light has been superseded by a 4th order 360° Chance lens and 25 mm. Diamond vapour installation with brass and iron stand.

Souris, East.—A 35 mm. Diamond vapour installation replaces the duplex lamp formerly used.

#### QUEBEC.

## New Aids.

Bonaventure.-360° Chance anchor lantern.

Cape Chat Wharf .- 360° Chance anchor lantern.

English Bay.—5th order 270° French lens, with brass and iron stands, and a 25 mm. Diamond vapour installation.

L'Ile, Bonaventure.—240° Chance anchor lantern.

New Richmond. -360° Chance anchor lantern.

Percé Wharf .- 180° Chance anchor lantern.

St. Godfrey.—240° Chance anchor lantern.

Three Rivers, Front Light.—4th order French lens and capillary lamp.

Three Rivers, Back Light.—4th order French lens and capillary lamp.

Cape Anguille, Newfoundland.—3rd order dioptric double flashing light and lantern has been erected at this point. The light is flashing white, showing a group of two flashes every ten seconds, thus:—

Flash	.525	seconds.
Eclipse	-350	"
Flash	$\cdot 525$	"
Eclipse 7	.600	"

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power 100,000.

#### IMPROVEMENTS.

Batiscan, Back Light.—Constant level lamp and 20-inch silvered copper reflector. Batiscan, Back Light.—Constant level lamp and 20-inch silvered copper reflector.

Brandy Pots.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp heretofore used.

Cap-au-Oies.—The catoptric fixed white light has been replaced by an occulting white light, visible for ten seconds and eclipsed for five, alternately. The apparatus is dieptric of the 4th order. The illuminant being petroleum vapour burned under an incandescent mantle.

Cape Magdalen, Gaspé Co.—A 3rd order dioptric triple flashing light and lantern has been erected on the new tower, the light is flashing white showing three bright flashes at intervals of six seconds, followed by an interval of 17½ seconds, thus:—

Flash	seconds.
Eclipse 5.	5 "
Flash	
Eclipse 5.	
Flash	
Eclipse	

Complete revolution, 30 seconds. The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 55,000.

Deslauriers.—Constant level lamp with 24-inch silvered copper reflector.

Entry Island.—The fixed white light heretofore shown at this point has been changed to a 4th order dioptric occulting white light, visible for four seconds and eclipsed for six seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

Heath Point, Anticosti.—A first order dioptric single flashing light and lantern has been erected at this point, replacing the catoptric fixed white light heretofore exhibited. The characteristic is as follows:—

Flash	 	 	·21 seconds.
Eclipse	 	 	7.29 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power, 500,000.

Little Metis.—The old alternating red and white catoptric light has been superseded by a 3rd order dioptric flashing white light, showing a group of three bright flashes every 7½ seconds, thus:—

Flash	$\cdot 25$ seconds.
Eclipse	1.00 "
Flash	
Eclipse	1.00 "
Flash	.25 "
Eclipse	4.75 "

The illuminant is petroleum vapour burned under an incandescent mantle. Candle power 55,000.

Rivière Valin, Front Light.—A 7th order 120° Chance lens with duplex lamp replaces the catoptric light formerly exhibited.

Rivière Valin, Back Light.—A constant level lamp with 20-inch silvered copper reflector.

South Traverse, (Temporary).—360° Chance anchor lantern.

West Point, Anticosti.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp used heretofore.

Belle Isle, Newfoundland, High Light.—The fixed white light has been changed to an occulting white light, visible for five seconds and eclipsed for five seconds alternately. The illuminant is petroleum vapour burned under an incandescent mantle.

Belle Isle, Newfoundland, Low Light.—The fixed catoptric light has been changed to an occulting white light, visible for 5 seconds and eclipsed for 5 seconds alternately. The apparatus and lantern being of the 2nd order dioptric. The illuminant is petroleum vapour burned under an incandescent mantle.

Cape Bauld, Newfonudland.—A 2nd order dioptric double flashing light and lantern replaces the alternating red and white catoptric light heretofore shown. The illuminant is petroleum vapour burned under an incandescent mantle. The characteristic of the new light is as follows:—

Flash		s.
Eclipse		
Flash		
Eclipse	11.94 "	

Complete revolution, 15 seconds. Candle-power, 270,000.

Point Rich, Newfoundland.—The revolving white catoptric light heretofore shown at this point has been superseded by a 3rd order dioptric double flashing light, shewing two flashes every 5 seconds, thus:—

Flash	.25	seconds.
Eclipse	.75	46
Flash	$\cdot 25$	26
Eclipse	3.75	24

The illuminant is petroleum vapour burned under an incandescent mantle. Candle-power, 100,000.

## ONTARIO.

## New Lights.

Argenteuil Bay, Ottawa River, Front Light .- 120° Chance anchor lantern.

Argenteuil Bay, Ottawa River, Back Light.—120° Chance anchor lantern.

Cobourg Range, Front Light .- 360° Chance anchor lantern.

Cobourg Range, Back Light-360° Chance anchor lantern.

Sheguiandah Range, Front Light-240° Chance anchor lantern.

Sheguiandah Range, Back Light .- 120° Chance anchor lantern.

Three Mile Point.—200 mm. special acetylene lighthouse lantern and acetylene tank.

Walpole Island, Front Light .- Piper lantern with 8" pressed lens.

Walpole Island, Back Light .- Piper lantern with 8" pressed lens.

## Improvements.

Bois Blanc.—The catoptric light has been removed and a 4th order 360° French lens with a 35 mm. Diamond vapour light installed.

Coppermine Point.—A permanent tower having been erected, a Canadian 5' 6" lantern with a 5th order French lens with brass and iron stand using duplex lamp replaces the dioptric 7th order light heretofore shown.

Cove Island.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp.

Christian Island.—A 35 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp.

Chantry Island.—A 55 mm. Diamond vapour installation and adjustable iron stand replaces the duplex lamp.

False Ducks.—A 55 mm. Diamond vapour installation and adjustable iron stand replaces the duplex lamp.

Fort William.—120° Chance lantern.

Goderich, Main Light.—The catoptric light has been removed and a 4th order French lens with a 25 mm. Diamond vapour light installed.

Goderich, Front Light.—A 5th order 270° French lens with duplex lamp replaces the old catoptric light and the colour changed from fixed red to fixed white.

Goderich, Back Light.—A new constant level lamp with a 24" reflector has been installed.

Griffith Island.—A 55 mm. Diamond vapour installation and adjustable brass stand replaces the duplex lamp heretofore used.

Ile Perrot.—The range lights at this point have been changed from fixed white acetylene lights to fixed white oil lights and are shown from anchor lanterns.

Lamb Island.—The catoptric light heretofore shown has been replaced by a 4th order 360° French lens and a 35 mm. Diamond vapour installation with adjustable iron stand.

Meaford.—Owing to the improvements made by the Public Works Department to this harbour, which necessitated changing the aids to navigation, they have been rearranged as follows:—

1st. A range of fixed incandescent lights on the east side of the harbour, which in one show the best water in approaching, have been erected. The front light is white and the back red.

2nd. A fixed red light is shown from an anchor lens lantern on a post on the outer end of the new extension to the breakwater.

3rd. The hand fog horn will be operated from the west pier, as heretofore.

Mississagi Strait.—A 4th order 240° French lens with a 35 mm. Diamond vapour installation and adjustable iron stand replaces the old catoptric light.

Nottawasaga.—A 55 mm. Diamond vapour installation with adjustable iron stand replaces the duplex lamp.

Oka Wharf.—A 7th order 240° Chance lens and brass stand has been installed.

Owen Sound, Front Light.—A 35 mm. Diamond vapour installation with brass and iron stand replaces the duplex lamp.

Owen Sound, Back Light.—A 35 mm. Diamond vapour installation with brass and iron stand replaces the duplex lamp.

Pelee Island.—The catoptric light heretofore shown has been replaced by a 5th order 360° French lens with adjustable iron stand and duplex lamp.

Pelee Passage.—A 55 mm. Diamond vapour installation replaces the duplex lamp. Point Clark.—A 55 mm. Diamond vapour installation with an iron stand replaces the duplex lamp heretofore used.

Point Edward, Front Light.—The catoptric light has been replaced by a 5th order 360° French lens with brass stand and duplex lamp.

Point Edward, Back Light.—A new constant level lamp with an 18-inch silvered copper reflector has been supplied.

Port Elgin.—A 360° Chance anchor lantern replaces the catoptric light.

Sailors Encampment, Front Light.—A new constant level lamp with 20-inch silvered copper reflector has been supplied.

Sailors Encampment, Back Light.—'A new constant level lamp with 20-inch silvered copper reflector has been supplied.

Salmon Point.—A 4th order 360° French lens with a 35 mm. Diamond vapour installation and iron stand replaces the old catoptric light.

Scotch Bonnet.—A 4th order 360° French lens with a 35 mm. Diamond vapour installation and adjustable iron stand replaces the old catoptric light.

South Bay Point.—A 4th order 360° French lens with a 35 mm. Diamond vapour installation and adjustable iron stand replaces the old catoptric light.

Stag Island.—A 360° 7th order Chance lens and brass stand, with duplex lamp replaces the light shown from the pressed lens.

Stokes Bay.—A new constant level lamp with 22-inch silvered copper reflector.

Thames River, Main Light.—A 5th order 360° French lens with iron stand and brass supports, also duplex lamp replaces the 7th order light.

Thunder Cape.—A 4th order dioptric single flashing light giving one bright flash every 15 seconds, the illuminant being petroleum vapour burned under an incandescent mantle, supersedes the revolving white catoptric light.

Colchester Reef.—A 55 mm. Diamond vapour installation and adjustable iron stand replaces the duplex lamp.

## Gas Buoy Services.

Two new gas buoys have been placed near the eastern cut from Lake Erie to the Detroit river.

Courtwright, St. Clair River .- Gas buoy.

Point Edward, Sarnia.—Gas buoy.

#### OTHER AIDS TO NAVIGATION.

Flowerpot Island (temporary).—Hand fog horn.

#### MANITOBA.

## New Lights.

Warrens Island Range, Front Light.—A 7th order 180° Chance lens and brass stand with duplex lamp.

Warrens Island Range, Back Light.—7th order 120° Chance lens and brass stand with duplex lamp.

Warrens Landing Range, Front Light.—Constant level lamp with 24-inch silvered copper reflector.

Warrens Landing Range, Back Light.—Constant level lamp with 24-inch silvered copper reflector.

Westbourne.—Three Wigham lamps have been supplied the Manitoba Gypsum Company for use on Lake Manitoba.

#### BRITISH COLUMBIA.

#### Improvements.

Cape Mudge.—The fixed white dioptric 7th order light has been replaced by a 5th order dioptric apparatus. The illuminant being petroleum vapour burned under an incandescent mantle.

Discovery Island.—A 4th order 360° Chance lens, Diamond occulting machine and 35 mm. Diamond vapour installation.

Fisgard.—A 35 mm. Diamond vapour installation replaces the duplex lamp.

Pachena Point.—A 1st order dioptric double flashing light and lantern has been erected, replacing the temporary light shown from a lantern on a gas tank. The light is flashing white showing two bright flashes of .44 seconds duration, separated by

an eclipse of 5.36 seconds duration, the total period being 7.44 seconds, thus: Flash, .44 second; eclipse, 1.2 seconds; flash, .44 second; eclipse, 5.36 seconds. Candle power, 450,000.

Trial Island.—The temporary fixed white light has been replaced by a double flashing light of the 4th order, showing a group of two flashes with a short interval between them every 10 seconds. Candle power, 25,000.

# Gas Buoy Service.

The following new gas buoys and beacons have been put in service:-

Casey Point, Prince Rupert Harbour.-Gas buoy.

Dall Patch.—Gas and whistling buoy.

Stenhouse Shoal, Browns Passage, Hecate Strait.—Gas and whistling buoy.

Lookout Island, Halibut Channel.-Gas beacon.

First Narrows, Vancouver Harbour.—Gas beacon.

Holland Rock, Chatham Sound.—The beacon heretofore maintained at Green Top island has been removed and installed at this point.

## Other Aids to Navigation.

Inverness, North Skeena Passage.—Conical steel buoy.

Inverness Cannery, two cables west.—Wooden beacon.

Prince Rupert Harbour Fairway.—The red spar buoy has been removed and replaced by a conical steel buoy.

Shark Spit, Mary Island, Strait of Georgia.—A steel conical buoy, painted red has been moored off the end of the spit, replacing a wooden beacon which has disappeared.

#### INCLOSURE NO. 2.

Statement by provinces showing the number of light stations, lights, fog alarms and warning buoys in service during the fiscal year 1908-9.

	it static	Fog alarm stations.	Lights.	Lightships.	Lightboats.	Keepers.	Diaphones.	Sirens.	Fog horns and trumpets.	Fog bells.	Hand fog horns.	Hand fog bells.	Gas buoys.	Gas beacons.	Whistling buoys.	Bell buoys.	Submarine bells.	Fog whistles.	Fog guns or bombs.
Nova Scotia	246 115 45 209 244 7 80 946	1 - 2 - 2	274 146 72 291 316 10 84 1,193	$ \begin{array}{r} 2 \\ 1 \\ -5 \end{array} $	1	248 125 48 227 212 - 60 - 923	$   \begin{array}{r}     10 \\     8 \\     1 \\     17 \\     \hline     18 \\     \hline     \hline     1 \\     \hline     \hline     65 \\   \end{array} $	1 2 -	$ \begin{array}{c} 3 \\ 6 \\ 1 \\ 2 \end{array} $ $ \begin{array}{c} 3 \\ -5 \\ \hline 20 \end{array} $	5 3 - 2 - 10 - 20	$   \begin{array}{r}     38 \\     19 \\     \hline     12 \\     \hline     36 \\     \hline     \hline     \hline     108 \\     \end{array} $	1 2 1 - 4	36 17 4 95 65 - 17 - 234	- - - - 27 - 27	15 2 3 1 - - 2 - 23	34 14 1 1 1 4 - 4 - 58	1 - 4	$ \begin{array}{c} 7 \\ 2 \\ 3 \\ 2 \\ \hline 1 \\ \hline 15 \end{array} $	1 - 6 - - 7

Besides the above mentioned lights, there are listed in the 'List of Lights,' by provinces, the following number under private control:—

Nova Scotia	1
New Brunswick	1
Quebec	3
Ontario	41
British Columbia	4
_	
Total	50

#### INCLOSURE NO. 3.

Statement by divisions showing the number of gas buoys in service throughout the Dominion during the fiscal year 1908-9.

District.				Type.			
District.	5 & 6	7 & 81/2	9 & 91	11	14	*C	Total.
Nova Scotia New Brunswick** Prince Edward Island*** Platon-Montreal Montreal-Kingston Lake Ontario Lake Erie Thames River St. Clair River Sarnia Goderich Southampton Georgian Bay Sturgeon River Sanlt Ste Marie	7 1	7 11 21 14 33 1 1 4 1 1 1 1 1 1 1 5	3 3 4	15 9	2	9 51	27 25 30 65 40 1
Port Arthur British Columbia		3 7	9	1			17
	14	111	19	28	2	60	23

<sup>\*</sup>Compression.

<sup>\*\*</sup>Nine buoys on the Nova Scotia coast have been included here, as they are attended to by the New Brunswick Agency.

<sup>\*\*\*</sup>One buoy on the New Brunswick coast has been included here, as it is attended to by the Prince Edward Island Agency.

## INCLOSURE NO. 4.

Statement giving complete list of stations at which gas buoys were in operation throughout the Dominion during the fiscal year 1908-9.

# UNDER THE NOVA SCOTIA AGENCY.—DISTRICT No. 1.

tation No.	Name of Station.	Description of Buoy
24	Pubnico.	Gas and whistling.
27	Pubnico Cape Sable, South-west Ledge Brazil Rock	11 11
29	Brazil Rock	0 0
32	Shelburne Lockeport	
35	Little Hope	11 11
37 39	Liverpool	0 0
40	Liverpool Liverpool Fairway	and bell.
45	La Have	11 11
48	Lunenburg	and whistling.
49	Lunenburg, East point Ledges. North-east Shoal	" and bell.
54	North-east Shoal	" and whistling.
60 61	North-east Shoal Sambro. Outer Automatic, Halifax Harbour Inner Automatic, Halifax Harbour Neverfail, Halifax Harbour Thrumcap Middle Ground, Halifax Harbour	[ H H
62	Inner Automatic Halifax Harbour	" "
63	Neverfail, Halifax Harbour	Gas.
65	Thrumcap	" and bell.
67	Middle Ground, Halifax Harbour	Gas.
70	Egg Island	das and winsting.
72	Sheet Harbour. Liscomb.	
76 80	Isaac Harbour	
84	Whitehead	11 11
86	Manager Charles Charl	
90	Carberus Rock Guion Island Louisburg Sidney Fairway or Low Point South-east Bar, Sidney	
100	Guion Island	11 11
102	Louisburg	11 11
108 109	Sidney Fairway or Low Point	Con
		1
	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC	CT No. 2.
4-S.	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC	CT No. 2.
6-S.	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC	CT No. 2.
6-S. 8-S.	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC	CT No. 2.
6-S. 8-S. 10-S.	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC	CT No. 2.
6-S. 8-S. 10-S. 12-S 14-S.	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC	CT No. 2.
6-S. 8-S. 10-S. 12-S 14-S. 16-S.	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC	CT No. 2.
6-S. 8-S. 10-S. 12-S 14-S. 16-S.	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor.	Gas and whistling.  " " " and bell.  " and whistling.  " Gas.  Gas and whistling.
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " and bell. " and whistling. " Gas. " " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " and bell. " and whistling. " Gas. " " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " and bell. " and whistling. " Gas. " " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " " " " Gas. Gas and whistling. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu. Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island. Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " " and bell. " and whistling. " Gas. " " Gas. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 112-S 14-S. 16-S. 3 5 7 9 18 20 31 32 34 40 42 44 46 47	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island Avon River. Old Proprietor. North Wolves.	Gas and whistling.  " " and bell. " and whistling. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 10-S. 112-S 114-S. 16-S. 3 5 7 9 18 20 31 32 344 36 340 422 44 46 47	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu. Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island. North-west Ledge, Brier Island. Avon River. Old Proprietor. North Wolves. Point Lepreau. Partridge Island. Fond Ground, St. John Harbour. Quaco Ledge. Scaumenac, Restigouche River. Point Lanim, Restigouche River. Point Lanim, Restigouche River. Oak Point, Restigouche River. Traverse, Restigouche River. Busteed, Restigouche River. Horseshoe Bar East, Miramichi River. Horseshoe Bar West, Miramichi River. Young's Point, Caraquet. Grassy Point, Caraquet.  NDER THE PRINCE EDWARD ISLAND AGENCY.—DIS	Gas and whistling.  " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 12-S 14-S. 16-S. 3 5 7 9 18 20 31 32 34 40 42 44 46 47	UNDER THE NEW BRUNSWICK AGENCY.—DISTRICE  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu. Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island. North-west Ledge, Brier Island. Avon River. Old Proprietor. North Wolves. Point Lepreau. Partridge Island. Foul Ground, St. John Harbour. Quaco Ledge. Scaumenac, Restigouche River. Point Lanim, Restigouche River. Point Lanim, Restigouche River. Oak Point, Restigouche River. Traverse, Restigouche River. Busteed, Restigouche River. Horseshoe Bar East, Miramichi River. Horseshoe Bar West, Miramichi River. Horseshoe Bar West, Miramichi River. Grassy Point, Caraquet. Grassy Point, Caraquet. Grassy Point, Caraquet.  Indian Rocks. Paint Prim.	Gas and whistling.  " " and bell. " and whistling. " " " " " " " " " " " " " " " " " " "
6-S. 8-S. 10-S. 112-S 14-S. 16-S. 3 5 7 9 18 20 31 32 34 36 38 40 442 44 46 47	UNDER THE NEW BRUNSWICK AGENCY.—DISTRIC  Blonde Rock. South-west Fairway, Yarmouth. Cape Fourchu. Hen and Chickens, Yarmouth. South-west Ledge, Brier Island. North-west Ledge, Brier Island. North-west Ledge, Brier Island. Avon River. Old Proprietor. North Wolves. Point Lepreau. Partridge Island. Fond Ground, St. John Harbour. Quaco Ledge. Scaumenac, Restigouche River. Point Lanim, Restigouche River. Point Lanim, Restigouche River. Oak Point, Restigouche River. Traverse, Restigouche River. Busteed, Restigouche River. Horseshoe Bar East, Miramichi River. Horseshoe Bar West, Miramichi River. Young's Point, Caraquet. Grassy Point, Caraquet.  NDER THE PRINCE EDWARD ISLAND AGENCY.—DIS	Gas and whistling.  " " " " " " " " " " " " " " " " " " "

# UNDER THE QUEBEC AGENCY.

## District No. 4.

Station No.	Name of Station.	Description of Buoy.
27-B.	Father Point	Pintsch gas
29-B.	Rimouski Road	
38-B.	Barrett's Ledge	
51-B.	Pilgrim Shoal.	
	Traverse, Middle Ground	
58-B.	Middle Ground Centre, Opposite Lower Traverse Pier	
60-B.	Middle Ground, Traverse, South-west extremity	
64-B.	Channel Patch.	
65-B.	St. Jean Port Joli	Gas.
67-B.	Beaujeu Bank, North-east extremity	" and bell.
69-B.	Beaujeu, New Channel, left hand	Gas.
70-B.	Beaujeu Bank, South-west of stream	
77-B.	St. Thomas	Gas.
80-B.	Quarantine or Grosse Isle.	11
	Madame Island Reef	
87-B.	Beaumont Reef	
89-B.	Point Levis	11
96-B.	Lark Reef, South end	
	Morin Shoal	
106-B.	Grande Pointe	
110-B.	Eastern Narrows, North Traverse	
10-Q.	Fly Bank	
15-Q.	St. Augustin Bar	
24-Q.	Pointe aux-Trembles	"
28-Q.	Point St. Antoine	11
34-Q.	Ste. Croix	11
49-Q.	Point Platon	H T
Temporary.		Pintsch gas.
11	n m	9 11
	Lower Traverse	Gas.

# MONTREAL DIVISION.

# District No. 5.

	District No. 5.	
2-C.	Point Citrouille	Gas.
15–C.		
20–C.	Champlain or Pouillier Carpentier	11
23-C.	Ile Bigot.	11
30-C.	Becancour, Lower Traverse	H
39-C.	Becancour Bend	11
43-C.	Becancour, Upper Traverse	11
	Cap Madeleine	
55-C.	Ile aux Cochons	11
59-Ç.	Three Rivers Shoal	. 11
6-L.	Pouillier Laforce	н
13-L.	English Bay	11
17-L.	Curve No. 3	H
21-L.	"	11
25-L.		11
35-I	Pointe du Lac course	11
41-L.		11
47-L.		- 0
57-L.	Yamachiche Bend	11
48-L.		11
67-L.	Curve No. 2 to White Buoy	11
79-L.		18
85-L.		11
91-L.	Curve No. 1 to Curve No. 2	11
97-L.		11
103-L.		11
111-L.	Ile aux Raisins	11
123-L.	Pointe aux Soldats	11
136-L.	Ile de Grace	11
146-L.	Nepigon Shoal	H
1-M.	Hay Island or Ile aux Foins	11
5-M.	St. Ours Traverse	11
16- M.	Bellmouth Curve	11
20-M.		11
24-M.	1	11
21—6		

# MONTREAL DIVISION-Con.

District No. 5-Con.

Station No.	Name of Station.	Description of Buoy.
31-M.	Contrecteur Bend	Gas.
45-M.	Controceur Junction	13
82-M.	Plum Island	11
89-M.	Vercheres	11
103-M.	Pouillier des Trois Bouées	11
117-M.	Cap St. Michel	11
124-M.	He des Lauriers	n
129-M.	Varennes Curve	11
133-M.	Varennes Curve	11
149-M.	Pointe aux Trembles Bend	11
167-M.	Pointe aux Trembles Curve	11
174-M.	Longue Pointe	
177-M.	Pouillier à Gagnon	tr
181-M.	Longueuil	tt
191-M.	Longueuil	11
193-M.	Longueuil	11
194-M.	Maisonneuve	19
195-M.	He Ronde	19
196-M.	Longueuil	11
52 -Q.	Portneut	11
68-Q.	Batture Simon	77
73-Q.	Batture du Chêne	29
77-Q.	Batture à Cadieux	11
80-Q.	Cap Charles	11
90-Q.	Cap à la Roche Curve	11
97-Q.	Upper Cap à la Roche	11
105 Q.	Cap Levrard	11
110-62.	Cap Levrard	"
115-Q.	Batiscan Traverse	"
119-Q.	Batture St. Pierre	11
123-Q.	Bat scan Anchorage	"
129-Q.	Batture Perrou	"

# UNDER THE PRESCOTT AGENCY. District No. 6.

30-F.   Soulanges Canal, entrance.   36-F.   Coteau Landing.	25-F.	Channe Bring	1~
36-F. Coteau Landing.  40-F. Hay Point.  43-F. West end of Middle Ground.  46-F. Port Lewis.  48-F. Point Mouillé Flats  48-F. Lancaster.  68-F. Island Bank.  69-F. East Lancaster Bar  76-F. Lancaster Bar  78-F. Squaw Island  84-F. Clark's Island.  84-F. Clark's Island.  88-F. Colquhoun Island.  96-F. St. Regis Dyke, West end.  16-S. Four fifth mile above Lachine.  18-S. Foot of dredged cut above Lachine.  18-S. East of Lightship No. 2.  53-S. Off Brown's Point.  76-S. Between Light No. 2 and Light No. 3.  86-S. Between top light and He Perrot.  98-S. Windmill Point.  100-S. Entrance to Soulanges Canal, East.  104-S. Soulanges Canal, East.  2-T. Brockville Narrows.  4-T. Hillcrest.  6-T. Cole Shoal, Middle Ground.  8-T. Fiddlers Elbow.  12-T. Gananoque Narrows.  33-T. Wolf Island.		Grosse Point.	Gas.
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38-T. Wolf Island. "		Fiddlers Elbow	11
38-T.   Wolf Island		Gananoque Narrows	11
46-T. Cold Bath Shoal		Wolf Island	
	46-T.	Cold Bath Shoal.	H

# UNDER THE PRESCOTT AGENCY-Concluded.

Station No.	Name of Station.	Description of Buoy.
69-T.	West end of Middle Ground, between Snake Island and Seven	
102-T.	Acre Shoal Northport Shoal	11
106	Trenton	
6-U. 8-U.	Delaney's Shoal	II .
40-U.	Farran Point	11
54-U. 127-U.	Prunner Shoal	11
136-U.	Dixon Island. Upper entrance, Iroquois Canal	11
	ONTARIO DIVISION.	
	Lake Erie, District No. 8.	
1	Bar Point	Gas.
2 5	Grub Reef. Eastern Cut, Lake Erie.	11
6	Eastern Cut, Lake Erie	11
	Thames River, District No. 11.	
1	Thames River	Gas.
	St. Clair River, District No. 12.	
1	Courtwright	Gas.
	Sarnia, District No. 13.	
1	Point Edward	Gas.
	Goderich, District No. 14.	
2	Goderich Fairway	Gas.
	Southampton, District No. 15.	
4	Chantry Island, North	Gas.
	Georgian Bay, District No. 16.	,
1-P	Spruce Shoal.	Gas.
2-P	Hooper Island	"
3-P 4-P	Middle Ground Three Star Shoal.	
5-P	Seguin Bank	Gas and whistling.
6-P 7-P	Lone Rock. Lockerbie Rock.	Gas.
7-1		

92 93 94

95 96

97

101

103

105 107

110 112

## 9-10 EDWARD VII., A. 1910

Gas.

Gas beacon.

. Gas and whistling.

## ONTARIO DIVISION-Concluded.

Sturgeon River, District No. 17.

Station No.	Name of Station.	Description of Buoy.							
1-N	Sturgeon Bar	Gas.							
	Sault Ste. Marie, District No. 18.								
1 2	Vidal Shoal	Gas.							
	Port Arthur, District No. 19.	· ·							
$\begin{array}{c}1\\2\\3\end{array}$	Port Arthur. Southeast Dredged Channel, Fort William. Northeast Dredged Channel, Fort William.	Gas.							
	BRITISH COLUMBIA DIVISION,	ı							
	District No. 24.	(							
1 2 17 19 23 24	Lookout Island. Kyuquot. Swiftsure Bauk San Juan. Lewis Reef. Kelp Reef.	Gas and whistling. Gas, whistling and bell. Gas and whistling.							
25 27	Dock Island	Gas and explosive fog							
29 30	Walker Rock. Coffin Islet.	Gas beacon.							
31	Danger Reef								
32 33	Joan Point.	Gas beacon.							
35	Gabrola Reef	Gas. whistle and bell.							
37	Sand Head First Narrows, Vancouver Harbour	Gas beacon.							
40	Sechelt	11							
42 43	Gallows, Point, Nanaimo Harbour	11							
45	Kelp Bar	Gas and bell.							
49	Lund	Gas beacon.							
52 53	Gillard Island	11							
54 54	Chatham Point.	Gas and explosive fog							
58	Haddington Reef	Gas.							
64	Zero Rock								
67 70	Fog Rocks. Dall Patch	Gas and whistle.							
72	Vancouver Rock	11							
74	Boat Bluff	Gas beacon.							
84 86	Klewnuggit	11							
86 89	Watson Rock Holland Rock	11							
92	Casey Point.	Gas.							

Casey Point
Kestrel Rock
Spire Ledge.

Spire Leage.
Barrett Rock
Coast Island
Ridley Island
Alford Rock
Hodgson Reef

Pointers. Gas beacon.
Stenhouse Shoal Gas and whistling.
Cas and hell

Skidegate or Lawn Point Gas and bell.

New England Rock Gas and whistling.

## INCLOSURE NO. 5.

\*Outline chart Atlantic coast of Canada showing quick flashing lights of the hyperradial, 1st order, 2nd order, 3rd order, 3rd order small model and 4th order in operation during the fiscal year 1908-9.

The whole respectfully submitted.

J. G. MACPHAIL, Acting Commissioner of Lights.

Commissioner of Lights Office, Marine and Fisheries, Canada. March 31, 1909.

<sup>\*</sup> Note.-The outline chart will be found with the illustrations at the end of the Report.

## APPENDIX No. 3.

## RIVER ST. LAWRENCE SHIP CHANNEL.

SIR,—I have the honour to present the following annual report on the operations for the improvement of the River St. Lawrence Ship Channel during the fiscal year ending March 31, 1909.

While every effort has been made to urge forward the work, it is necessary to take very great care to so arrange the operations that navigation is not interrupted, nor

dredge vessels put in more than the usual danger.

The success of the operations is due in a very large measure to the skill and energy of the staff in charge, and also to the untiring and careful work of the various captains, engineers, and crews of the different vessels.

I have the honour to be, sir, Yours obediently,

V. W. FORNERET, B.A.Sc. Superintending Engineer.

G. J. DESBARATS, Esq.,
Acting Deputy Minister, Marine and Fisheries,
Ottawa.

## HISTORY OF THE SHIP CHANNEL.

The St. Lawrence, owing to its situation, is the natural route from the Atlantic to the northern and northwestern half of the North American continent.

The opening of the Lachine canal, connecting Montreal with the great lakes in

1825, established the route commercially.

The light draught sailing vessels could then reach Montreal without trouble, except during a few weeks in the autumn when they resorted to lightering.

In 1844, it was in an effort to give navigation up to Montreal for vessels of 500

tons, that the first work of dredging was undertaken.

The first proposals for improvements were discussed in 1825, the national character of the work being then recognized. Surveys were made and reported upon in 1831, and again in 1838.

In 1841, during an investigation, the committee proposed a tonnage duty sufficient to provide for the cost of the improved channel, which it was considered would be less than that of lighterage. It was, however, agreed that 'in order to draw the produce of the west down the St. Lawrence, it was expedient to make the transit charges as light as possible.'

Operations were commenced by the 'Board of Works' in 1844 and continued until 1847, when owing to opposition as to the location of the channel the work was abandoned. This work was in Lake St. Peter, in what was known as the Straight channel. After sixty years, it is now considered that the straight channel as commenced, would

have been preferable in many ways.

In 1850, the Harbour Commissioners of Montreal proposed that they could do the work more economically and expeditiously. They asked for authority to under-

take the work and to charge a tonnage duty to pay for the 8 per cent interest and 2 per cent sinking fund.

This plan was adopted in August, 1850, and the commissioners were authorized to proceed in such a manner as they should deem best, the government plant being trans-

ferred to them.

The Harbour Commissioners, after examination and the best advice obtainable, adopted the location of the deepest natural channel in Lake St. Peter. This results in the present channel with five tangents, instead of two long straight courses as at first commenced.

The original depth through Lake St. Peter, was 10 feet 6 inches.

From 1850, the channel was deepened from stage to stage until in 1888, when the debt amounted to somewhat over three million dollars, the government decided to complete the channel as a national work, and to assume the debt, and from that day the channel has been open free to the commerce of the world.

At that date the channel had been deepened to 27½ feet at ordinary low water from

Montreal to Cap à la Roche, and from there to Quebec the tide was available.

Nearly 20,000,000 cubic yards had been dredged at an average cost of about 20

cents per yard, including the cost of the plant.

A dredge of the type of 1846, excavated in Lake St. Peter in one day 1,200 cubic yards. By wonderful improvements, in 1888, the dredge of that time could make 7,200 yards without trouble. At the present time, working day and night, the Lake St. Peter dredge removes at a fairly average rate 20,000 cubic yards per day.

This work was conducted by the Department of Public Works of Canada from 1889 until 1904, when the management and control of the river together with the shops and dredges, were handed over to the Department of Marine and Fisheries, which de-

partment had general charge of navigation.

At the present time a splendid channel of 30 feet at extreme low water exists from Montreal to Cap à la Roche, and to Quebec, by taking advantage of the tide.

The success of the work is in a great measure due to the geographical situation of the route, the physical features of the river favourable for improvement, the determination and public spirit of the business men and industrial corporations of Montreal, and to the recognition by the government of Canada of the national character of the project.

## PROGRESS OF THE OPERATIONS.

From 1850 to 1888 the work was conducted by the Harbour Commissioners of Montreal.

The first dredging plant was designed and engined on the Clyde in 1840.

It is interesting to note that in 1906 the designs for the latest dredge for the Clyde, were made by Mr. John Kennedy, C.E., then Chief Engineer of the Montreal Harbour Commissioners.

The St. Lawrence dredging operations have always been conducted departmentally. The extent and continuity of the work have resulted in a staff, and an organization of men and plant, which is one of the subjects of interest in the commercial and engineering circles of the world. The engineers who have been connected with the St. Lawrence ship channel comprise the best known men in the profession in Canada.

The names of Bayfield, Gzowski, Keefer, Forsyth, Nish and Kennedy, who were the chief engineers at various times between 1840 and 1888, will go a long way to explain the success of the efforts for obtaining the improvements as planned by the government and the commissioners.

The Superintendents Vaughan, Bell, Armstrong, McKenzie and Howden have from time to time improved methods and plant, until the operations on the St. Law-

rence are considered examples for other and older ports.

The rule has been to thoroughly understand the conditions and requirements and then to design dredging machines for the special work they are expected to perform.

The St. Lawrence dredging plant comprises a wide range of types:-

Two elevator dredges for soft clay,

Four elevator dredges for hard-pan and shale rock,

One hydraulic dredge for soft mud, discharged by pipe.

One sand pump hopper sea-going dredge, One hydraulic hopper sea-going dredge.

In every case these machines are actually doing their work as well or better than it could be dredged by any other existing type in the world.

With the staff for designing the channel and a plant specially suitable for the work proposed, the next consideration is the organization for keeping the machines constantly at work.

The St. Lawrence dredges work for seven months each season. They have then five months in winter quarters. The object of the working staff is to keep the dredge going as constantly as possible during the seven-month's season. Owing to the very hard character of the material, and the necessity of not interrupting traffic, breakages and stoppages are frequent. The endeavour is, however, to keep as near to 70 per cent of the full working time as possible.

The working hours with double crews, are 132 hours per week, i.e., from midnight on Sunday, without stops for meals, until noon on Saturday. The men were glad to work during twelve hours on condition of their receiving about 10 per cent

increase of wages.

The crews of the dredges, tugs, barges, &c., are almost exclusively French Canadians, born and brought up on the banks of the St. Lawrence. For skill, patience, sobriety and fitness for the work, it would be quite impossible to find their equal. Most of them make it their life work. They are trained to every phase of operating a dredge to the limit of its strength, to being resourceful and to quickly making repairs.

By order from the minister conducting the department, owing to the faithful discharge of continuous duties, the men are taken to Sorel every second Sunday.

The repair and construction shippyard and shops at Sorel also add very materially to the success. The rule is to drive the machinery to its limit, to expect breakdowns, and to have spares or the equipment for speedy repairs.

The strain on the men and machinery is very great. At the end of seven months

a rest is inevitable.

The whole work being in the interest of navigation, the channel is periodically examined and swept, to be sure that there are no obstructions. The depth of water is given daily. In the first part of the season, the depth of the 30-foot channel ranges from 36 to 42 feet. It lowers in September, and usually the lowest stage is reached in October. The highest in 1908 was 42 feet 4 inches, and the lowest 30 feet.

In the long experience of design and usage, the machinery has been brought to a state of perfection and strength, the shale-rock merging into soft limestone is

dredged, at a speed and cheapness most extraordinary.

As a government organization the ship channel is well known as being able to compete in every way with operations by contract. This is due to the fact that an efficient staff, good men, and the best plant are provided.

The aims which have resulted in marked success are briefly as follow:-

- (1) To keep the plant up to the best standard of design and suitability for the work.
  - (2) To provide first-class officers and crews.
  - (3) To design the improvements with careful consideration.
  - (4) To keep down costs by a thorough system of comparative statistics.
  - (5) To keep up the quality by a regular and systematic inspection.
- (6) As a public work to keep the confidence of the public by consultation with those who are interested and make use of the improvements.

#### THE PRESENT PROJECT.

The present project for a 30-foot channel between Montreal and Quebec was adopted in 1889, while the improvements below Quebec were decided upon in 1906.

The estimate of 1899 was for ten years' work. The plant was only partially avail-

able until 1903.

The project for the channel between Montreal and Quebec had in view a channel of 30 feet depth, at the extreme low water of 1897, from Montreal to tide water at Batiscan, and from Batiscan to Quebec at extreme low tide. The width contemplated was a minimum of 450 feet in the straight portions, and from 550 to 750 feet at the bends. An anchorage was to be provided for Lake St. Peter.

Of this work, the 30-foot channel from Montreal to tide water at Batiscan, was completed in 1906. This is now in use, deep draught vessels in the autumn waiting

for tide, to pass cap à la Roche and St. Augustin bar.

The work remaining to be done is about two miles of shale rock at Cap à la Roche; about one mile at Grondines, about one mile at St. Augustin bar, and also about one mile of widening at Ste. Croix, and 5½ miles of widening in Lake St. Peter.

Cap à la Roche will probably take from three to four years to complete, while the remainder to Quebec should be completed at the same time or in one year longer.

The widening of Lake St. Peter it is expected will be done in 1909.

The project of work below Quebec, had in view a 30-foot channel at low tide at St. Thomas flats, and at Beaujeu banks everywhere 1,000 feet wide.

The Beaujeu bank will be completed in 1909.

The St. Thomas flats, where the material is clay and sand, and covering nearly four miles of channel should be finished in about three years.

## THE PLANS FOR THE FUTURE.

The completion of the 30-foot project being in sight, it is not too soon to look forward to the next step.

The 30-foot channel was designed and laid out so as to be easy of navigation for the largest ships that could pass with the available depth. The widths and curves were designed for a much greater available depth than 30 feet.

A new depth may therefore be commenced without changing the lines of the

channel, or the aids to navigation.

With the ship channel dredges a face of 4 feet is preferable as being a full economical cut. As, however, 35 feet would give easy navigation to the largest present New York steamships, it has been considered the best proposal for the next project.

The plant available at present for between Montreal and Quebec, consists of six elevator dredges, one hydraulic dredge, two stone lifters, and a complement of tugs,

scows, &c.

For below Quebec there are two splendid seagoing hopper dredges.

For the upper reach one large size spoon dredge is under construction. A steel hull elevator dredge, capable of dredging to a greater depth is authorized, as well as a new stone-lifter.

At least two of the present elevator dredges having wooden hulls will not last many more years, and the construction should be commenced of one each year. They take about two years to build.

Two or three additional tugs and several scows will also be required.

The plant for below Quebec is in every way suitable for the work, except that a

larger tug should be connected with it.

The present progress is excellent, the plant is unique in fitness and economy, and the extent and importance of the operations would be considered remarkable anywhere in the world.

ACCIDENTS IN THE ST. LAWRENCE RIVER BETWEEN MONTREAL AND FATHER POINT.

Not one accident of importance took place in the ship channel proper during the season of 1908, and those which did occur were of minor character. This speaks well for those in charge of the vessels, the season being an exceptional one for heavy fogs and thick smoke, which completely paralyzed navigation for days at a time.

The only accidents in the St. Lawrence river, between Montreal and Quebec, were

as follows:--

- SS. Marina, Donaldson line, went aground at Varennes on September 18, in thick fog. Was refloated. No damage.
- SS. Fimerite, went ashore at Longue Pointe, on October 15, during fog. Was refloated. No apparent damage.
- C.G.S. Montcalm and C.P.R. steamer Milwaukee, collision in Quebec harbour. The C.G.S. Montcalm sank in Custom House basin, where she had gone for refuge. Milwaukee had her bow badly damaged.
- SS. Inishowen Head, Head line, went ashore, Union cove, Quebec, October 1. Refloated. No damage.

## BETWEEN QUEBEC AND FATHER POINT.

- SS. Amethyst went ashore at Green island, near Saguenay river, on June 30. Refloated. No damage.
- SS. Catalone, British steamer, grounded at Red island on August 12. Refloated No damage.
- SS. Gustav Adolph, Swedish steamer, went ashore at Goose island on September 5. Refloated, repaired.
- SS. Corinthian (Allan line), and SS. Malin Head (Head line). Collision near Grosse Isle on September 13. Both vessels badly damaged. Malin Head beached at St. Laurent to prevent sinking. Collision due to haze, caused by smoke from forest fires.
- SS. Ashanti, British steamer, went ashore at Madame reef, opposite Island of Orleans, on October 26. during fog. Refloated, repaired.

## MARINE SIGNAL SERVICE.

The commencement of night navigation, and the increase in size of ships, as well as general improvement on all sides, called for a system of signal service.

It was frequently found that by prompt action serious results from accidents could have been avoided, and sometimes signals of danger could have prevented bad accidents.

The government of Canada, therefore, through the Minister of Marine and Fisheries, took up the matter and established in connection with the River St. Lawrence Ship Channel a telephone service extending from Montreal to Crane island below Quebec.

There are twelve stations, established at the following places:-

	Distance in nautical miles from Montreal.	In operation.
Montreal Longue Pointe Verchères Sorel. Three Rivers Batiscan St. Jean des Chaillons Portneuf. St. Nicholas Cap Rouge. Quebec Crane island	5 19 39 71	Day and night.  During daylight. Day and night.  During daylight. Day and night. During daylight. During daylight. During daylight. Day and night. During daylight.  Day and night.

The above stations are connected by a private through telephone system, terminating at Quebec and Montreal.

Crane island station communicates with Quebec via the Bell Telephone Company's

system.

The telephone service was started September 1, 1907, but the system of signals was officially inaugurated by the Honourable the Minister of Marine and Fisheries on November 5, 1908.

The value of the combined system of telephone and signals, is such, that expressions of satisfaction are received every day during the season of navigation, when orders may be given, information as to whereabouts of vessels obtained, and signals to passing boats recorded.

The service has also been very useful in connection with the dredging operations, as communications can be made immediately with the officials at the shops at Sorel, where orders can be given for repairs, and owing to the promptness of the service a great deal of valuable time has been saved.

# NEW STEEL SPOON DREDGE.

The new steel spoon dredge now nearing completion at the Sorel shippard, will be the most powerful dredge of this type afloat. She was designed by Mr. John Kennedy, Consulting Engineer of the Montreal Harbour Commissioners.

This dredge is intended for work at Cap à la Roche. It will tear out the bank quickly, and afterwards an elevator dredge will go over the ground to clean up, and make a smooth bottom.

The completion of this dredge has been greatly delayed owing to necessary alterations in the design.

The following are her dimensions:-

*		Feet.	Inches.
Length moulded		108	0
Breadth moulded		42	0
Depth at bow		11	6
Depth at stern		9	9
Length of boom (centre to centre)		55	3
Length of spuds		74	0
Main engines, 2 compound			16 and 30 x 22.
Swinging engines, simples	٠.		10 x 14
Capstan engines, simples			10 x 14
Bucket capacity (1 14-cub.yd., for soft mat )1 8-cub.yd., for hard	al.		
)1 8-cub.yd., for hard	46		

The pull on the bucket rope will equal 180,000 lbs. The dredge will be able to work to 50 feet, and will be equipped with electric light.

One marine boiler 12 feet in diameter by 10 feet long will furnish steam for the machinery. The boiler will have a working pressure of 160 lbs. per square inch.

#### NEW ELEVATOR DREDGE.

In order to expedite the work at Cap à la Roche, the department has decided to build a new elevator dredge for working in rock. This dredge is to be modeled after the *Baldwin* (No. 6) but will be able to dredge to 52 feet, and the hull is to be built of steel.

An appropriation for this vessel has been placed in the estimates for 1909-10. The following are her dimensions:—

	Feet.
Length between perpendiculars	 180
Breadth of beam (moulded)	 40
Depth of hold	 14
Draught (loaded)	

## C.G. ICE-BREAKER 'MONTCALM.'

## Operations 1908-9.

The opening of St. Lawrence navigation last spring, ten days earlier than the previous year was very much hastened by the operations of the steamer *Montcalm* at the Cap Rouge ice-bridge, and also by the successful operating of the steamer *Lady Grey* in breaking up ice-jams at the head of Lake St. Peter amongst the islands.

Under the command of Captain Gagnon, the *Montcalm* began attacking the Cap Rouge ice-bridge on January 12, 1909. The bridge was found to be exceptionally strong, and composed of from 35 to 40 feet in depth, of heavy packed ice, for about three miles, extending from abreast of the Chaudière river up to a short distance above Pointe à Bazile low light. Above this, there was an open area of water about six miles long, and from 1,000 to 2,500 feet in width, containing more or less floating ice which moved up and down with the wind and tide.

After strenuous work during the whole winter, the ice-breaker succeeded in cutting a wide channel through the ice and attained the open water by March 30. She then worked for a few days enlarging this cut, to allow a free passage for ice coming down, to increase the discharge, and thereby help to lower the river level in the upper reaches. This effect on the water level is generally conceded, by information obtained at different points.

Captain Gagnon and his officers deserve a great deal of credit for the capable manner in which they conducted this work, this being the first year on record that an attempt to break up the Cap Rouge ice-bridge has proved a complete success.

After the Cap Rouge ice-bridge was completely destroyed, the *Montcalm* worked her way with fair progress up the river, breaking ice averaging a thickness of 20 inches, as far as Portneuf, where she arrived on April 10.

At Portneuf a ship channel officer was sent on board with one of our best pilots to conduct the operations in the upper part of the river. Here heavy packed ice from 3 to 4 feet in thickness somewhat checked the steamer's advance, but she finally succeeded in forcing her way through to clear water on April 13. On this day it was reported that the ice up as far as Port St. Francis was on the move, so that it was considered advisable to return to Quebec to be on hand in case of a jam occurring at Cap Rouge narrows.

By the 15th, there being no more danger of a jam at Cap Rouge, most of the ice having passed down, the *Montcalm* started up for Port St. Francis to break up any jams which might form when the lake ice started down.

She reached as far as St. Jean at 11.20 a.m., and was obliged to tie up on account of a very heavy snow storm.

Next day, the 16th, she proceeded up, meeting very little ice, as far as Nicolet

Traverse, at the foot of Lake St. Peter.

On her arrival at Nicolet Traverse the *Montcalm* immediately commenced operations, and soon succeeded in starting the lake ice to move down. This jammed at Port St. Francis the following morning, but was easily broken up again, and the ice commenced to move and continued down steadily all that day and during the next night.

On Sunday, April 18, the Lady Grey was met at Port St. Francis after she had successfully broken up several jams amongst the islands at the head of Lake St. Peter.

This steamer reported the lake practically clear.

There being no more ice in sight, instructions were given for the *Montcalm to* return to Quebec, and the *Lady Grey* to proceed to Montreal, the former arriving at Quebec on the same day and the latter reaching Montreal at 1.30 p.m. after running in clear water the whole way up.

From April 19 to the 21st, while in Montreal, the Lady Grey rendered great help in clearing out the ice around the upper piers in the Montreal harbour. She then

returned to Sorel.

The results obtained by the operations of the steamers Montcalm and Lady Grey have not only pleased shipping interests by hastening the opening of navigation, but have also given much satisfaction to riparian residents on both banks of the St. Lawrence between Montreal and Quebec, as it is generally claimed that the work performed by the ice-breakers has prevented floods and thus saved much suffering and damage to property.

## GENERAL INFORMATION.

At the end of the season of 1908 there was a completed channel to a depth of 30 feet at extreme low water, from Montreal to Cap Levrard, 4 miles below Batiscan, a distance of 104½ miles below Montreal. Below Cap Levrard advantage is taken of the tide during the low water season to obtain this depth to pass Cap à la Roche and St. Augustin bar.

The available depth in the Cap à la Roche dredged channel is indicated by the St. Jean des Chaillons semaphore, which was put in operation for the season on June

17, 1908.

The available depth over the undredged St. Augustin bar is indicated by the semaphore at St. Nicholas, which was started for the season on June 24, 1908.

With the exception of some minor shoals at Champlain, there is practically no filling in, in the ship channel, and, although, since its commencement no actual boulders have been known to have been carried into the dredged channel, such conditions are possible, and it has been decided, therefore, that once a year the dredged and shallow channels shall be swept.

Mr. N. B. McLean, C.E., with an assistant, are specially detailed for this important work. A twin-screw steamer and a testing scow make up the present sweep-

ing plant.

The additional dredging which has been done below Quebec has increased the amount of sweeping to such an extent that one testing scow is not adequate, and a second outfit will soon have to be procured.

During the course of the sweeping in 1908 no obstruction of any serious nature was found. Two or three vessels were reported to have touched, but the most careful examination failed to reveal anything in the channel.

The work of deepening the St. Thomas channel below Quebec was commenced late in the autumn of 1907, and by the close of the season of 1908, good progress had been made.

The Beaujeu channel below Quebec, was commenced in 1906. On June 29, 1908, a channel 600 feet wide, and to 30 feet in depth at extreme low tide, was officially opened. It is expected that the full width of 1,000 feet will be completed during the season of 1909.

The exceedingly dry spell of weather during the latter part of the summer of 1908 had the effect of lowering the level of the water in the St. Lawrence to the datum adopted for low water, viz., the low water of the year 1897, which was the lowest on record, except for the extraordinary low water of 1895, which for a few days reached a stage 6 inches lower.

The annual trip of inspection of the ship channel and the works connected therewith, was made by the Honourable the Minister of Marine and Fisheries on November

5, 1908.

'The steamer Lady Grey left Victoria pier, Montreal, at 8.30 a.m., and the inspection occupied two days and a half, covering various works between Montreal, and Crane island, below Quebec.

The minister, the Honourable Mr. Brodeur, was accompanied by his officials, representatives of the Shipping Federation, Montreal Board of Trade, La Chambre de Commerce, the mayor of Quebec, representatives of the Montreal and Quebec Harbour Commissioners, and the Montreal and Quebec pilots.

Much satisfaction was expressed, at the progress made, especially in dredging, at the various points, and also at the good organization of the Marine Signal Service which was established in 1907. This service was especially useful during the latter part of the season of 1908 when so much smoke and fog prevailed.

Another feature of the trip was the inauguration of a new code of signals, to be used between signal stations and passing steamers, by means of flags by day and

lights by night.

The total cost from 1851 to the end of the fiscal year of the ship channel, including plant, shops, survey, &c., is as follows:—

Dredging	 . \$7,208,543 50
Plant, shops. surveys, &c	 . 3,501,449 96
	\$10,709,993 46

The total number of cubic yards dredged, the material varying from very hard shale rock, to soft blue clay, amounted to 61,767,292.

Year.	Average depth for each Month in the $27\frac{1}{2}$ foot Channel. ( $27\frac{1}{2}$ feet in Ordinary Low Water.)						FROM SOREL GAUGE DURING EACH YEAR MAY TO NOVEMBER.		
	May.	June.	July.	August.	Sept.	Oct.	Nov.	Highest.	Lowest.
1890	Ft. In.  35 6 34 6 31 0 36 0 34 6 33 3 33 6 35 6 31 6 36 36 2 33 6 34 3 32 2 33 0 36 3 31 10 32 4		IN T	не 30 гоот	Ft. In.  30 9 30 0 28 9 29 6 27 6 28 0 28 2 27 6 28 1 27 7 28 1 28 4 29 5 28 2 27 3		Ft. In.  30 6 28 3 28 3 28 0 29 0 26 9 27 6 28 6 27 9 29 2 27 3 29 0 27 11 29 3 28 1 27 6	Ft. In.  37 0 36 9 33 6 37 6 36 0 34 6 37 0 32 1 37 9 35 9 36 3 34 1 32 8 37 4 33 3 33 3	Ft. In.  29 0 27 3 27 3 27 6 27 7 25 10 27 4 26 5 26 9 27 4 26 6 27 6 27 1 28 1 28 1 27 9
	May.	June.	July.	August.	Sept.	Oct.	Nov.	Highest.	Lowest.
1907 1908	37 1 41 5	35 9 37 10	34 3 33 10	32 10 32 10	32 4 32 0	32 9 31 0	33 7 30 6	38 3 42 4	31 10 30 0

#### COST OF SHIP CHANNEL TO DATE.

Table showing the Total Cost of the Dredging and Plant, and the Quantities dredged to March 31, 1909.

	Cost of Dredging.	Expenditure for Plant, Shops, Surveys, &c.	Quantities dredged.
Maymany Hannoun Covergence 1951 to 1999	\$ cts.	\$ cts.	Cubic Yards.
Montreal Harbour Commissioners, 1851 to 1888.			
Dredging Montreal to Cap à la Roche to $27\frac{1}{2}$ feet at ordinary low water, and from Cap à la Roche to Quebec to $27\frac{1}{2}$ feet at half tide	3,402,494 35	534,809 65	19,865,693
DEPARTMENT OF PUBLIC WORKS.			
Dredging consisting of widening and cleaning up of channel: deepening Cap à la Roche to Cap Charles to $27\frac{1}{2}$ feet at ordinary low water, and dredging at Grondines, Lotbinière and Ste. Croix, 1889 to June 30, 1899.	829,583 08	486,971 79	3,558,733
Project of 1899:-			
Dredging channel between Montreal and Quebec to 30 feet at lowest water of 1897, also widening to a minimum width of 450 feet, and straightening.  Fiscal year 1899-1900  " 1900-1901  " 1901-1902  " 1902-1903.  " 1903-1904.	100,191 01 136,680 83 185,429 80 255,776 55 276,958 59	265,270 78 287,040 04 479,731 47 277,703 50 308,765 44	1,107,894 2,479,385 3,098,350 6,544,605 4,619,260
DEPARTMENT OF MARINE AND FISHERIES.			
Fiscal year 1904-1905	311,087 93 431,768 30 302,677 37 478,209 66 497,686 03	266, 460 33 125, 107 37 80, 613 26 179, 339 78 209, 636 55	2,716,220 4,047,530 3,001,010 4,831,875 5,896,737
	7,208,543 50	3,501,449 96	61,767,292

#### DREDGES.

Laval (No. 1).—Of the fleet of ship channel dredges this is the oldest. The hull is of wood, constructed in Ottawa in 1894. The buckets are made of cast-steel for work in rock and other hard material.

The dredge was hauled out on the slipway as soon as she came into winter quarters in the autumn of 1907 to have repairs made to her hull, which was also thoroughly caulked and tarred. The machinery was given a complete overhauling and put in good condition for the next season's work.

The details of the operation of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

At the opening of the season of 1908 the dredge was taken down to Cap Levrard and laid out on May 12 where the *Baldwin (No. 6)* had left off the previous season, to widen and deepen the curve, the material consisting of clay and stones.

The Laval completed the work at the curve on August 1. She was then laid out on the south half of the Cap Levrard channel opposite the upper brick yards, below Cap Levrard, to widen and deepen the channel, the material being hard clay, stones and some sand. The dredge continued working there until November 10, when she

was taken up to Varennes and laid out on the upper part of the curve to deepen the channel to 35 feet at L.W. of 1897, the material being soft clay.

On November 25 the *Laval* was taken down to Sorel to go into winter quarters. In a total of 167 days during which this dredge was at work, her machinery was

in actual operation 65 per cent of the full working time.

The percentage of full working time for all the dredges would have been higher but for the unavoidable delays caused during the autumn by fog and smoke, which was the worst experienced, on record, and suspended all operations on the river for days at a time.

The total number of cubic yards removed amounted to 285,200 at a total cost of

\$45.768.08, or 1604/100 cents per cubic yard.

Laurier (No. 2).—The hull of this dredge is also of wood, having been constructed at the government ship-yard at Sorel in 1897. Her buckets are made of cast-steel, especially designed for work in rock and other hard material.

During the winter of 1907-8 this dredge was thoroughly overhauled and her

machinery put in good order for the next season's work.

The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

Dredge No. 2 left Sorel on May 4, and was laid out at Champlain to clean up some lumps found in the channel by testing, the material being fine sand. She finished her work at Champlain on June 5, and was then taken down to Cap à la Roche and laid out on the curve where she had left off the previous season to widen and deepen the channel, the material being shale rock and very difficult to remove.

During the months of September and October the dredge lost a great deal of time

owing to smoke and fog.

On November 10 No. 2 was taken up to Varennes, where she commenced to deepen

the channel to 35 feet at L.W. of 1897.

On November 23 the dredge broke down and was taken to Sorel and put into winter quarters.

The number of days during which this dredge was in operation was 172, and the

percentage of time at actual work 62.

During the fiscal year she removed 132,650 cubic yards at a total cost of \$45,596.77, or  $34^{37}/_{00}$  cents per cubic yard.

Lady Aberdeen (No. 3).—The hull of this dredge is of steel, the vessel complete, having been constructed at the Sorel works in 1900. The buckets are of cast-steel, specially designed for working in rock and other hard material.

During the winter, the dredge was given the usual overhauling.

The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

On April 28 dredge No. 3 left Sorel for Pointe aux Trembles to clean up a few lumps which had been found in the channel by testing, the material being sand and clay. She finished this work on May 27, and was taken down to Cap Charles and laid out on the curve on May 28, where she had left off the previous season, to widen and deepen the curve to 30 feet at L.W. of 1897, the material being shale rock and very difficult to remove. The progress was slower than during the previous season as the material was a great deal harder.

This dredge was very unfortunate in the way of accidents.

On June 3 she had a bad break in her main engine, which caused a delay of a

few days.

On July 15 the upper tumbler shaft broke, which necessitated bringing up the dredge to Sorel for repairs. These were completed on the 22nd, and she was taken back to Cap Charles.

Dredge No. 3 met with another bad accident on July 25, when her buckets came off the frame, which, on being lifted, was found to be very much bent and twisted. This made it absolutely necessary to bring the dredge up to Sorel. The damage was caused by the swell of passing steamers while the lower end of the frame was still resting on the river bottom.

On her arrival at Sorel on July 29, day and night shifts were put on to rush the repairs, the frame having to be practically rebuilt. These repairs were completed on August 20, and the dredge taken down to Cap Charles, where she continued working until November 6. The dredge was then taken up to Sorel to go into winter quarters and to be hauled up on the ways.

In a total of 137 days during which this dredge was at work, her machinery was

in actual operation 58 per cent of the full working time.

The total quantity of material dredged amounted to 122,200 cubic yards, at a cost of \$52,238.42 or 4271/100 cents per cubic yard.

Lady Minto (No. 4).—This dredge is of the same type and design as the Lady Aberdeen, her hull being also of steel, and her buckets of cast-steel for working in rock and other hard material.

During the winter of 1907-8, this dredge was given a thorough overhauling, and her machinery put in good order for the next season's work.

The details of the operations of this dredge for the fiscal year were as follows:-

The dredge left Sorel on April 28 for Pointe aux Trembles (en haut) where she was laid out to clean up some lumps found in the channel by testing, the material being clay and sand. When this was finished the Lady Minto was taken down to work at Cap Charles channel and laid out where she had left off the previous season, the material to be removed consisting of shale rock, hard clay, and stones. The dredge continued to work there until November 11, when she was taken up to Sorel and set to work to dredge a shoal which had formed opposite the new coal dock, at the shipyard, St. Joseph de Sorel. The dredging of this shoal was completed on November 14, and the Minto was taken down to work in the channel opposite Stone Island light to clean up some lumps found by testing. No. 4 was taken into winter quarters on November 25.

Like all the other dredges of the fleet, No. 4 lost a great deal of time during the

autumn on account of smoke and fog.

In the 173 days of work, the actual operations were carried on for 67 per cent of the full working time, and 267,950 cubic yards were removed at a cost of \$48,458.96 or 18\%00 cents per cubic yard.

Lafontaine (No. 5).—The hull of this dredge is of wood, the work of the Sorel shippard, completed in 1901. Her buckets are made of cast-steel for working in rock and other hard material.

During the winter of 1907-8 she was given a thorough overhauling, and put in good shape for the next season's work. The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

No. 5 left Sorel on May 4, and was taken down and laid out at Batiscan channel to remove some lumps found there and at the anchorage. The dredged material consisted of sand and stones.

The work at Batiscan was finished on May 21, when the dredge was taken to Cap à la Roche, and laid out to work on the curve where she continued operations until November 9, the material being shale rock. This dredge was then towed up river, and placed to work at Varennes curve, deepening the channel to 35 feet at L.W. of 1897, the material removed being soft clay.

The working time of Dredge No. 5 was 173 days, the dredge being in actual

operation 65 per cent of the full working time.

The total number of cubic yards removed, amounted to 160,500 at a cost of \$49,056.65 or 305\% cents per cubic yard.

Baldwin (No. 6).—The hull of this dredge is of wood, constructed at the Sorel shippard in 1902. She has large built-up buckets for work in soft material, but with sufficient teeth to enable the dredge to work in hard-pan, &c.

During the winter of 1907-8 the boilers of this dredge were thoroughly repaired,

and her machinery was given a good overhauling.

The Baldwin left Sorel on May 4, and was laid out to work on Champlain channel

the same day, to clean up sand bars which had formed.

This dredge continued working at Champlain channel until October 6, when she was taken down to Cap Levrard and laid out to straighten, deepen, and widen the Cap Levrard channel, the material consisting of clay and stones.

The Baldwin worked at Cap Levrard until November 13, when she was taken up to Ste. Anne de Sorel, and set to work on the traverse to deepen the channel to 35 feet at L.W. of 1897, the dredge material being soft clay.

No. 6 was taken into winter quarters on November 25.

The number of days during which this dredge was in operation was 173, and the percentage of time of actual work, 68.

The total number of cubic yards removed amounted to 390,500, at a cost of \$49,157.43 or 125\%100 cents per cubic yard.

J. Israel Tarte (No. 7).—This hydraulic dredge was constructed by the Polson Iron Works Company, of Toronto, Canada, in 1902.

The hull is of steel, of the same type and general design as the steel hulls of

the elevator dredges.

During the winter of 1907-8 the dredge was given a good overhauling and repairs were made to her four boilers. Fifteen of the discharge-pipe pontoons were hauled

were made to her four boilers. Fifteen of the discharge-pipe pontoons were haule out for caulking and painting.

At the commencement of the season of 1908, the J. Israel Tarte was placed a

At the commencement of the season of 1908, the J. Israel Tarte was placed at the mouth of the Richelieu river to do some filling at the new ship-yard coal wharf. This work she completed on May 9, and was then put into shape for work on Lake St. Peter. The dredge was laid out to begin operations on May 11 between the White buoy and No. 2 curves where she left off the previous season. Her work consisted of widening and deepening the channel, the dredge material being soft clay.

As with all other dredges of the fleet, unavoidable delays were caused during the

autumn by fog and smoke.

After completing the widening and deepening between the White buoy and No. 2 curves, No. 7 was laid out to widen and deepen the channel between No. 2 and No. 1 curves, the material also being soft clay. She completed this work on November 3, and as it was then too late in the season to consider placing the dredge to work above No. 3 curve, this part of the lake being very much exposed to bad weather, it was decided to start deepening No. 1 curve to 35 feet at L.W. of 1897.

No. 7 continued working at No. 1 curve until November 14. She was then given

a thorough cleaning out before being put into winter quarters.

Notwithstanding the lost time on account of smoke and fog, the season's work was the most successful on record.

In a total of 163 days during which this dredge was at work, her machinery was in actual operation 70 per cent of the full working time.

The total number of cubic yards removed amounted to 3,209,237, at a total cost

of \$101,548.47, or 315/100 cents per cubic yard.

The total number of cubic yards removed by the dredging fleet between Montreal and Quebec during the fiscal year ending March 31, 1909, amounted to 4,568,237, at a total cost of \$391,824.78, or 857000 cents per cubic yard.

New Hopper-Hydraulic Dredge Beaujeu (No. 8), Steel Hull Twin-Screw.—The construction of this dredge was commenced at the Sorel ship yard in 1905. She was

launched in 1906, and delivered to the operating branch of the department on November 1, 1907.

The dredge was taken down to St. Thomas de Montmagny and placed to work on the St. Thomas channel, where she remained until November 15, 1907, when she was brought back to Sorel to go into winter quarters.

During the winter, alterations were made to the bow anchor winch, to give a

quicker motion when winding up chain.

The machinery was given a thorough overhauling and put in good working order for the next season.

The Beaujeu left Sorel to begin her 1908 season's work on May 4. She was laid out to work on St. Thomas channel on May 6. On commencing, the dredge unfortunately broke her cutter-head shaft, which necessitated taking her up to Quebec for repairs. These having been completed by the 11th, she coaled up and returned to work at St. Thomas channel on the 13th, but on starting work the cutter-head shaft again broke. It was then decided to take the dredge up to Sorel and have repairs and certain alterations made.

No. 8 arrived at Sorel on the 18th of May, and the necessary repairs were completed by the 25th, when the Beaujeu left Sorel for St. Thomas channel, where she arrived the following day and immediately resumed work.

On June 3 this dredge was taken down to Beaujeu channel to remove some lumps composed of sand and clay which were found too difficult for the *Galveston* to pump.

No. 8 continued working at Beaujeu channel until June 13, when she returned to St. Thomas channel and worked very satisfactorily.

From August 12 to 19 the dredge was delayed for repairs to her cutter-head engine, and while these were being made her turbines had new lining put in.

From the 19th August until the 22nd of October the *Beaujeu* worked satisfactorily at St. Thomas channel, except for three short periods, when, on one occasion, she went down the Beaujeu channel to remove some material consisting of sand and clay which was found too difficult for *No. 9* to pump.

On October 22 No. 8 was found to be making water; she was, therefore, taken up to Lévis to go into the dry dock for the necessary repairs to her hull. While in

dock her boilers and machinery were given a thorough overhauling.

The Beaujeu came out of dry dock on November 5, and, after coaling, proceeded down to Beaujeu channel and resumed her work cleaning up lumps which were too hard for No. 9. The weather, however, became very unfavourable on account of the late season, and it was decided to put the dredge into winter quarters.

She left on the 6th November and reached Sorel the following day, when she was

immediately laid up for the winter.

Notwithstanding the fact that 1908 was the first season for dredge *Beaujeu*, with an inexperienced crew, new machinery, &c., the results obtained have been most satisfactory, and the dredge has proved herself a credit to the Sorel shipyard.

The working time of No. 8 was from daylight to dark, and the dredge was in

actual operation 44 per cent of the full working time.

During the season the dredge worked 108 days at St. Thomas channel, and made 332 loads, which amounted to 651,800 cubic yards, the material consisting of clay and stones.

The dredge also worked twenty-seven days at Beaujeu channel, and made sixty-five loads, which amounted to 126,000 cubic yards, the material being sand, clay and stones.

Suction hopper dredge Galveston (No. 9) steel hull, twin screw.—During the winter of 1907-8, this dredge was given a thorough overhauling, and her machinery put in good order for the next season's work.

The details of the operations of this dredge for the fiscal year beginning April 1, 1908, were as follows:—

The Galveston left Sorel on May 5, for Quebec, where she arrived on the same day. She started for Beaujeu channel, Crane island, on the following morning, to commence operations.

During the season, the dredge was beached several times for repairs.

The Galveston worked at Beaujeu channel until November 7, when orders were received to proceed to Sorel to lay up for the winter.

No. 9 left Quebec on November 9, for Sorel. On the way up, the dredge was laid out at St. Croix Bar to make a trial load. The material was found to be very difficult to pump, being composed of very hard sand, with many stones.

No. 9 reached Sorel on November 12, and was immediately laid up for the winter.

During the season, the *Galveston* worked 159 days, her hours of operation being from daylight until dark. She was in actual operation 50 per cent of the full working time, and made 437 loads, amounting to 550,700 cubic yards, the material being sand, some soft blue clay and stones, at a total cost of \$48,059.37, or 87100 cents per cubic yard.

The total number of cubic yards removed by the *Beaujeau* (No. 8) and the *Galveston* (No. 9) below Quebec, during the fiscal year ending March 31, 1909, amounted to 1,328,500 at a total cost of \$105,861.25 or 79%00 cents per cubic yard.

The total number of cubic yards removed by the whole of the dredging fleet amounted to 5,896,737, at a total cost of \$479,686.03 or 841/00 cents per cubic yard.

Progress of dredging operations at the date of writing, the close of the season, 1908.

Locality.	Distance English miles.	Total length requiring dredging.	Length dredged in 1908.	Total length of 30 foot channel dredged.	Length yet to be dredged.
		Miles.	Miles.	Miles.	Miles.
Division 1:— Montreal to Sorel	45	22.90		22.90	All completed.
Division 2:— Sorel to Batiscan	36	12.45	,	12.45	All completed.
Division 3:— Lake St. Peter	20	18.00	4.22	*5·38 †12·62	All completed.
Division 4:— Batiscan to Quebec	59	10.00	0.80	5.52	to be widened.
Division 5:—  Quebec to The Traverse	60	6.65	1.25	2.00	4.65
Total	220	70.00	6.27	60.60	9.40
			1		

<sup>\*</sup> Not widened.

<sup>†</sup> Widened.

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Progress of Dredging Operations at date of writing, the close of the season, 1908.

Logarims	LENGTH OF	Dredging.	Cubic yards
Locality.	Required.	Done.	yet required to be done.
	Miles.	Miles.	
Division 1:— Longueuil Shoal. Longue Pte. to Pte. aux Trembles (E.H.). Ile Ste. Thérèse. Varennes to Cap. St. Michel Cap. St. Michel to Vercheres Vercheres Traverse. Vercheres to Contrecoeur Contrecoeur Channel.		1·10 5·05 0·40 3·00 4·50 1 10 1·70 6·05	
Total			
Division 2:— Sorel to Ile de Grace. Stone Island. Ile aux Raisins. Lake St. Peter (see Div. 3). Port St. Francis.		4:40 1:10 0:25	
Three Rivers Cap. Madeleine to Becancour Becancour to Champlain Champlain to Pte. Citrouille Batture Perron		0·50 1·55 2·25 1·30 0·60	
Total		12.45	
		*5·38 †12·62	3,300,000
Total		18.00	3,300,000
Division 4:—  Batiscan to Cap Levrard Cap à la Roche Channel Pouiller Rayer Cap Charles Grondines Lotbiniere Cap Santé Ste. Croix St. Augustin	0·20 1·10 0·80 0·65 0·80	2·80 0·90 0·40 0·25  0·40 0·20 0·30	50,000 500,000 175,000 210,000 200,000
Total	4.75	5.25	1,435,000
,			
Division 5:— Quebec to the Traverse	4.65	2.00	3,200,000
Total	4.65	2:00	3,200,000
Totals	9:40	60.60	7,935,000
Cubic yards yet to be done			7,935,000 61,767,292
Total			69,702,292

<sup>\*</sup> Not widened. † Widened.

RIVER ST. LAWRENCE SHIP CHANNEL.

CLASSIFICATION of Disbursements for Fiscal Year ended March 31, 1909.

briations.	cts.	497,686 03
Total expenditure on different appro-	99 	497,6
Total cost of opera- tions of each dredge and plant during Fiscal Year.	\$ cts. 45,768 08 445,768 08 45,596 77 62,238 42 48,458 96 49,157 43 101,548 47 57,801 88 48,059 37	
Inspection towing, sec.	\$ cts. 4,381 03 4,381 03 4,381 03 4,381 03 4,381 03 4,381 03 8,762 04 8,762 04 4,381 03 4,381 03	
Tug service.	\$ cts. 9,663 85 12,334 64 11,312 42 14,173 03 13,461 39 17,897 41 7,791 70 7,791 70	
	\$ cts. 1,177 59 1,177 59 1,177 59 1,177 59 1,177 58	
Proportion of gener- al and office ex- penses, &c.  Expenditure for each vessel.  Stone-litter service, &c., floating shop, &c., floating shop,	\$ cts. 30,546 613 861 9,663 862 27,743 51 13,333 44 13,334 64 13,334 64 13,335 16 14,13 03 14,13 03 14,13 03 14,13 03 14,13 03 14,13 03 15,461 39 15,908 14 15,583 40 15,583 40	7,844 28 19,198 99 16,767 01
Proportion of gener- al and office ex- penses, &c.	\$ cts. 1,537 48 486 44 486 44 486 44 486 44 486 44 486 42 42 42 669 42 1,575 50 669 42 1,576 93 677 58 3,769 38 667 1,806 30 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 42 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,806 30 41 1,80	394 86 966 37 843 96
Expenditure: new plant, rebuilding consipprates, &c.	Se Cot	
Repairs and labour.	\$ cts. 10, 185 59. 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45 1, 133 0.45	1,852 37 2,742 11 2,730 25
Stores and material.	\$ cts. 2,729 36 880 08 8,415 61 966 49 975 96 975 96 975 97 975 96 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 975 97 97 97 97 97 97 97 97 97 97 97 97 97 9	697 27 3,474 86 2,859 47
Board.	\$ cts. 2,737 98 1,431 39 2,834 59 2,834 59 2,771 402 76 1,402 77 1,503 1,503 37 1,730 62 1,730 62 1,730 62 1,730 62 2,243 57 2,243 57	837 69 3,015 33 2,512 66
Wages.	\$ cts. 7,784 97 7,695 98 7,695 98 7,695 98 7,619 80 3,552 67 7,629 87 7,629 87 7,629 87 7,629 87 7,629 87 7,629 87 7,629 87 7,639 87 7,639 87 11,755 48 14,755 48 14,755 48 14,755 48 14,755 48 14,755 48 14,755 48 11,340 60 9,539 15	2,397 97 5,967 94 4,956 92
Lacl.	\$ cts. 5,510 23 2,135 92 2,135 92 2,135 92 2,135 92 2,170 72 2,170 72 2,170 72 3,233 45 5,914 42 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,287 07 6,3,324 04	1,664 12 2,863 76
Versels.	Dredge Launi (No. 1).  Tug Portnen!  Tug Cartier.  Dredge Laurier (No. 2).  Tug Cartier.  Dredge Lady Mento (No. 4).  Tug Chumpdain.  Dredge Lafontaine (No. 5).  Tug Chumpdain.  Dredge Lafontaine (No. 5).  Tug As Jean d'Iberville.  Dredge Baldwin (No. 6).  Tug Montelm.  " Garneliu.  " Garlesston (No. 9).  " Garlesston (No. 9).  " Garlesston (No. 9).	Divided 18 to each eleva to reach strain Burg Jessie Hume Add \$\frac{1}{2}\$ to Str. De Lévis No. 7 e a ch to dred \$\frac{1}{2}\$ each to dred \$\frac{1}{2}

RIVER ST. LAWRENCE SHIP CHANNEL—Continued.

CLASSIFICATION of Disbursements for Fiscal Year ended March 31, 1909.—Concluded.

					9-10 EDW	/ARD VI	I., A. 1910
Total expenditure on different appro- priations.	& cts.		39.952 76			47,691 03	
Total cost of opera- tions of each dredge and plant during Fiscal Year.	S ets.						
Inspection towing, sec.	& cts.						
Tug service.	& cts.						
Stone-lifter service, &c., floating slop, elevator dredges.	es.	: : :					
hxpenditure for each	ets.	3,358 20 2,646 30 1,061 03	39,952 76		: : :		
Proportion of gener- al and office ex- penses, &c.	ets.	165 133 23 4 53 4	2,010 96				
Expenditure: new plant, rebuilding shipy, ards, &c.	s cts.			3,445 05 594 73 681 12 1,168 14	3,214 06 7,408 90 26,701 93	4,474 10	9,930 95 250 76 1,593 54
The pairs and labour.	se tts	1,093 56 496 15 15 42	8,365 00				
Stores and materials.	ets.	507 52 536 79 252 30	5,761 14				
Board.	ets.	281 76 414 84 145 47	4,714 80				
Wages.	e cts.	1,281 14 1,065 29 387 40	12,666 80				
Fuel.	se ets.	25 16	6,434 06				
Vesstels.		Stone lifter No. 2 equally No. 3 between Floating shop	Str. Lady Grey (ice breaking and energency tug)	Construction for dredging fleet— Floating machine shop Str. Do Levis, steering gear Tug Jossic Hume Construction 2 flat scows 50 feet	Construction 1 flat scow 60 free Construction 1 pontoon an- clor scow. Construction 2 dump scows 200 cubic yds.	Reconstruction dump scows Nos. 8 & 10	Boiler shop, new tools and machinery Machine shop, new tools and machinery Saw mill, new tools and machinery

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											42,758 72	79,234 04	43,810 28 497,686 03 707,322 58
:	:	:		:	:		:						197,686 03
:		:		:			:	:	:	:			43,810 28
:	:	:		:					:	:			106,025 30
:	:	:		:	:			:					7,065 53
:		:									:		537,638 79
		:			:				:				90,449 75 27,071 10 537,638 79 7,065 53 106,025 30
252 57	252 28		1,24, 337 80	2,427 25	4,107 38			2,597 40	5,425 85	3,808 23	4,185 41		90,449 75
		:			:				:				138,263 32
:	:				:	:		:	:	:	:		54,518 83
	:	:			:	:					:		53,933 17
		?			:								144,758 73
	:		:		:	:		:	:		:		119,093 64 144,758 73
Pipe and asbestos shop, new tools and machinery.	Carpenters' shop, new tools and machinery	outfit	Spare floats, scows, &c	Air and steam plant	Shipyard railway	New offices	Building No. 19, patterns.	ber shed	Building No. 21, fire hole No. 2.	Building No. 22, shed for castings	Building No. 23, dry-kiln shed	Stores and materials	

RIVER ST. LAWRENCE SHIP CHANNEL—Continued.

DETAILS of Dredging, Locality and Cost per Cubic Yard.

•				9-	-10 EDW/	ARD VII., A	. 1910
Locality of dredging.	and Cap Levrard Channel.  Varennes Curve.	Champlain. Cap à la Roche Curve. Varennes Traverse.	Pte. aux Trembles Channel. Cap Charles Curve.	Pte. aux Trembles Channel. Cap Charles Channel. Stone Island.	Batisean Channel. Cap à la Roche Curve. Varennes Traverse.	Champlain Channel. and Cap Levrard Channel. Ste. Anne Traverse.	White Buoy to Curve No. 1 Curve No. 1 L. S. P.
Kind of material dredged.	Hard clay, stones and sand.	Sand (cleaning up) Shale rock	Clay and sand	Clay and sand Shale rook and stone Soft clay (cleaning up)	Clay and stones	Sand (cleaning up) Hard clay, stones sand. Soft clay	Soft blue clay
Average cost per cubic yard for each dredge.	Cts.	34.37	42.74	18.08	30.28	12.68	3.16
Cost per cubic yard, each locality.	Cts. 16·13 15·09	39·11 34·18 28·40	28.00	29.59 17.68 13.43	42.32 29.19 36.82	11.68 23.13 8.68	2.91
Total cubic yards for each dredge.	285,200	132,650	122,200	267,950	160,500	390,500	3,209,237
Number of cubic yards dredged in each locality.	261,600	18,300 103,150 11,200	35,400 86,800	14,200 239,150 14,600	10,050 138,900 11,550	318,500 39,300 32,700	3,166,250 42,987
Total cost of opera- tions of each dredge.	\$ cts.	45,596 77	52, 238 42	48,458 96	49,056 65	49,157 43	101.548 47
Cost of work, each locality.	\$ cts. 42,205 29 3,562 79	7,157 64 35,257 97 3,181 16	9,913 87	4,201 94 42,296 10 1,960 92	4,253 47 40,549 71 4,253 47	37,223 19 9,092 75 2,841 49	92,203 52 9,344 95
Days working each locality.	154	27 133 12	$\frac{26}{111}$	15 151	15 143 15	131 32 10	148. 15
Cost per day, opera- tions of dredges and plant.	\$ cts.	265 09	381 30	280 10	283 56	284 14	622 99
Number of days in operation each dredge.	167	172	137	173	173	173	163
Total cost of opera- tions of each dredge and plant during Fiscal Year.	\$ cts.	45,596 77	52,238 42	48,458 96	49,056 65	49,157 43	101,548 47
Dredges,	Laval (No. 1)	Laurier (No. 2)	Lady Aberdeen (No. 3)	Lady Winto (No. 4)	Lafontaine (No. 5)	Baldwin (No. 6)	J. Israel Turte (No. 7) 101,548 47

9.17  Sand, soft blue clay and Beaujeu Channel.	Clay and stones St. Thomas Channel.		8.72 Soft blue clay and stones. Beaujeu Channel.		
<u>S</u>	7:43			9	
9.17	2.00	_	8.12		
:	651,800 777 800 7 9		250 700	000,1000	5,896,737
126,000	- 1		0,70		1,452 1 452 497,686 03 497,686 03 5,896 737 5,896,737
:	57 801 88	00 700,10	10 050 97	40,000 01	497,686 03
135   428 16   27   11,560 38	108 46,241 50 57 801 88		7 159 302 26 159 48,059 37 55		497,686 03
27	108		159		1 452
128 16			302 26		:
135 [4			159	_	1,452
88 108'42			48,059 37		497,686 03 1
Beaujeu (No. 8)			Galveston (No. 9) 48,059 37		

ABSTRACT of work of Dredging Fleet during the Fiscal Year ended March 31, 1909.

							9-10 E	DW	'ARD VII., /	A. 1910
Remarks.		77 34 61 77 50	Capt. I. Matte.		Capt. O. Gendron.		Capt. O. Gaucher.		Capt B. Ladebauche. Cleaning up.	
Character of Soil.		stor	Soft clay		Sand, cleaning up Shale rock Soft clay.		Clay and sandShale rock and stones		Clay and sand	
Vidth in feet.	Feet.	450 to 600	500		450 to 550 500		450 600		450 450	
at low water.	In.	0	0		000		00		000	
Depth of dredging	F.	30	35	1	888	, ,	88		888	
Xumber of cubic yards dredged (scow measure- ment.)		261,600	23,600	285,200	18,300 103,150 11,200	132,650	35,400 86,800	122,200	14,200 239,150 14,600	267,950
Number of scows filled.		1,579	118	1,697	122 669 56	847	177	611	71 2064 73	3504
Hours actual dredging.		$2,222\frac{3}{4}$	161	$2,383\frac{3}{4}$	435 <del>1</del> 1,778 <u>1</u> 114 <u>5</u>	2,3284	$395_{\frac{3}{4}}$	$1,726\frac{1}{4}$	2,26328 874	2,552‡
Nominal working time, 24 hours per day.	Hours.	3,384	288	3,672	600 2,916 264	3,780	576 2,436	3,012	336 3,312 156	3,804
Time of Service.	Days.	154	13	167	27 133 12	172	26 111	137	15 151 7	173
Locality of Dredging.		Cap Levrard (curve and channel)	Varennes Curve		ChamplainCap à la Roche Curve Varennes Traverse		Pointe aux Trembles Channel Cap Charles Curve		Pointe aux Trembles Channel Cap Charles Channel. Stone Island	
Dredge,		Laval (No. 1)			Laurier (No. 2)		Lady Aberdeen (No. 3), Pointe aux Trembles Channel Cap Charles Curve		Lady Mento (No. 4)	

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Lafonbuine (No. 5)	Batiscan Channel Cap à la Roche Curve. Varennes Traverse	143	336 3,132 336	$\begin{array}{c} 206\frac{1}{2} \\ 2,102 \\ 168\frac{1}{2} \end{array}$	33.5 463 38.5 38.5 38.5	10,050 138,900 11,550	888	<del>4</del> 0	450 to 550 s	0 450 to 550 Shale rock	apt. A. Marcotte.
	•	173	3,804	2,477	535	160,500					
Baldwin (No. 6)	Champlain Channel Cap Levrard Channel.	131	2,880	2,0873	1,078	318,500 39,300	30	00	450 450	and stones,	Capt. L. Dauphinais
	Ste. Anne Traverse	10	216	139	109	32,700	35	0	450	Soft clay	Oleaning up.
	•	173	3,804	2,5863	1,318	390,500					
J. Israel Turte (No. 7). Lake St. Peter White Buoy to Curve No. 1.	Lake St. Peter White Buoy to Curve No. 1. Curve No. 1	148 15	3,252 336	2,249		3,166,250	888	00	450 660	Soft blue clay	apt. J. S. Michaud
	1	163	3,588	2,299		3,209,237					
					No. of Loads.						•
Beaujeu (No. 8)	Beaujeu Channel	61		:	653	126.000	30	0	1,000	1,000 Sand, some soft blue clay	least A Domingot
	St. Thomas Channel	108	:	:	3323	651,800	30	0	1,000	Clay and stones	apt. A. Dourget.
	, ,	135			3982	777,800					
Galveston (No. 9)	Galveston (No. 9) Beanjen Channel	159	:	:	437	550,700	30	0	1,000	1,000 Sand, some soft blue clay	e clay
						5,896,737					(apr. 74, Cetton,
PROTECTION AND ADMITTAL PROTECTION OF THE PROTECTION AND THE PROTECTION OF THE PROTE								-			Value design consistency of the Administration of the second of the seco

#### DREDGING PLANT.

The following is a description of the dredging plant in November, 1908, owned and operated by the Department of Marine and Fisheries in connection with the River St. Lawrence ship channel:—

#### DREDGES.

The Elevator Dredge 'Laval' (No. 1), wooden hull.

Length over all, 150 feet. Breadth of beam, 30 feet. Depth of hold, 14 feet. Average draught, 11 feet. Greatest working depth, 42 feet. Hull built in Ottawa in 1894. Steel buckets.

Working capacity per day in hard material, 1,000 or 2,000 c. yds.

The Elevator Dredge 'Laurier' (No. 2), wooden hull.

Length over all, 163 feet. Breadth of beam, 32 feet. Depth of hold, 14 feet. Average draught, 10 feet. Greatest working depth, 45 feet. Built at Sorel shipyard in 1897. Steel buckets.

Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Lady Aberdeen' (No. 3), steel hull.

Length over all, 148 feet.
Breadth of beam, 32 feet.
Depth of hold, 13 feet.
Average draught, 8.5 feet.
Greatest working depth, 42.5 feet.
Built at Sorel shipyard in 1900.
Steel buckets.

Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Lady Minto' (No. 4), steel hull.

Length over all, 148 feet.
Breadth of beam, 32 feet.
Depth of hold, 13 feet.
Average draught, 8.5 feet.
Greatest working depth, 42.5 feet.
Built at Sorel shipyard in 1900.
Steel buckets.

Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Lafontaine' (No. 5), wooden hull.

Length over all, 168 feet. Breadth of beam, 32 feet. Depth of hold, 14 feet. Average draught, 9 feet. Greatest working depth, 45 feet. Built at Sorel shipyard in 1901. Steel buckets.

Working capacity per day in hard material, 1,000 to 2,000 c. yds.

The Elevator Dredge 'Baldwin' (No. 6), wooden hull.

Length over all, 165 feet.

Breadth of beam, 34 feet.

Depth of hold, 14 feet.

Average draught, 8 feet.

Greatest working depth, 42.5 feet.

Built at Sorel shipyard in 1902.

1 cubic yard buckets strengthened for fairly hard material.

Working capacity per day in medium material, 2,500 to 3,500 c. yds.

The Hydraulic Dredge 'J. Israel Tarte' (No. 7), steel hull.

Length over all, 160 feet.

Breadth of beam, 42 feet.

Depth of hold, 12.5 feet.

Average draught, 6 feet.

Length of suction frame, 80 feet.

Greatest working depth, 50 feet.

Built at the Polson Iron Works, Toronto, in 1902.

Working capacity per day in soft material, 12,000 to 20,000 c. yds.

Discharge Pipe and Pontoons of Dredge 'J. Israel Tarte' (No. 7).

23 lengths of pipe, 36 ins. diameter by 100 feet long. 1 length of pipe, 36 ins. diameter by 35 feet long. 23 pairs of pontoons for floating pipes, 42 ins. diam. by 90 ft. long.

Winch Scow 'No. 3' for Dredge 'J. Israel Tarte' (wooden hull).

Length over all, 60 feet. Breadth of beam, 18 feet. Depth of hold, 6 feet. Built at Sorel shipyard in 1902.

Winch Scow (wooden hull) for Dredge 'J. Israel Tarte' (with steam boiler and steam winch).

Length over all, 75 feet. Breadth of beam, 25 feet. Depth of hold, 5.5 feet. Built at Sorel shipyard in 1902.

The Suction Hopper Dredge 'Galveston' (No. 9), steel hull, twin-screw.

Length over all, 233 feet.

Breadth of beam, 39 feet.

Depth of hold, 15 feet 5 inches.

Draught when loaded with 1,800 tons, 14 ft. 9 in. aft. 13 ft. 1 in. fwd.

Greatest working depth, 55 feet. Built in 1904,

Two suction pumps, Dutch type 8 ft. 6 ins. outside diameter.

Working capacity, 1,350 cubic yards in 45 minutes.

Hopper capacity, 1,400 cubic yards.

Sea-going Suction Hopper Dredge 'Beaujeu' (No. 8), steel hull twin screw

Length between perpendiculars, 264 feet.

Breadth of beam, 45 feet.

Depth of hull, 20 feet.

Capacity of hoppers, 2,000 cubic yards in 45 minutes.

Greatest working depth, 65 feet.

Draught when loaded, 15 feet.

Ordinary speed, 9 statute miles.

Built at Sorel shipyard in 1907.

#### TUGS.

The Ice-breaking and Sweeping Tug 'Lady Grey' (steel hull, twin screw).

Length between perpendiculars, 172 feet.

Length over all, 183 feet 6 inches.

Breadth moulded, 32 feet.

Breadth extreme, 32 feet 3 inches.

Depth moulded, 18 feet.

Draft mean to bottom of flat plate keel (normal) 12 feet.

Draft when ice-breaking, about 13 feet.

Displacement in tons at 12 foot draught, 1,070.

Mean speed at 12 foot draft on 6 runs over measured mile base, 14 knots.

Built by Vickers Sons & Maxim, Ltd., Barrow-in-Furness in 1906.

The Tug 'Frontenac' (composite hull).

Length over all, 113 feet.

Breadth of beam, 23 feet.

Depth of hold, 10 feet.

Average draught, 9 feet.

Built at Sorel shipyard in 1902.

The Tug 'De Levis' (wooden hull).

Length over all, 104 feet.

Breadth of beam, 20 feet.

Depth of hold, 10 feet.

Average draught, 8 feet.

Built at Sorel shipyard in 1902.

The Tug 'James Howden' (wooden hull).

Length over all, 100 feet.

Breadth of beam, 21 feet.

Depth of hold, 10 feet.

Average draught, 7.5 feet.

Built at Sorel shippard in 1903.

The Tug 'St. Jean d'Iberville' (steel hull).

Length over all, 90 feet. Breadth of beam, 18 feet. Depth of hold, 12 feet. Average draught, 10 feet. Built at Sorel shipyard in 1897.

The Tug 'Lac St. Pierre' (wooden hull).

Length over all, 100 feet. Breadth of beam, 21 feet. Depth of hold, 10 feet. Average draught, 7.6 feet. Built at Sorel shipyard in 1901.

The Tug 'Portneuf' (wooden hull).

Length over all, 84 feet. Breadth of beam, 17 feet. Depth of hold, 9 feet. Average draught, 8 feet. Built in 1875.

The Tug 'Cartier' (wooden hull).

Length over all, 84 feet. Breadth of beam, 18 feet. Depth of hold, 9.5 feet. Average draught, 8 feet. Built at Sorel shipyard in 1893.

The Tug 'Emilia' (wooden hull).

Length over all, 84 feet. Breadth of beam, 17 feet. Depth of hold, 9 feet. Average draught, 8 feet. Built at Sorel shipyard in 1898.

The Tug 'Champlain' (wooden hull).

Length over all, 84 feet. Breadth of beam, 17 feet. Depth of hold, 9 feet. Average draught, 8 feet. Built at Sorel shipyard in 1901.

The Tug 'Jessie Hume' (wooden hull).

Length over all, 72 feet. Breadth of beam, 17.3 feet. Depth of hold, 10 feet. Average draught, 8.5 feet. Built in Buffalo in 1878.

The Tug 'Montcalm' (wooden hull).

Length over all, 80 feet. Breadth of beam, 23 feet. Depth of hold, 8 feet. Average draught, 7 feet. Built at Sorel shipyard in 1903.

The Tug 'Carmelia' (wooden hull).

Length over all, 84 feet. Breadth of beam, 17 feet. Depth of hold, 9 feet. Average draught, 8 feet. Purchased in 1903.

COAL BARGES.

The Coal Barge 'No. 1' (wooden hull).

Length over all, 120 feet. Breadth of beam, 24 feet. Depth of hold, 10 feet. Built in Sorel shipyard in 1898.

The Coal Barge 'No. 2' (wooden hull).

Length over all, 125 feet. Breadth of beam, 25 feet. Depth of hold, 11 feet. Built at Sorel shipyard in 1900.

The Coal Barge 'No. 3' (wooden hull).

Length over all, 98 feet. Breadth of beam, 28 feet. Depth of hold, 12 feet. Built at Sorel shipyard in 1902.

The Coal Barge 'No. 4' (wooden hull).

Length over all, 98 feet. Breadth of beam, 28 feet. Depth of hold, 12 feet. Built at Sorel shipyard in 1903.

Stone-lifter 'No. 2' (wooden hull).

Length over all, 80 feet. Breadth of beam, 25 feet. Depth of hold, 9.8 feet. Rebuilt at Sorel shipyard in 1897.

Stone-lifter 'No. 3' (wooden hull).

Length over all, 108 feet. Breadth of beam, 34 feet. Depth of hold, 14 feet. Built at Sorel shipyard in 1903.

Sounding Scow (wooden hull).

Length over all, 60 feet. Breadth of beam, 25 feet. Depth of hold, 6 feet. Built at Sorel shipyard in 1898.

Floating Shop (wooden hull).

Length over all, 90 feet, 4 inches.
Breadth of beam, 25 feet.
Depth of hull, 9 feet.
1 forge, 1 shaper. 1 emery wheel, 1 drill, 1 lathe, 1 gasoline, 6 h.p. engine.
Living quarters for 4.
Built in 1908 at Sorel shipyard.

Two Boarding Scows (wooden hulls).

Length over all, 60 feet. Breadth of beam, 18 feet. Depth of hull, 7 feet. Built in 1908, at Sorel shipyard.

One Boarding Scow (wooden hull).

Old dump scow. Rebuilt in 1899.

Two Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 97 feet. Breadth of beam, 24·5 feet. Depth of hold, 9 feet. Capacity, 200 cubic yards. Built at Sorel shipyard in 1897.

Two Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 90 feet. Breadth of beam, 18 feet. Depth of hold, 7 feet. Capacity, 150 cubic yards. Built at Sorel shipyard in 1898.

Four Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 97 feet.
Breadth of beam, 24 feet.
Depth of hold, 9 feet.
Capacity, 200 cubic yards.
Built at Sorel shipyard in 1899 and 1901.

Five Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 98 feet. Breadth of beam. 24 feet. Depth of hold, 9.5 feet. Capacity, 300 cubic yards.

Built at Sorel shipyard, two in 1901, three in 1902.

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Two Hopper Scows (wooden hulls) with hydraulic power for closing gates.

Length over all, 97 feet. Breadth of beam, 24.5 feet. Depth of hold, 9 feet. Capacity, 300 cubic yards. Built at Sorel shipyard in 1903.

Two Small Flat Scows (wooden hulls) used at the Sorel Shipyard.

20 feet by 40 feet. One of these with a derrick of five tons lifting capacity.

#### APPENDIX No. 4.

#### SOREL SHIPYARD.

G. J. DESBARATS, Esq.,

Acting Deputy Minister of Marine and Fisheries, Ottawa.

SR,—I have the honour to report on the work performed at the Sorel shipyard during the twelve months of year 1908-9, ended March 31 last.

#### SPRING WORK, 1908.

The opening of the fiscal year finds the shippard busy to its full capacity. The wintering of a large dredging fleet and many other vessels is over. Most of the important repairs have been completed in the various shops and the new pieces of machinery or old ones repaired are put on board.

April is devoted to outfitting the several vessels of the dredging fleet, overhauling all the machinery, cleaning and painting, and then to putting on board all necessary supplies and, in the meantime, taking on the crews with their belongings.

In April, 1908, there were at the shipyard the following craft:-

Six elevator dredges, numbered from one to six.

One suction dredge, known as No. 7, with cutter head and discharge pipes.

One suction dredge, known as No. 8, with cutter head, carrying her own load and self-propelling.

One suction hopper dredge, known as No. 9, also self-propelling.

Nine tugs employed as tenders for the above mentioned dredges:—

The Lac St. Pierre, St. Jean Iberville, Montcalm, Portneuf, Champlain, Cartier, Emilia, Carmelia, Jessie Hume.

Three other twin screw wooden boats, to do towing, as well as survey work, sweeping of the channel, and official duty: the De Lévis, the James Howden and Frontenac.

Fifteen dumping scows, numbered from one to fifteen, to serve the elevator dredges.

The discharge pipe of dredge No. 7, consisting of 2,200 feet of pontoons in 100 feet lengths.

Two stone lifters, used as a complement to the dredging fleet and capable of hauling the largest boulders.

Four coal barges, Nos. 1 to 4, of about 375 tons capacity each, continually busy distributing coal to the dredges and tugs, during the season of navigation.

One floating shop kept within reach of the group of dredges for minor repairs. Three scows with housing on them, serve to lodge the spare crews of the boats, where accommodation is scarce.

Besides the above mentioned craft which had wintered at the Sorel yard, there were also:—

La Canadienne, a vessel of the Hydrographic Survey; the Shamrock and Acetylene, of the Maintenance of Lights branch; the Vercheres, Hosanna and Alpha, three vessels employed in the construction-of-lights branch; the Maisonneuve of the Hydrographic Survey.

In April, 1908, all of the above vessels were, as I said, being outfitted, overhauled and made ready for the season's work.

The ice of the Richelieu river went, on April 8, and that of the St. Lawrence on April 17. The first dredge to leave the shipyard was the No. 3 on May 6.

#### CONSTRUCTION.

In addition to the work required on the vessels of the fleet, there was also the work on the new constructions.

Those on hand at the beginning of the fiscal year were dredge No. 19, dipper

dredge; tug No. 22, for the upper lakes; one floating shop.

Work on the dipper dredge was continued through the whole fiscal year. The vessel was launched in July, 1908, and then the installation of her machinery was begun.

At the same time as the machinery of No. 19 was being completed, that of No.

24, which is to be a duplicate of the first, was kept in hand.

At the end of the fiscal year the main hoisting engine on No. 19 had been installed, as well as the spud-lifting engines, swinging engine, Wheeler condenser, feed pump and dynamo.

Tug No. 22, by April 1, 1908, had her hull almost completed and her woodwork well advanced. The machinery was installed on board, her propeller shafts lined and put in place, her propellers shipped, and on September 25 she was successfully launched. Her installation continued, and in December was far enough advanced to have a trial of her engines in place. By the end of March the vessel was nearing completion.

The name chosen for the new craft known hitherto as No. 22 was Lambton, from

the family name of Lord Durham of historical fame.

The floating shop was equipped with a 6-horse power Foos gasoline engine, stationary type, and with shafting and belting, lathe, shaper, drill, emery wheel, smith's forge, blower and necessary tools.

The floating shop was put to actual work in the month of August, 1908, and is found a great convenience for urgent ordinary repairs. One end is set apart as living room for the foreman, a blacksmith.

#### NEW CONSTRUCTIONS.

Construction No. 20, a stone lifter. Material was received, machinery prepared. Lighthouse Tender No. 21, although begun in previous year, was, properly speaking, put in hand in 1908, her keel being laid in July of that year.

#### Dimensions.

The length is 222 feet over all.

Beam moulded, 34 feet 8 inches.

Depth moulded, to upper deck 22 feet.

Draught, when loaded, 15 feet.

Estimated speed, 11½ knots.

The vessel is of steel throughout, has a double bottom 3 feet deep extending through machinery space and bunker, subdivided in three water-tight compartments, that under the boilers forming the reserve feed tank. There are six water-tight bulk-heads.

The No. 21 will be propelled by twin triple expansion engines with cylinders 15 in. 24 in. and 39 in. diameter, respectively, and a common stroke of 24 inches.

The steam is supplied by two marine boilers of the return tube type, 14 feet diameter by 10 feet long.

There is also a donkey boiler of the vertical type, 5 feet diameter by 9 ft. 2 in. high.

Two flat scows under No. 27 were begun in May, 1903; these scows are 63 feet

by 27 by 8.

Construction No. 28 consisted of two wooden scows, capacity 200 c. yds. One is equipped with the government pattern of hopper doors and hinges, the other has the same design as the Harbour Commissioners' scows, the doors being reinforced by an I-beam and the hinges somewhat different.

In both these scows, as in the whole fifteen others already in commission, the doors are operated by means of hydraulic pressure supplied by a pump on board the tug, and carried through a hose to the ram located within the hold of the scow. This works a shaft and opens or shuts the four pairs of doors at the bottom of the hoppers.

Construction No. 29 is a wooden tug of light draft. A model was worked out

in September, 1908. The framing was begun in November.

This tug is to have twin-screws and double expansion engines of the type of the *Emilia*. At the end of the fiscal year, the framing of the hull was completed and the planking fairly advanced. The engine frames, cylinders, and several other pieces of the machine were cast.

Construction No. 30. This is a derrick scow for work on the Ottawa river. The scow is 40 feet by 16 feet by 4 feet, carries a stiff leg derrick, with boom of 25 feet and a hand winch. There is a cabin on deck of 8 feet by 10. This scow was built during winter of 1909 for the Maisonneuve. At the beginning of April of this year, there remained some painting to be done and a few items of outfitting.

#### SUMMER WORK, 1908.

Reverting to the vessels of the dredging flect, these were as usual, kept in efficient working order throughout the season of navigation.

The De Lévis was hauled on the slipway for repairs to her rudder.

Dredge No. 3 was brought to the shipyard to have a new upper tumbler installed. Some weeks later, the same dredge through an accident, had her frame broken, which called for extensive repairs.

The tug Jessie Hume was also hauled out for painting, and securing the

iron sheeting at water line.

#### VESSELS HAULED OUT, ETC.

The following vessels were also hauled out on the slip-way in the course of season 1908:—tug Montcalm, tug Hosanna, scow No. 9, tug Alpha, scow No. 14, tug Ottawa, tug Reserve, tug Champlain, tug Emilia, scow of St. Ours lock, tug Frontenac, tug Vercheres, scow No. 10, barge Acetylene, for repairs either to their propellers, rudders, shafting or hulls.

The stone lifter of the Public Works Department was brought to the shipyard and received a final coat of paint. The piping was overhauled, and two cleats added

to the deck equipment.

N.B.—This is outside of the ordinary work of the Marine and Fisheries, but the facilities at the shippard and central location of Sorel, make it convenient for other departments to have some of their work done here.

## MAINTENANCE AND IMPROVEMENTS TO SHIPYARD BUILDINGS AND PLANT.

The buildings of the different shops were kept in repair. The machine shop foundation had to be examined, and as a consequence, the ground plates and bases of studding were renewed; some additional ventilation was provided, the confined spaces underneath being apt to induce rotting of the timbers.

At the blacksmith shop a crane of 15 feet radius, and 1,500 lls. capacity was added to the plant.

At the boiler shop, some broken sections of the iron floor were renewed. The furnace was relined with fire brick. A set of powerful bending rolls were purchased and received during the winter. These will be capable of bending boiler plates 14-inch thick and roll boiler halves 14 feet diameter and 12 feet 6 inches wide.

Building Nos. 2 and 3 had ordinary repairs and painting.

Building No. 4.—Contains offices and stores. Alterations were made to increase space available for offices; in summer 1908, the foundation was repaired; the bottom stringer being rotten, had to be renewed.

Building No. 5, Machine shop.—Repairs were made to soil plate, as the woodwork was decaying.

Buildings Nos. 6, 7, 8, 9, 10 11, 12, 13, 14, 15, 17, 18 and 19 were all painted during the summer of 1908.

Shipyard railway.—The narrow gauge track received new extensions, one line being built from the saw-mill to the boiler house, No. 2, to carry the slabs from the mill to the fire. One line of track was also laid alongside of the standard gauge railway siding and extended to the wharf No. 4. These two new lines were connected with the previously existing lines, and also with the new dry kiln, and the shed for dry lumber.

Six new switches, two right angle crossings and about 2,000 feet of new track were laid. Planking was renewed and crossings added on the old track, wherever necessary.

Wharf No. 4.—Which is the newest and largest of the four at the shipyard, was filled at the rear, with material dredged at high water, by *Dredge No.* 7, and discharged through its floating pipe.

The anchorage of the cribwork was added to by driving groups of piles and binding same with chains and rods to the loaded platform of the wharf. The earth filling was levelled, and a wooden floor laid on top. The first cargo of coal was placed there in November, 1908.

#### NEW BUILDINGS.

Four new buildings were erected in the course of the year in order to meet the growing requirements. One known as No. 22 is a store house for castings large and small; there are two floors 50 by 32 feet.

In connection with this store-room, there is a plank platform 100 feet by 36 feet, where heavy castings are stored, while waiting to be brought to the machine shop near by. The whole is inclosed by a wire fence 100 by 80 feet, with gates under lock and key, so as to ensure correct distribution of all castings issued to the several constructions.

Another new building is No. 23. The dry kiln, which existed before, had become unequal to the needs of the shipyard. A new one was built in 1908. There are two compartments, 10 feet by 60 feet, with 1,600 feet in each, of 13-inch piping. The kiln is capable of taking alternately or at same time 18,000 feet of lumber. It is equipped with necessary ventilators and means of regulating the heat and evaporation.

Building No. 20 is a double pitched roof building 51 feet long by 25 feet, with wide sliding doors on either side, and serves for storing lumber after it has been dried in the kiln, or dressed at the mill, and is wanted as a reserve. The narrow gauge track runs along the doors on the south side.

Building No. 21, or boiler-room No. 2, also erected in 1908, is a sort of temporary housing for two boilers of the locomotive type. These are used to consume the slabs

and sawdust; the steam generated serving to heat the dry kiln, and also for the heating, in winter time, of the sawmill, paint shop, asbestos shop and mould loft.

The boilers rest on a concrete foundation which has been made permanent from the first and will allow the superstructure, now of rough boards only, to be lined with

brick or concrete, at some future time.

This boiler-room No. 2 is connected with the sawmill by a square wooden box, carried on posts, through which the sawdust and shavings are blown into a large bin in the boiler-room. It is also connected by steam pipes with asbestos shop and adjoining buildings.

The northern end of the grounds is gradually being occupied by new buildings. As a consequence the extension of the narrow gauge track, mentioned above, and also

the increasing of the fire protection were necessary.

#### WATER WORKS.

One main line 6 inches in diameter, running along the railway track and branching out with 4 inch pipes to wharf No. 4 and to wharf No. 3, with one hydrant on each branch, were laid. One hydrant was placed northwest of boiler-room No. 2, and a fourth one at a short distance from buildings No. 15 and 19, where the patterns are stored, as well as the movable equipment of vessels in winter time. Seven hundred feet of pipe were laid and four hydrants, as mentioned above, and two others repaired.

#### DRAIN.

An earthenware drain pipe was laid from the centre of the space between the mould loft and dry kiln and lumber store to the water's edge, at wharf No. 4. The area between the above mentioned buildings has since been quite free of water, even during the spring thaw and heavy rains.

#### WINTER WORK, 1908-9.

At the end of the season of 1908, the whole of the dredging fleet enumerated above, together with the new constructions launched during the summer, were at the shippard as their winter quarters.

In addition to this, were the following: La Canadienne, the Lady Grey, the Maisonneuve, the International, of the Public Works Department; as well as the vessels of the construction of lights branch: Vercheres, Hosanna, Alpha, and several scows. The Shamrock and Acetylene also had their repair work done at the yard; and finally the Constance was brought here in the fall, to have a new hoiler installed.

Following in alphabetical order, are the principal items of repairs executed in the course of the winter:—

Acetylene.—This vessel of the maintenance of lights branch, met with an accident at the close of navigation of 1908, while lifting buoys. The vessel had a load of gas buoys on board and was being towed to Sorel, when she capsized and turned turtle.

The wrecked vessel was towed in that position to Sorel harbour, and an attempt to right her was made by means of the crane of dredge International, but was not successful. As the ice was fast forming, and vessels had to go into winter quarters, the operations were postponed until the ice was strong enough to serve as base. Finally on December 29, the vessel was turned right side up and afterwards removed from its position in the channel, a road having to be cut through ice almost two feet thick. The vessel was found to have lost her boiler, and all movable things on deck. The crane was broken by dragging on the bottom, and many connections burst through freezing. The woodwork was out of plumb and partly broken.

The Acetylene received a general overhauling, all machinery being dismounted and refitted. A new boiler was installed, new piping laid; the crane was repaired; the

woodwork was altered so as to include the compressors in the main room of the barge; the roof was repaired, windows and doors touched up or renewed; the sides and hull of the vessel were painted.

Alpha.—Changes to steering apparatus, caulking deck and painting.

Coal barges No. 1, 2, 3 and 4 were caulked and painted. No. 3 was given a new life boat.

Bronx. a gasoline launch, hauled out for repairs.

Building No. 16, or power house, received coat of paint, during week following Christmas.

Building No. 17, saw-mill.—A circular saw was added, also a saw setting machine.

Tug Champlain was hauled out in November and wintered on the ways.

The position of the shaft was straightened and some repairs were made to the boiler. The vessel was scraped and painted and let down in the spring.

Tug Carmelia had a new smokestack.

Tug Cartier.—The boiler had to be raised for inspection, and was found to need repairs to lower front part and water pan. New plates had to be flanged, the old ones renewed, and of course, connections overhauled, asbestos relaid, &c.

C.G.S. Constance.—Had a new boiler built at the yard and installed. This necessitated cutting through deck, and through roof of boiler room. A wheel house was added to the vessel. The machinery and equipment received at the same time a thorough overhauling.

#### CONSTRUCTION OF LIGHTS.

Vessel Vercheres.—In order to secure a clear view from pilot house astern, two ventilators were shifted to each side. A new life boat was supplied to the Vercheres. Pile Driver Scow was caulked and painted during winter 1909.

Barge Davis—Had a new boom, repairs to mast, painting and caulking part of deck.

De Levis.—The boiler had to be raised for inspection and needed new plates at lower front and new water pan. The repairs were of the same nature as those on the Cartier.

Dredge No. 3 was hauled out in November. The hull was thoroughly scraped and painted in the fall; an additional coat was given after the winter. The vessel was launched only in the spring of 1909.

Dredge No. 7.—There were new water ends fitted on two feed pumps. Repairs to the breasting winches, new cast-iron nipple on the suction pipe of dredge, 3 feet long x 3 feet square.

Jet blowers were installed on boiler, making two boilers so equipped. The pipe pontoons were hauled out and repaired, scraped and painted. The winch scow was hauled out for repairs. The special pontoon connected at the angle of dredge was repaired pending the construction of a new one.

Dredge No. 8 had ordinary repairs and painting.

Dredge No. 9 also had ordinary repairs; a new pair of davits was installed and another repaired. There were also repairs to the crane of the suction pipe; a new gear for the stern winch and strengthening of deek forward.

Tug Emilia had repairs to her deck, guards and stanchions.

Tug Frontenac had ordinary repairs; was supplied with a new flat-bottomed boat 15 feet x 3 feet. The hull was painted and the gasoline launch was equipped with a new Bellfuss engine.

Hosanna.—Main deck was caulked, spring of 1909, besides painting.

Iberville.—The boiler had to be lifted from its place and repairs to bottom angle and water pan were made. To make the above repairs the woodwork had to be cut and connections, asbestos covering, &c., made anew after boiler was reinstalled.

International (a spoon dredge of the Public Works Department) wintered here. The three spuds and dipper arm were taken down for repairs.

The spuds were refitted and put in position by means of the shear legs. A new spider for bucket crane was forged and fitted. Foundations of one engine were rebuilt of steel instead of wood, and two dumping scows were repaired.

James Howden.—Boiler had to be lifted for examination and repairs; the front bottom plates had to be renewed. In order to repair the boiler and re-insert the tubes the cylinder engine had to be taken out. As in the case of the other two boilers before mentioned, connections and covering had to be overhauled.

Jessie Hume had a steam steering gear installed; this was taken from the De-Levis, where a stronger machine was placed last year in view of work below Quebec. Lady Grey wintered at the yard. There were ordinary repairs; some ventila-

tors added. A 24' x 6' x 26" Clinker built boat was built for her.

The tank was cleaned and painted; the double bottom spaces were cleaned and received a cement wash.

Lake St. Pierre.—The boiler had to be raised for inspection. It was necessary to repair the lower front and water pan. This is the fourth of the series of boilers which had to be repaired in the same manner. There is considerable labour in repair of this kind, the old plates having to be cut in place, the new ones adjusted and tried, and then drilled and riveted, all in the cramped space in the hold of the tugs.

Maintenance of Lights.—Repairs were made to 3 floating lightships of Lake St. Peter channel, 1, 2 and 3. The No. 2 had a new deck, new guards, stanchions, windlass; the other two had minor repairs of the same nature; decks were caulked, woodwork painted.

A mast to carry a light was built and shipped to wharf, Longueuil ferry, near Bellerive Park, Montreal.

Boiler makers, smiths and painters were supplied for repairs to gas buoys.

Maisonneuve wintered at the yard; was hauled on slipway, the boiler was reconstructed; a new rudder made, woodwork repaired and painted, deck was caulked.

Montcalm had repairs to her boiler, which had to be raised in the same manner as described for the Lac St. Pierre and Iberville.

Shamrock had six new stay tubes fitted; some alterations to woodwork of chart-room, and some repairs to main hoisting winch.

Sounding Scow wintered at shipyard, was hauled out on the slipway, repaired, caulked and painted.

A number of pressing jobs accomplished throughout the year for vessels of the dredging fleet, or auxiliaries, are not detailed in the foregoing report, but form together a considerable total.

The readiness of the shippard to handle these emergency jobs on short notice, with trained mechanics, is of vital importance to the efficiency of the channel dredging fleet.

General.—All the buildings of the shipyard were painted during the year 1908. The machinery was kept in good order, as well as the water-works system for fire protection. In winter, the roads were maintained, ice was cut around the vessels, and special watch kept over the fleet wintering here. The telephone exchange and electric light lines were kept in constant working order. The compressed air distribution and air compressor were also kept in constant efficiency.

Force Employed.—The force employed varied from 623 to 920 and averaged 729 for the twelve months.

The financial statement herewith, shows the total amount expended at the Sorcl shipyard during the fiscal year ending March 31, 1909, t ohave been \$1,132,279.40.

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

L. G. PAPINEAU.

Assistant Director of Shipyard.

# GOVERNMENT SHIPYARD, SOREL.

STATEMENT of Revenue and Expenditure for the Fiscal Year 1908-1909.

		9-10 EDWARD VII., A. 1910
Amount,	& cts.	707,322 58 131,225 31 156,751 91 52,308 43 4,066 57 4,256 00 22,587 56 16,935 22 1,516 69 1,16 69 1,16 69 1,316 90 283 96 283 96
		31. By Operating dredging fleet   \$537,638 79 31. By Operating dredging fleet   47,691 03 31. Improvements to Sorel shippard   79,234 04 42,755 72 32. Stores and materials.   79,234 04 42,755 72 31. Construction to 19 dredge for Cap   73,673 04   70,29 total fifter No. 4   10,797 93   70,29 total fifter No. 4   10,797 93   70,29 total fifter No. 4   10,797 93   70,29 total fifter No. 4   10,797 94   70,29 total fifter No. 29 total fifter No. 59 total fifter No
Year.	1909.	March  1
Amount.	& cts.	730,728 10 131,225 31 156,134 71 15,135 33 16,502 56 16,502 56 16,502 56 16,502 56 16,502 56 16,502 56 16,502 56 16,503 10 2,41 51 1,31 6 1,31
		March 31. To Appropriation for St. Lawrence ship channel actually expended           " Appropriation for improvements to dredging plant Construction of dredge for Cap à la Roche. \$73,673.04           " Stone lifter No. 4         10,797.93           " Stone lifter No. 4         10,797.93           " Flevator dredge. \$73,673.04         10,797.93           " Flevator dredge. \$73,673.04         10,797.93           " Flevator dredge. \$75.54         10,000.00           " Flevator dredge. \$75.04         10,798.00           " Flevator dredge. \$75.04         10,798.00           " Steamer for construction of lights below Quebec. \$1.00         10,798.00           " Hydrographic Survey. \$1.00         10,799.00           " Hydrographic Survey. \$1.00         10,799.00           " Steamer Scout. \$1.00         10,799.00           " Steamer Forder. \$1.00         10,799.00           " Bopartment of Public Works. \$1.00         10,799.00           " Mondealm. \$1.00         10,799.00           " Monde
Year.	1909.	March

113 74 119 19 19 259 86 259 86	2 & 2 &
13 74 119 19 12,259 86	1,132,279 40
Department of Railways & Canals. Salaries at Ottawa. Cruiser Constance, repairs and supplies. \$ 3,913 80	
######################################	
	1,132,279 40

L. G. PAPINEAU, Assistant Director of Shipyard.

Shipyard, Sorel, March 31st, 1909.

APPENDIX No. 5.
Statement of Expenditure for the Year 1908-9.

Service.	Vote.	Expenditure.	Totals.
	\$ cts.	\$ cts.	\$ cts
Ocean and river service— Dominion steamers and icebreakers	625 000 00	694 010 76	
Examination of masters and mates	$\begin{array}{cccc} 635,000 & 00 \\ 12,600 & 00 \end{array}$	634,919 76 8,244 56	
Rewards for saving life	39,600 00	35,586 13	
Investigation into wrecks	12,000 00	8,569 02	
Schools of navigation	10,000 00	3,599 23	
Registration of shipping Removal of obstructions	2,000 00 $20,000 00$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Tidal service	32,000 00	31,271 67	
Winter mail service	16,000 00	6,509 97	
Cattle inspection	3,600 00	3,555 99	
Wrecking plants Unforeseen expenses	30,000 00 5,000 00	$\begin{bmatrix} 30,000&00\\4,166&78 \end{bmatrix}$	
Naval Militia	10,000 00	8,652 33	
Patrolling waters in northern portion of Canada and	20,000 00	0,002 00	
Hudson bay	56,000 00	55,733 94	
New icebreaking steamer	365,000 00	363,073 19	
New steamer to replace Lansdowne	75,000 00		
hay	4,000 00	4,000 00	
ublic Works—chargeable to capital—			1,201,804 76
Ship channel	760,000 00	730,728 10	
Permanent piers in Lake St. Peter, &c	100,000 00	94,185 84	
Dredging plant, River St. Lawrence	213,000 00	131,370 64	
Purchase of yard property at Sorel.  Compensation to Wm. Paul, jr.	$\frac{30,000\ 00}{7,000\ 00}$	7,000 00	
Gratuity to the mother of the late J. Carbonneau	500 00	500 00	
ighthouse and coast service—			963,784 58
Agencies, rents and contingencies	33,000 00	31,403 17	
Salaries and allowances to lightkeepers	330,000 00	321,218 91	
Maintenance and repairs to lighthouses	730,000 00	725,013 05	
Repairs to lightships Construction of lighthouses and aids to navigation	20,000 00	16,606 14	
	1,300,000 00	1,223,713 29	
Wireless stations	131,550 00	66,238 07	
Signal service	9,000 00 $31,550 00$	8,939 35 31,546 00	
Pensions to retired pilots	3,600 00	3,400 00	
Maintenance and repairs to wharfs	3,000 00	2,338 47	
Maintenance and upkeep of dockyards	50,000 00	45,061 98	
Breaking ice in Thunder bay and Lake Superior Salaries of temporary clerks, &c	40,000 00 17,000 00	$\begin{bmatrix} 33,692&00\\ 7,720&09 \end{bmatrix}$	
Telephone stations	10,000 00	1,120 03	
Telephonic reporting stations (signal service) Montreal			
and Father Point.	23,500 00	20,273 60	
New steamer for the great lakes and Georgian Bay Repairs to maritime road, Gaspé	150,000 00	147,186 94	
Charter of steamers, Lime Kiln Crossing	$2,000 \ 00$ $12,000 \ 00$	$\begin{bmatrix} 1,696&59\\11,650&00 \end{bmatrix}$	
Improvements at Parry Sound	30,750 00	23,978 93	
Purchase of land at St. John, N. B	50,000 00		
Pension to Pilot F. X. Lamarre New lightship at Point Pelee, Lake Erie	150 00	125 00	
Signal service for Grosse Ile	30,000 00 1,000 00		
\ <u>-</u>			2,721,801 58
cientific Institutions and hydrographic surveys— Meteorological service	122,300 00	120,664 59	
Magnetic observatory.	3,200 00	3,052 47	
Montreal	500 00	500 00	
Kingston	500 00	500 00	
Hydrographic surveys	170,000 00	130,229 83	
survey steamer for Pacific coast	45,750 00 50,000 00	41,104 45 527 96	
iii iii ii i	00,000 00	021 .0	296,579 30

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# STATEMENT of Expenditure for the Year 1908-9-Concluded.

· Service.	Vote.	Expenditure.	Totals.
	\$ ets.	\$ cts.	\$ cts.
Brought forward			5,183,970 22
Scientific Institutions and hydrographic surveys— Marine hospitals	55,000 00 3,000 00 46,600 00	54,989 85 2,004 02 41,226 47	56,993 87
Inspection of Dominion Steamers and fog alarms	4,500 00		41,226 47
Fisheries— Salaries and disbursements of Fishery officers Fish breeding. Fisheries protection service Oyster culture Cold storage Dog-fish reduction works. Souris fish curing establishments Canadian Fisheries exhibits. Distributing fishing bounty Building fishways Legal and incidental expenses Georgian Bay laboratory. Fisheries protection service cruiser for Pacific coast Marine biological stations. Transportation of fresh fish Fishery commissions. New steamer to replace Osprey  Gasoline launches for British Columbia Inquiries into fisheries rights (Federal & Prov'l. Gov'ts). Services of customs officers issuing licenses to U. S. F. vessels. International Fisheries commissions.	$\begin{array}{c} 192,900 \ 00 \\ 322,300 \ 00 \\ 270,500 \ 00 \\ 7,000 \ 00 \\ 60,000 \ 00 \\ 75,000 \ 00 \\ 12,000 \ 00 \\ 12,000 \ 00 \\ 5,600 \ 00 \\ 10,000 \ 00 \\ 2,000 \ 00 \\ 25,000 \ 00 \\ 25,000 \ 00 \\ 25,000 \ 00 \\ 25,000 \ 00 \\ 25,000 \ 00 \\ 25,000 \ 00 \\ 25,000 \ 00 \\ 4,000 \ 00 \\ 10,000 \ 00 \\ 700 \ 00 \\ 5,400 \ 00 \\ \end{array}$	161,756 34 190,563 19 242,601 14 3,635 36 32,688 58 45,223 88 2,324 78 4,300 01 5,598 09 6,764 22 1,970 51 1,500 00 8,354 21 20,099 70 4,232 00 7,337 73 25,000 00 18,000 00 3,998 85 748 12	761 792 60
Miscellaneous— To repay A. Cushing & Co., re seizure of schr. Evolution in 1893. Investigation, Marine and Fisheries Department Returns to Parliament. Contingencies Civil government salaries	800 00 55,000 00 500 00 21,150 00 122,250 00	800 00 31,316 90 681 02 20,320 92 163,222 36	791,728 69 800 00 31,316 90 681 02 20,320 92 163,222 36
Totals			6,290,260 45

## APPENDIX No. 6

STATEMENT of Revenue of Marine and Fisheries Department for Fiscal Year Ended March 31, 1909.

Service.	Amount.	Refunds.	Total.
Harbours, piers and wharfs.	\$ ets. 18,288 25	\$ ets. 484 00	\$ ets. 17,804 25
Dominion steamers—			ŕ
Champlain.			
Freight, 1,127.86; passengers, 5,699.85; meals, 275.75; berths	7,103 46		
Minto.			
Freight, 6,171.99; passengers, 3,275.50; meals, 277.10; berths, 487.00; miscellaneous, 332.25	10,543 84	13 52	
Stanley.			
Freight, 6,443.97; passengers, 2,887.00; meals, 334.10; berths, 589.00; extra, 1.00.  Winter mail service Examination, masters and mates Fines and forfeitures. Steamboat inspection fund  "engineers certificates. Sick mariners fund. Signal station dues. Decayed pilots fund. Pilots expense account Marine register fees. Pilots licenses. Casual revenue marine  "fisheries.	10,255 07 123 30 4,192 50 418 00 5,952 96 2,014 50 67,483 46 663 00 5,485 88 140 00 44 42 35 00 35,584 37 3,481 48	1,234 13 575 46	27,888 85 123 30 4,192 50 418 00 5,952 96 2,014 50 66,249 33 663 00 5,485 88 140 00 44 42 35 00 38,490 39
Total	171,809 49	2,307 11	169,502 38
Fisheries revenue	75,011 31 9,794 70	2,109 75	72,901 56 9,794 70

# FISHERIES Revenue for Fiscal Year Ended March 31, 1909.

Ontario Sales and Fines. Quebec Licenses and Fines. Nova Scotia New Brunswick. Prince Edward Island. Manitoba Saskatchewan Alberta Hudson Bay British Columbia Yukon.	6,787 9 5,394 7 12,385 8 2,393 6 3,237 2 1,185 8 1,296 6 20 6 41,321 6 228 6	1 0 9 9 16 12 22 10 10 90 55	31
Less Refunds:— Nova Scotia New Brunswick Manitoba. British Columbia.  Modus Vivendi	25 (7 14 (2,070 (2,109 7	00 55 00 00 75 \$2,109 \$72,901	75 56
Grand total		\$82,695	56

For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

und Little date.					
Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount.	
Ontario.			p. <b>c.</b>	\$ cts.	
Bronte. Bruce Mines Echo Bay. Goderich Haileybury Hilton. Honora Kingsville L'Orignal Leamington Midland North Bay Oshawa. Pelee Island Pembroke. Providence Bay Richards Landing Rondeau Rosseau Sault Ste. Marie	W. H. Black E. A. Hall J. E. Johnson J. Yates P. Kinsella W. T. Henry H. Henderson J. McKechnie R. Armstrong W. R. Fellows A. Monteith G. S. Boyd F. G. R. Bradbury Geo. McVittie J. D. Perron	Oct. 26, 1905. April 15, 1902. Oct. 9, 1908. Feb. 14, 1894. May 8, June 20, 1894. Oct. 26, 1905. Aug. 1, 1902. Aug. 10, 1905. June 30, 1905. Aug. 10, 1904. April 27, 1906. June 10, 1907. Dec. 17, 1883. Aug. 6, 1908. Aug. 16, 1908. Aug. 16, 1897. Aug. 16, 1898. Aug. 16, 1908. Aug. 6, 1908. Aug. 6, 1907. April 27, 1908. Aug. 16, 1908. Aug. 16, 1908. Aug. 16, 1908.	50 25 25 25 25 25 25 25 25 25 25	646 42 58 77 145 41 49 79 58 60 324 30 182 51 13 87 66 20 202 66 119 27 462 63 8 60 1 42 167 59 100 00 16 50 171 64 33 30 147 49	
Harbour dues — Fort William			\$84 75 35 00	4,376 16	
Total		,		4,495 91	

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For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Locality.	Wharfinger.	Date of Appointment.	Remuneration Allowed.	Amount.	
Quebec.			р.с.	\$ cts	
Anse aux Gascons	S Chapados	Feb. 16, 1906	25	89 2	
Anse St. Jean			\$19 per annum.	46 5	
Baie St. Paul	E. Cunningham		25	36 9	
Beauport	Under lease			20 0	
Berthier	J. Blais	Nov. 7, 1905	50	87 5	
Cap à l'Aigle	A. Dufour	May 11, 1906	25	22 0	
Carleton	B. Leclerc	June 13, 1905	50	1 8	
Chicoutimi	T. Tremblay	May 23, 1901.	\$122 per annum.	200 0	
Coteau Landing	E. de Chantal	Feb. 1, 1909	25	22 5	
rand River	Geo. Beaudin	Nov. 16, 1896	25 50	199 9	
Hudson	E. W. Mullan	July 13, 1904	25	47 8	
le aux Grues	D. Vezina	June 13, 1904	25	13 3	
acolle		Mar. 8, 1894	\$29 per aunum.	33 0	
Les Eboulements	Fusaba Dania wrt	May 15, 1901 .	25 per annum.	127 4	
lagog	D Poters	June 15, 1906.	50	49 2	
Matane	Louis Durette	Aug. 25, 1900	25	206 2	
Murray Bay			\$40 per annum.	59 8	
New Carlisle			50	62 2	
Paspébiac	Julien de Caen	Feb. 22, 1908.	50	12 6	
Peel Head Bay	S. N. Ray		25	6 5	
Percé	E. Bourget	Mar. 11, 1903	25	233 2	
Port Daniel			\$50 per annum.	56 7	
Rigaud	O. Mallette	Oct. 14, 1907		33 6	
Rimouski			50	118 5	
Rivière du Loup	L. J. Puize		\$146 per annum. 25	192 3 11 0	
St. Anicet	M. C. Pognon	Sept. 14, 1896	50	180 0	
St. Alphonse de Bagotville	The Fortier	May 21, 1908		63 3	
St. Jean d'Orléans	I. Lachance	Sept. 26, 1896	50	15 (	
St. Jean Port Joli		Nov. 5, 1908	25	19 2	
Ste. Cécile du Bic	O. Quellette		25	94 4	
St. Laurent d'Orléans	J. Godbout	May 11, 1904	50	20 1	
St. Nicholas	. Under lease			25 (	
St. Siméon	H. Savard	May 7, 1908	25	1 4	
St. Thomas de Montmagny	L. L. Dionne	Oct. 22, 1896	25	7	
St. Zotique	. A. Bissonnette	May 7, 1906	25	9 4	
ladousac	A. Gingras	May 29, 1906	\$30 per annum.	57 2	
				2,477 1	
Refunds				484 (	
Harbour Dues		1			
St. John's					
Sorel			163 00		
				281 (	
				2 0 12 6	
				3,242	

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For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Babin's Cove.   Alex. Thomas.   Oct.   20, 1897.   25	arfinger.  Date of Appointment.  Remuneration Allowed.	Wharfinger.	Locality.
Barrington	р. с.		Nova Scotia.
Port Wade.	Stie   Aug. 31, 1896   25   1807   26, 1907   25   25   25   25   25   25   25   2	J. H. Christie J. W. Ellis R. Grant J. Small St. C. Thériault J. P. Littlewood Jas. McLeod Alex. Craig H. Dickey Alf. Ward L. Belliveau R. W. McCaul L. N. Poirier W. W. Haden T. W. Brooks H. Roney T. A. Neuville C. H. Harvey C. E. Dunn L. D. Curry J. Fredericks J. B. Huskins D. H. McLean H. F. Robichaud D. D'Entremont J. Redgate Under lease J. L. Swindle S. Anderson F. A. Eaton W. K. Smith A. Balcon O. Douglas F. McInnis C. D. Cook F. Beardsley Geo. Cook D. F. Macualey J. D. Apt Alex. Shaw Jn. T. Saulnier R. Nickerson J. F. Duncan A. West C. C. D'Entremont J. L. Franklin D. Livingstone.	Barrington Battery Point. Bayfield. Bear Point Belliveau Cove. Belliveau Cove. Black Point Brooklyn. Brulé. Canada Creek. Centerville. Church Point Delaps Cove. Descousse Digby. Freeport. Grandville Centre. Hall's Harbour. Halifax Hampton Harbourville. Horton's Landing Jordan Bay Kelly's Cove. Margaretsville Moteghan Cove. Meteghan River Morden Oak Point, Kingsport. Ogilvie. Parker's Cove. Pickett's Wharf. Plympton Port Dufferin. Port George. Port Hawkesbury Port LaTour Port Lorne Port Wade. Sandirord. Saulnierville. Shag Harbour Swims Point. Victoria. West Pubnico Wolfeville. Whycocomagh
Grand total 5,			

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For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

	Wharfinger.	Date of Appointment.	Remuneration   Allowed.	Amount.
New Brunswick.			р. с.	\$ ets.
nderson's Hollow W. Gampbeilton. Geo. araquet. Hen ape Tormentine N. I alhousie W. opewell Cape. Geo. wo Rivers. W.	E. Asker ri Friolet. B. Riley. J. Smith. D. Wilson.	May 11, 1904 Sept. 11, 1906 June 25, 1905 June 27 1891 April 10, 1899 Sept. 23, 1889	25 25 25 25 25 25 25 25 25 25	108 13 1,970 01 30 21 599 08 264 67 51 59 51 13 1 84
				3,082 60
Prince Edward Island.  nnandale	Iarrington F. Halliday JcCormack S. N. Crane Lord Gunn JcKinnon R. Jenkins Tisher Webster Henry Hongomery Hodgson Johnston JcKinnon a Bull F. Steele M. Haley Smith Randall F. Gaudet M. Forbes	Oct. 2, 1885. May 1, 1901. Sept. 18, 1885. Sept. 18, 1885. Agt. of Dept. May 24, 1900. July 7, 1897. Oct. 14, 1892. March 27, 1998. Oct. 22, 1896. Nov. 9, 1891. Aug. 16, 1901. June 10, 1895. May 3, 1900. Jan. 27, 1896. May 1, 1901. Oct. 13, 1896. April 3, 1900. Dec. 31, 1908. Aug. 23, 1898. April 23, 1898. April 23, 1898.	25 25 25 25 25 25 25 25 25 25 25 25 25 2	82 53 1 61 62 65 17 88 39 47 730 35 26 25 220 16 10 25 32 71 43 65 1 7 75 63 78 136 45 7 50 63 65 31 33 16 73 32 25 28 74 48 65 48 65

# For the Year Ended March 31, 1909, Minor Public Works—Revenue—Wharfs, Piers and Harbours.

Locality.	Amount.
British Columbia.	\$ ets.
Comex (Harbour dues) Ladysmith (Harbour dues). Nanaimo	139 00 1 09 97 50
Total.	237 50

List of United States Fishing Vessels to which Licenses were issued under the Act, intituled, "An Act respecting Fishing Vessels of the United States of America," during the fiscal year ended March 31, 1909.

Vessel.	Port of Registry.	Tonnage.	Port of Issue.	Amount.
· Cocci.	for or registry.	Tommage.	Tort of Issue.	Amount.
				8 cts.
Viola	Beverly, Me	14	Yarmouth, N. S	21 00
Maxime Elliot		75 75	Shelburne, N. S	112 50
Quickstep	Portland Me	75 44	Varmouth N S	$\begin{array}{c} 112 \ 50 \\ 66 \ 00 \end{array}$
Elector	Gloucester, Mass	84	Digby, N. S. Yarmouth, N. S. Pubnico, N. S.	126 00
Indigin		89	Shelburne, N. S	133 50
Dickerson	Southwest	23	Shelburne, N. S Yarmouth, N. S	34 50
Ella M. Goodwin		86	Sand Point, N. S,	129 00
J. W. Parker	Boston, Mass	96 8 <b>3</b>	Halifax, N. S.	144 00
Susan & Mary	Gloucester Mass	125	Lockeport, N. S	124 50 202 50
Lizzie Maud	Vinal Haven.	48	Yarmouth, N. S	72 00
Senator	Gloucester Mass	74	Pt. Mulgrave	111 00
Margaret. Yakima. Cavalier. Richard. A. R. Lawson.		79	Canso, N. S	118 50
Yakima		71		106 50
Cavalier		96	Port Hawkesbury, N.S.	144 00
Kichard	"	90	T 1 N G	135 00
A. R. Lawson	Boston Visco	85 . 87	Lockeport, N. S Pubnico, N. S	$127 50 \\ 130 50$
Harvard	Gloncester, Mass	76	Liverpool N S	114 00
Waldo L. Stream	11	81	Liverpool, N. S Port Hawkesbury, N.S.	121 50
Arbutus		86	Liverpool, N. S	122 00
Selma	Boston, Mass	87	Port Hawkesbury, N.S.	130 50
Vera		77	G N G"	115 50
Dictator		92 92	Canso, N. S	138 00
Cath. Burke		78	11	138 00 117 00
Gossip	Gloucester, Mass	91	"	136 50
John Hays Hammond	"	92	Port Hawkesbury, N.S.	138 00
John Hays Hammond	и	71	House Harbour, P. Q.	106 62
Arcadia		90	D	135 21
Moornam.	Boston, Mass	82	Pubnico, N. S Canso, N. S	123 00
Mildred Robinson	Glovacetor Mass	$\frac{86}{92}$	Canso, N. S	129 00 138 00
Dora A. Lawdon	"	93	Varmonth N S	139 50
Dora A. Lawdon Valkyrie		104	Arichat, N. S Yarmouth, N. S Shelburne, N. S	156 00
Onata	Boston, Mass	105	North Sydney Yarmouth, N. S	157 50
Jas. R. Clark		43	Yarmouth, N. S	64 50
Preceptor		89	White Haven, N. S	133 50
Gladiator	11	75 77	Canso, N. S	112 50 $115 50$
Atlanta		75	Causo, N. S	112 50
Mooween	Duxburg	83	Arichat, N. S.	124 50
Jas. A. Garfield	Gloucester, Mass	50	Port Hawkesbury	75 00
Mary Edith		51	Liverpool, N. S	76 50
John R. Bradley Fannie A. Smith	Gloucester, Mass	80	Tusket Village	120 00
Jennie B. Hodgden	11	87 85	Amherst, Mag. Is	131 37 127 50
Elizabeth N	Bucksport	153	Yarmouth, N. S St. Peters, P. E. I North Head, N. S	153 00
Agnes	Gloucester, Mass	75	North Head, N. S	112 50
Paragou	11	80	St. John, N. B	120 00
Lillian	Boston, Mass	95	North Sydney	142 60
M. U. Nunan.	Cape Porpoise	43	Liverpool, N. S	64 50
H. F. Curtis	Bucksport, Me	85 90	Shelburne, N. S Arichat, N. S Canso, N. S	$\begin{array}{ccc} 127 & 50 \\ 135 & 00 \end{array}$
Metamora	Boston Mass	81	Canso N S	121 50
Patriot	Gloucester, Mass	58	Lunenburg, N. S	87 00
Oliver F. Kilham	Salem, Mass	43	Lunenburg, N. S Liverpool, N. S	64 50
Gladys & Sabra	Beverly, Mass	50		75 00
Teazar	Boston Mass	61	Shelburne, N. S	91 50
Susan & Mary	Boston, Mass	85 74	Sand Point, N. S Louisburg, N. S	$124 \ 50$ $111 \ 00$
Waldo L. Stream	Gloucester, Mass	81	Halifax, N. S	121 50
James R. Clark	Beverly, Mass	43	Halifax, N. S Yarmouth, N. S	64 50
Smuggler		91	Lockeport, N. S	136 50
Hazel R. Hines	11	79	Pubnico, N. S	118 50
Theodore Roosevelt		90	Varmouth N S	135 00
Senator GardnerViola	Ravarly Mass	94 14	Yarmouth, N. S	141 00
v 101a	beverry, Mass	14	" " " " " " " " " " " " " " " " " " " "	

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List of Untited States Fishing Vessels to which Licenses were issued, &c.—Con.

Vessel,	Port of R	Registry.	Tonnage.	Port of Issue.	Amount.
J. R. Bradley. Arkona Mabel D. Hines Athelete Orinoco Bohemia Blanche Ettie M. Morrissey J. J. Flaherty Claudia Tattler Anne M. Parker Maxine Elliot	R	Iass	80 97 92 96 88 86 78 83 124 79 205 206 75	Tusket Wedge, N. S. Liverpool, N. S. Tusket, N. S. Tusket, N. S. Tusket Wedge, N. S. Liverpool, N. S. Shelburne, N. S. Lockeport, N. S. Lockep	\$ cts 120 00 145 50 138 00 144 4 00 132 00 117 00 117 00 124 50 186 00 118 50 202 50 150 00 112 50

# STATEMENT of Minor Revenue collected during the Year ended March 31, 1909—Sick Mariners Dues.

# PROVINCE OF QUEBEC.

Gaspé	\$ 117	24
Montreal		
Paspebiac		66
Percé	109	24
Quebec	6,226	80
Rimouski		35
St. Armand		96
St. Johns	1.638	23
Sorel		SS
Three Rivers	370	47
	\$17,072	10

# PROVINCE OF NEW BRUNSWICK.

Bathurst	\$ 76 60
Campbellton	
Chatham	1,181 19
Dalhousie	426 02
Fredericton	8 16
Moncton	539 00
Newcastle	396 42
Sackville	211 91
St. John.	6,506 45
St. Stephen	161 72

\$10,258 37

STATEMENT of Minor Revenue collected during the Year ended March 31, 1909—Sick Mariners Dues—Concluded.

## PROVINCE OF NOVA SCOTIA.

PROVINCE OF NOVA SCOTIA.		
Amherst	\$ 366	84
Annapolis	209	05
Antigonish	0	
Arichat	25	92
Baddeck	112	81
The state of the s	28	
Barrington		37
Glace Bay	9 9	00
Canso	202	
Digby	111	19
Halifax	11,091	
Kentville	50	
Liverpool	155	
Lockeport		30
Lunenburg	581	
North Sydney	1,066	36
Parrsboro	621	19
Pictou	243	90
Port Hawkesbury	292	08
Port Hood	55	80
Shelburne	70	14
Sydney	2,993	
Truro		88
Weymouth	199	
Windsor	1.106	
	512	
Yarmouth	شلك	90
	\$20.103	06
	\$20,108	06
BRITISH COLUMBIA.	\$20,108	06
BRITISH COLUMBIA.		
Nanaimo	7,445	60
Nanaimo	7,445 94	60 58
Nanaimo. New Westminster. Prince Rupert.	7,445 94 238	60 58 98
Nanaimo. New Westminster. Prince Rupert. Vancouver.	7,445 94 238 2,967	60 58 98 65
Nanaimo. New Westminster. Prince Rupert.	7,445 94 238	60 58 98
Nanaimo. New Westminster. Prince Rupert. Vancouver.	7,445 94 238 2,967 8,978	60 58 98 65 28
Nanaimo. New Westminster. Prince Rupert. Vancouver.	7,445 94 238 2,967	60 58 98 65 28
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.	7,445 94 238 2,967 8,978	60 58 98 65 28
Nanaimo. New Westminster. Prince Rupert. Vancouver.	7,445 94 238 2,967 8,978	60 58 98 65 28
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown.	7,445 94 238 2,967 8,978	60 58 98 65 28
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND.	7,445 94 238 2,967 8,978 \$19,725	60 58 98 65 28 09
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown.	7,445 94 238 2,967 8,978 \$19,725	60 58 98 65 28 09
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown. Summerside.	7,445 94 238 2,967 8,978 \$19,725	60 58 98 65 28 09
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown.	7,445 94 238 2,967 8,978 \$19,725	60 58 98 65 28 09
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown. Summerside.  GRAND TOTALS BY PROVINCES.	7,445 94 238 2,967 8,978 \$19,725 238 81 \$319	60 58 98 65 28 09
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown. Summerside.  GRAND TOTALS BY PROVINCES. Quebec.	7,445 94 238 2,967 8,978 \$19,725 238 81 \$319	60 58 98 65 28 09 35 49 84
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown. Summerside.  GRAND TOTALS BY PROVINCES. Quebec. New Brunswick.	7,445 94 238 2,967 8,978 \$19,725 238 81 \$319 \$17,072	60 58 98 65 28 09 35 49 84
Nanaimo. New Westminster. Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown. Summerside.  GRAND TOTALS BY PROVINCES. Quebec. New Brunswick. Nova Scotia.	7,445 94 238 2,967 8,978 \$19,725 238 81 \$319 \$17,072 10,258	60 58 98 65 28 09 35 49 84
Nanaimo New Westminster Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown Summerside.  GRAND TOTALS BY PROVINCES. Quebec. New Brunswick Nova Scotia. British Columbia.	7,445 94 238 2,967 8,978 \$19,725 238 81 \$319 \$17,072 10,258 20,108 19,725	60 58 98 65 28 09 35 49 84 10 37 06 09
Nanaimo New Westminster Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown Summerside.  GRAND TOTALS BY PROVINCES. Quebec. New Brunswick Nova Scotia British Columbia.	7,445 94 238 2,967 8,978 \$19,725 238 81 \$319 \$17,072 10,258 20,108	60 58 98 65 28 09 35 49 84 10 37 06 09
Nanaimo New Westminster Prince Rupert. Vancouver. Victoria.  PROVINCE OF PRINCE EDWARD ISLAND. Charlottetown Summerside.  GRAND TOTALS BY PROVINCES. Quebec. New Brunswick Nova Scotia. British Columbia. Prince Edward Island.	7,445 94 238 2,967 8,978 \$19,725 238 81 \$319 \$17,072 10,258 20,108 19,725	60 58 98 65 28 09 35 49 84 10 37 06 09 84

STATEMENT of Steamboat Inspection Dues Collected for the Fiscal Year Ended March 31, 1909.

PROVINCE OF ONTARIO.	
Name of Port.	Amount.
Sault Ste. Marie.       \$ 45 68         Windsor.       138 40	
Total	\$ 184 08
PROVINCE OF QUEBEC.	
Montreal	
Total	\$ 528 72
PROVINCE OF NEW BRUNSWICK.	
New Brunswick Nil.	
PROVINCE OF NOVA SCOTIA.	
Halifax.       \$ 2,572 08         Kentville.       582 40         North Sydney.       92 40	
Total	\$ 3.246 SS
PROVINCE OF BRITISH COLUMBIA.	
Vancouver	
Total	\$ 19,932 28
Grand Total	\$ 5,952 96

STATEMENT of Marine Register Fees collected for the Fiscal Year ended March 31, 1909.

PROVINCE OF ONTARIO	0.	
Name of Port.	Amount	
Hamilton	\$ 0.20	
Kingston	1 68	
Picton		
St. Catharines		
Toronto		
<u> </u>		
Total	\$ 6.30	

STATEMENT of Marine Register Fees collected for the Fiscal Year ended March 31, 1909—Concluded.

## PROVINCE OF QUEBEC.

Montreal \$ 7 Quebec 11	
Total	\$ . 18 02
PROVINCE OF NEW BRUNSWICK.	
St. Stephen \$ 0	25
Total	\$ 0 25
PROVINCE OF NOVA SCOTIA.	
Liverpool.       0         Lunenburg.       4         Shelburne.       1	08 45 80 08 52
Total	\$ 10 93
PROVINCE OF MANITOBA.	
Winnipeg	20
PROVINCE OF BRITISH COLUMBIA.	
Victoria	12
PROVINCE OF PRINCE EDWARD ISLAND	) <b>.</b>
Charlottetown	60
Grand total	\$ 44 42

STATEMENT of Lighthouse and Coast Dues collected for the Fiscal Year ended March 31, 1909.

PROVINCE OF NOVA SCOTIA.	
Name of Port.	Amount.
Halifax\$ 663 00	
RESUME OF MINOR REVENUE.	
Sick Mariners' Fund	\$67,483 46
Steamboat Inspection Fund	5,952 96
Marine Register Fees	44 42
Signal Station Dues	663 00
-	
Grand total	\$74,143 84

### APPENDIX No. 7.

### METEOROLOGICAL SERVICE.

MAGNETIC OBSERVATORY.

Acting Deputy Minister of Marine and Fisheries.
Ottawa.

Sir,—I have the honour to submit the annual report of the Magnetic Observatory, Agincourt.

Mr. Menzies has continued as observer in charge of this observatory and his zealous attention to duty has resulted as in past years in an almost unbroken record of magnetic changes and he has acted as instructor to many survey officers who have visited the observatory.

The magnetic variometers have been kept in constant operation and the hourly ordinates of declination and horizontal force obtained from the photographical traces have been reduced and tabulated. Weekly absolute determinations of the declination and dip of the needle and fortnightly of the horizontal force have been made in order to check the base line values and determine any changes occurring from loss of magnetism and other instrumental alternations. The magnetic declination has increased in the year by 5'.6 from 5° 52'.6 to 5° 58'.2 west. The horizontal component has decreased slightly while the dip has remained almost stationary at 74° 37'.4. From April to the close of August there were no pronounced magnetic disturbances but a period of disturbance then set in and during September the magnets were almost constantly in motion and large magnetic storms were registered on the 11th and 12th and from the 28th to 30th. From October and through the winter months the magnets at times showed abnormal movements, but the only pronounced disturbances occurred on the last two days of January and from the 26th to 28th of March. Many surveyors and other observers have visited the observatory in order to obtain either base station values for their instruments or to obtain instruction in the use of instruments.

In July last, an observer, Mr. W. E. Jackson, who has been attached to the central office staff for some years was assigned for duty as magnetic and meteorological observer on the D.G.S. *Arctic*, which has been wintering in high latitudes. His instructions were to build a small observatory ashore and devote as much time as possible to magnetic observations.

I have the honour to be, Your obedient servant,

R. F. STUPART.

Director.

METEROLOGICAL SERVICE.

METEOROLOGICAL OFFICE, TORONTO, June 19, 1909.

Acting Deputy Minister of Marine and Fisheries, Ottawa.

Sir,—I have the honour to submit the thirty-eighth annual report of the meteorological service, this report being for the fiscal year ended March 31, 1909, with Appendices A and B, reports of the St. John and Quebec observatories.

The number of persons in receipt of pay from the meteorological service during the year for various services performed in connection therewith was 238. Of this number, 24 are employed permanently in the Central office, and with a few others at outside stations have devoted their whole time to the work of the service; others are employed in observing during only a portion of each day, and others again are employed only to attend to the display of storm signals when notified.

There are now in the Dominion 445 stations supplied with more or less complete equipment for meteorological observations, and during the year 410 observers have furnished either daily, weekly or monthly reports to the Central office. At 39 stations where the observers are paid salaries, two or more observations are taken daily, and those taken in the morning and evening are reported by telegraph to Toronto. At 58 other points, chiefly in outlying districts, the observers also receive some remuneration for a more or less extended series of observations. Special observations during the summer months are collected at Winnipeg by telegraph from 25 stations in the western provinces, and together with other information sent from Toronto are embodied in a weather bulletin which is widely disseminated from Winnipeg westward; for this bulletin service remuneration is allowed. Eighty-five persons are paid as storm signal agents, and seven for special duties in connection with the time service.

Over 200 observers report voluntarily, and the thanks of the service are due to these persons who contribute so much valuable information regarding the climate of the Dominion.

#### CENTRAL OFFICE.

During the past year the work of the central office has been carried on under somewhat unfavourable conditions in temporary quarters, pending the completion of the new meteorological building. The records have been kept in a university building, the workshop and instrument supply department in a building near the old observatory site, and the meteorological reference library has been mostly packed away in boxes. The staff has been increased by the addition of one clerk, Mr. Arthur Ough, and during the summer months several university undergraduates were employed to assist in preparing the annual climatological report.

#### WEATHER FORECASTING

Weather forecasts covering 36 hours in advance and sometimes a longer interval are issued twice daily throughout the year. The weather charts on which the forecasts are based, have entered on them, information obtained by telegraph from 37 stations in Canada and 64 stations in the United States, also from St. John's, Newfoundland and from Bermuda. The forenoon chart is ready for inspection ordinarily about 9.45, a.m., and the forecast official having drawn the isobars, first issues a bulletin for the maritime provinces, including forecasts for the current and following day for Nova Scotia, New Brunswick and Prince Edward Island and also for vessels leaving for the Grand Banks and for American ports. Then follows a forecast for the western provinces which is telegraphed without delay to Winnipeg, where a local agent who has meanwhile received weather telegrams from some 25 points additional to those received in Toronto, prepares a bulletin, giving a general synopsis of existing weather conditions and also includes all weather reports received, together with the forecasts from Toronto. This bulletin is then distributed in Winnipeg and telegraphed to the more important centres in the prairie provinces. The central office forecast official lastly prepares a bulletin for Ontario and Quebec which is usually despatched about 10.10 and is published very widely by the afternoon press as well as being posted at telegraph offices, post offices and other frequented places. At all the larger towns in these provinces a special effort has been made to have these bulletins exposed on wharfs and docks within easy reach of shipping people and fishermen.

The evening weather chart like that of the morning is usually ready for inspection about 9.45 and with as little delay as possible a bulletin is prepared for the press and forecasts are issued for all parts of the Dominion exclusive of British Columbia. in which province a local officer under the direction of the superintendent at Toronto issues the forecasts for the Pacific coast. The forecasts are distributed by the telegraph companies to most of the telegraph offices in the Dominion and by arrangement are posted up in a frame hung in a conspicuous place, and nearly every morning journal publishes them, generally on the front page.

During the winter months a very large number of special forecasts were made for shippers of perishable goods, inquiries being received by both telephone and telegraph. Indeed it is certain that a majority of the shippers of such goods in the Dominion now consult the weather service before sending forth consignments.

Special warnings of snow and drift were issued to all Canadian railways whenever it was deemed advisable to do so and various electric railways have made a practice of consulting the central office as to the weather of the coming night, the information supplied enabling them to reduce the working staff on duty to a minimum or on the other hand to take unusual measures to prevent snow blockade.

During the late autumn many telegrams were received from vessel masters wishing to cross the lakes, requesting special forecasts as to probable winds and weather and indeed in some cases asking as to the advisability of starting; also during the autumn several dredges and unseaworthy tows were safely taken from port to port under advice by telephone and telegraph from the Meterological Office, the captains remaining in shelter until advised that the winds for a definite period would be light or moderate.

Between April 1, 1908, and March 31, 1909, 1,555 warnings were issued to Canadian ports and of these 89.8 per cent verified. The number of storm signal stations increases annually and applications are being continually received for still more stations. There were fewer storms during the year than the preceding one, but many gales of more or less severity were of course experienced; 102 of the total of 131 being credited to the months of November. December, January, February and March. The warnings were for the most part eminently satisfactory, and few storms occurred without ample notice of their approach being given.

The accompanying table shows the number of weather forecasts issued for each of the various districts and the percentage of verification.

SESSIONAL PAPER No. 21

NUMBER of predictions and percentage of fulfilment in each district for the year ended March 31, 1909.

	Percentage.		28886868888. 2586967798	8 <b>5 8</b> 8 7 8	68
Verified.	Number not,		- Eunau-rar	21 21 10	99
	Zumber partly.		=======================================	1222	179
	Zumber fully.		2%555288 2	888	217
	Xumber of forecasts.		<u> </u>	105	156
<u> </u>	Регсептаgе.		T&%4-4T	\$ 5.51 \$ 2.50 \$ 2.50	90 85 0  1456  1217
ied.	Zumber not.		Franco & Sure	2) 2) 2)	8
Veril	Zumber partly.		127888158	255	51
	Number fully.		252385225 25235	338	013
	Xumber of forecasts.		55 8 55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	882	63 86 5 1315 1012
	Регсептаде,		P888888 098040000	0 8 9	9.9
ied.	Zumber not.		20120-4-64	20 20 20	8
Verif	Zumber partly.		41152050x	7.2	=
	Zumber fully.		188848853	8 6 2	28.7
-	Zumber of forecasts.		£ \$ £ £ £ £ £ £ \$ £	252	888
Verified.	Ретсептаве.		624626246 694626262	9 8 0	87.8
	Zumber not.		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 C C C C	27
	Number partly.		= <u>%3545</u> =cc	320	E
	Zumber fully.		188881888	289	121
	Xumber of forecasts,		626 <u>28</u> 2828	<u>s</u> 778	096
	Percentage.		+20000	0.0 0.0 0.0 0.0 0.0	9.98
ed.	Number not.		F-5-312473231 	∞ 5/3 ⊃ ∞ ∞ ⇔	25 25
/erifi	Zumber partly.		008077704	555	25
	Zumper fully.	-	884425836	525	750
	Zumber of forecasts.		68628258	x : = =	553
	Month.	1908.	April. May June July September September November. December.	January Pebruary March	Totals
	Verified. Verified. Verified.	Zumber of forecasts.  Zumber partly.  Zumber not.  Zumber of forecasts.  Zumber fully.  Zumber tully.  Zumber tully.  Zumber not.  Zumber of forecasts.  Zumber fully.  Zumber fully.  Zumber fully.  Zumber fully.  Zumber fully.  Zumber of forecasts.  Zumber fully.  Zumber not.  Zumber partly.  Zumber not.  Zumber partly.  Zumber partly.  Zumber partly.  Zumber partly.	Xumber of forecasts.  Xumber of forecasts.  Xumber inl.  Xumber inl.  Xumber of forecasts.  Xumber inl.  Xumber of forecasts.  Xumber partly.  Xumber fully.  Xumber partly.  Xumber partly.  Xumber fully.  Xumber fully.  Xumber partly.  Xumber fully.  Xumber fully.	Maid:   Maid	1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968   1968

NUMBER of predictions and percentage of fulfilment in each district, for the year ended March 31, 1909.

					9-10 EDW	'ARD	VII., A. 1910
1 .		Регсептаве:		25.5 25.5 25.5 25.5 25.5 25.5 25.5 25.5	88 88 88 86 88 88 86 88 88	0.28	
VRENCE	jed.	Number not.		48-800-01-F	G 25 75	192	
T. Lav	Verified.	Number partly.		120000000000000000000000000000000000000	25.52	202	
LOWER ST. LAWRENCE.		Number fully.		_ <u>888</u> <u>9</u> 2 <u>8</u> 38	19.6.3	1,089	
Le	'su	Number of Predictio		<u> </u>	50 60 60 60	1,367	
		Percentage.		87729999788 87777777788	83.5	9.88	
RENCE	led.	Xumber not.		690-001-0-	o w 4	159	
T. LAW	Verified	Number partly.		<u> </u>	21	176	
Uррен St. Lawrence.		Number fully.		68 101 101 100 100 100 100 100 100 100 10	28.8	1,070	
n	*su	Number of Prediction		93 105 1119 1117 1117 1117	86.0	1,308	
	Verified.	Percentage.		88.500 ± 7.3.68 85.500 ± 7.3.68	83.7 85.9 86.1	0.88	
LEY.		Number not.		<u>∞</u> ± 0101 = 04 ∞ ∞ m	649	15	
Offawa Valley.		Number partly.		19-9-18-19-6	20 19 16	187	
OTTAN		Zumber fully.		\$ 5 8 5 8 5 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8	73	1,056	
	*suc	Number of Predictio		93 105 111 1117 1117 1118	98 101	1,306	
		Percentage.		0.000000000000000000000000000000000000	93.0 92.4 88.8	90.1	
25 25	ed.	Number not.		03-12-12-12	-019	56	
LOWER LAKES.	Verified.	Number partly.		11 12 13 13 13 14 14 17 17 17 17 17 17 17 17 17 17 17 17 17	4 25 25	177	
Low		Number fully.		01 100 100 100 100 100 100 100 100 100	828	1,231	
	*suc	Number of Prediction		30 1112 1122 1123 1123 1133 1133 1133 11	114	1,465	
		Month.	1908.	April. May June June June August. September. October. November.	1909. January Pebruary March	Totals	

NUMBER of predictions and percentage of fulfilment in each district, for the year ended March 31, 1909.

	PER N	0, 21			
TCTALS.	ed.	Ретсептаве.	\$25.53.83.83.83.83.83.83.83.83.83.83.83.83.83	F. 28	
		ied.	Zumber not.	882344888 884	81.4
	Verified	Zumber partly.	211 221 217 217 217 217 221 232 232 232 1175 1175 1175	2,234	
=	Í	Zumber fully.	1,091 873 1,012 1,012 1,012 1,072 1,072 1,072 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,085 1,	12,300	
	*suoi	Number of Predict	1,318 1,150 1,150 1,316 1,316 1,326 1,389 1,189 1,189 1,189	85.9 15,348 12,300	
		Регсептаge.	73.88.88.88.88.87. 78.88.88.87. 14.88.87.88.88.88.88.88.88.88.88.88.88.88.	82.9	
AST.	ed.	Number not.	<u> </u>	<del>2</del> 6	
Maritime East	Verified	Number partly.	2522222222222	235	
Мляг	 	Number fully.	28 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1,107	
	,sito.	Number of Predicti	123 1183 1183 1183 1184 1194 1194	1,426	
		Регсептаде.	888 888 888 888 888 888 888 888 888 88	86.5	
EST.	Verified.	ed.	Number not.	4x-20000xx	80
Martine West.		Number partly.	718858868 859	220	
Marit		Zumber fully.	68553882288 848	1,125	
	*8110	Zumber of Prediction	1001 855277831998 1601 855277831998	1,425	
		Регсептаде.	8888889888988 688888988 688888988 6888888988	86.5	
1	ed.	Number not.	9 0 1 4 1 0 1 4 0 1 4 0 1 4 1 0 1 4 1 1 1 1	3	
Gure.	Verified	Number partly.	427.8 2002 1002 1002 1002 1002 1002 1002 100	122	
3		Number fully.	568 198 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 83 128 128 128 128 128 128 128 128 128 128	1,080	
	'suc	Number of Predictio	101 128 118 118 118 118 118 118 118 100 100 10	1,379	
		Month.	April. May June June June June June June June June	Totals	

9-10 EDWARD VII., A. 1910

NUMBER of predictions and percentage of fulfilment in each district, for the year, March 31, 1909.

					9-10 EDW	ARD \	
		.⇔3£	Ретсептяgе.		121282252	76.8 1.9 9	9.18
	ed.	Хилибет по€.	1	<u>មន្តម្ចីម្ចេច</u>	<del>1</del> 88	406	
Totals.	Verified	Zumber partly.		8277225	2 2 2 2	180	
		Number fully.		ELPS 95000	173 150	2,12,	
		Zumber of Forecast		8288 8288 8288 8288 8288 8288 8388 8388	227	2,719	
		Ретсептаgе.		8 8 8 8 8 8 8 8 5 5 5 5 5 5 5 5 5 5 5 5	\$ 1.08 \$0.10 \$0.00	82.6	
INPAND.	ied.	ХишЪет поt.		<u> </u>	851	<u>z</u>	
WER MA	Verified	Lower Mainband Verified.	Zumber partly.		No a Handa	. 2 1	26
Lo		Number fully.		522222222 52222222222	32.2	1,056	
	's	Number of Forecast		<u> </u>	110 105 102	1,337	
	Verified.	Ретсептаge,		38288886 66648666	78.6 76.4 75.0	9.08	
ICINITY.		ed.	Zumber not.		행보도 등 등 행도 환	ភគិត	25.52
Vістопіл акіз Vісіліту.		Number partly.		Ersara-Frs	8 11 10	99	
Уістопі.		Number fully.		\$33.355.5 <u>\$</u>	31488	1,068	
	*sı	Number of Forecast		113 125 140 102 112 113 114 114 115 115 115 115 115 115 115 115	108	1,382	
		Мохти.	1908.	April May June July August September October November	January February March	Totals.	

During the past few months at the request of the government of Newfoundland arrangements have been completed whereby that colony will shortly receive storm warnings and forecasts from the central office of the Canadian service, special bi-daily bulletins being issued daily to that colony by telegraph from Toronto to a distributing agent in St. Johns.

Last summer a full meteorological equipment was furnished to each of six stations between the Athabaska river and the Arctic sea, namely, Fort McMurray, Hay river, Fort Norman, Fort Good Hope, Fort Simpson and Fort Macpherson, and from reports received recently by winter mail from the north it is evident that these outlying posts will furnish most valuable data not only as regards the path of storms across America, but also as regards the mean distribution of pressure in high latitudes.

The publications issued have been a daily weather map; a monthly weather map; the monthly Weather Review and an annual climatological report, which latter is a volume of 633 pages and represents an enormous amount of computation in the cent-

ral office.

Reports and exchanges have been received with regularity from the meteorological bureaus of all countries, but owing to the temporary removal of the meteorological office last year and the prospective removal to the new building during the present summer, our library arrangements are much disarranged and in a thoroughly unsatisfactory condition.

## INSPECTION.

As many stations as possible were inspected during the year but many others again had to remain without the requisite inspection.

The director visited certain portions of the Dominion more especially in the

interests of the time service at St. John and Halifax, also that of Quebec.

The assistant director installed the new pattern electrical wind gauges at desirable points in the western provinces and in British Columbia, also at Pelee island on Lake Erie and instructed the provincial officers for Saskatchewan and Alberta. At the commencement of the present year he was deputed to proceed to Newfoundland and inaugurate the meteorological service for the Newfoundland government.

Inspectors Allan and H. V. Payne visited stations in the Gulf of St. Lawrence and in Ontario respectively and Mr. W. E. Jackson was selected to accompany the

Arctic on her long cruise to the far north.

#### SOLAR WORK.

Owing to the demolition of the old magnetic observatory at Toronto early last spring, the 6-inch equatorial telescope was dismounted and the daily record of solar disturbance as indicated by sun spots had to be discontinued. The instruments will shortly be again mounted and a much more systematic and closer study of solar disturbance by telescope and spectroscope will be commenced and carried on, together with measurements of solar radiation as registered by an Añgström pyrheliometer.

Investigation as to the more direct causes leading to variations in the character of corresponding seasons in different years, has led to a conviction that in order to obtain results the circulation of the atmosphere must be studied as a whole as there is strong indication of inter-relationship between the intensity and position of the extra-tropical belts of high pressure and the formation of anticyclones in high latitudes. It does not appear improbable that tropical barometric gradients may be the pulse which first responds to a varying solar radiation and reacts on pressure distribution.

The Milne seismographs at Victoria and Toronto have been kept in operation throughout the year, 55 disturbances being recorded by the former and 46 by the

latter. The Calabrian quake was recorded by both instruments, the preliminary tremors arriving at Toronto two minutes earlier than at Victoria, while, however, the latter showed somewhat the larger movement. It is proposed to install very shortly improved open scale recorders for the seismographs, in place of the old pattern now in use, it having been shown by Dr. Milne that with the newer type of instruments, minute preliminary tremors are recorded which with the more slowly moving surface are frequently lost by halation. The seismograph in use by the Meteorological Service are of the type approved and adopted by the B.A.A.S. Committee of Seismology.

#### TIME SERVICE.

The time service in connection with the Meteorological Service has been maintained most satisfactorily and time balls have been dropped daily, except Sundays, during the season of navigation at Montreal, Quebec and Halifax; a time gun has been fired at Vancouver and the fire alarm bells struck at Toronto. A new time ball tower has been erected at Halifax.

At Toronto during the year ending March 31, 1909, 95 observations for time were made in the meridian with the transit instrument; of these 78 were stellar and 17 solar observations. The positions of the stars were as usual those given in the 'Berliner Jahrbuch.'

Preparations for the removal of the transit instrument—chronograph and clocks—to their new quarters in the transit and clock building adjoining the new observatory on Bloor street was made in December, 1908. The Sidereal clock was stopped on the 16th, dismounted, thoroughly overhauled, cleaned and placed in its new position on December 23, the mean time clock being kept in its old position until the sidereal clock had been mounted and brought to its normal rate.

The transit instrument was dismounted on December 18 and put on its new pier in the transit room adjoining the clock room the same day, and finally adjusted into position by the 29th. The mean time clock was then dismounted, cleaned and put on its pier in the same room with the sidereal clock.

Both these clocks are on separate brick piers on concrete foundations down to the clay and welled in from the surrounding soil and building.

The transit pier has been carefully put up, being a stone cylinder 19 inches in diameter and about 6 feet long, embedded in concrete foundation built several feet in the clay and welled similar to the clock piers. The transit instrument is bolted to an oval slate slab, 1½ inches thick, placed on top of the pier.

The new transit and clock building has proved to be a great improvement upon the old building.

The 6-inch equatorial telescope was dismounted early in April, 1908, to allow the old tower to be pulled down. This instrument has been packed away awaiting the completion of the new tower in the new building on Bloor street.

The difference in latitude and longitude between the transit piers of the old and new observatories has been determined by triangulation, the new pier being 24.9 seconds north and 0.95 seconds west of the old pier, the new latitude and longitude being: Latitude, 43° 40′ 0.8″ N.; longitude, 5 hrs., 17 mins., 35.60 sees. W.

A large amount of transit work has been done in the new position, the clocks being gradually brought into their normal rates. The time exchanges with Quebec, Montreal and St. John, N. B., have been continued, also the time given to the Agincourt observatory and generally when required. A new improved switch-board, with all the necessary electrical connections on the clock, has been installed, as has also the fire-alarm time signal.

The following Table shows the difference between the Times at Quebec, Montreal and St. John at the various time exchanges compared with that at Toronto. The sign + indicates that Toronto is slow of the other observatories.

Үеақ.	Quebec.	Montreal.	St. John.
1908.  April 24 May 22 June 5. " 19 July 10. " 24 August 7. " 21 September 18 October 16 November 6.	Seconds.  +0.21 -0.92 -1.26 -0.47 -0.92 -0.88 +0.40 -1.16 -1.15 -0.48 -1.06	Seconds.  +0.58 +0.77 -0.32 -0.30 -0.69 -0.62 -0.63 -0.52 -0.02	Seconds. +0.15 -0.76 -1.07 -0.39 -0.58 -0.32 -0.51 +0.56 +1.28
1909. * March 13	+0.51		+0.73

<sup>\*</sup> Exchange from the new transit building. The Latitude and Longitude of the new transit pier is :— Latitude 43° 40′ 0°8″ N. Longitude 5h. 17m. 35s. 60 W.

All of which is respectfully submitted.

R. F. STUPART.

Director.

#### APPENDIX A.

METEOROLOGICAL SERVICE, St. JOHN OBSERVATORY, St. JOHN, N.B., July 1909.

R. F. STUPART, F.R.S.C.,
Director, Meteorological Service,
Toronto, Ont.

SIR.—I have the honour to present my annual report on the St. John observatory

for the fiscal year ending March 31, 1909.

Meteorological Service.—The usual meteorological observations, records and reports have been continued without interruption. The various eye-reading and self-registering instruments, including electric rainfall register and wind recording apparatus, are in excellent condition. No change has been made either in equipment or method of work. The interest taken by the general public in the information furnished from the observations and records continues. This is evidenced by the largely increased demand individually and from the press.

Weather Bulletin.—As heretofore the morning weather bulletin has been promptly issued each week day, upon receipt of the telegraphic report from Toronto. It is published by the afternoon papers, distributed through the mail and posted in public places. This information of weather conditions, along with the forecasts and warnings of dangerous storms, is a necessity to mariners, shippers of perishable goods, contractors and numerous other interests affected by weather changes. The warnings and forecasts frequently requested through telephone are received and answered at all hours.

The morning forecasts are repeated to St. Martins. Storms warning messages are telephoned to St. Martins and Point Lepreau and signals displayed for use of mariners in those parts of the Bay of Fundy.

Time Service of the Maritime Provinces.—Observations of standard stars with the meridian telescope were made nearly every clear night and with the clock comparisons recorded on the chronograph as previously reported. The time balls at St. John and Halifax have been dropped each week day at 1 p.m., 60th meridian time, excepting at Halifax during the period of erecting new tower and improved apparatus. Daily signals have been sent automatically, direct from our transmitting clock over the Western Union wires, throughout the maritime provinces, for the two minutes ending at 10 a.m., and continue to be most useful to navigators, railways and the public generally. Practically all the time pieces in eastern Canada are regulated by the time of this observatory. At other times than 10 a.m., time signals are frequently asked for by telegraph and telephone, beats from the relay in connection with the transmitting clock being audible locally and through long distance telephones.

Wireless Time Signals.—The apparatus at Camperdown, N.S., Marconi Station, which automatically repeats our time signal from land line to wireless has been maintained in operation throughout the year. Navigators find this method of checking ships' chronometers at sea most practical and useful.

Clocks.—The standard sidereal clock Riefler, No. 94, is mounted in the basement clock room where it is run under constant pressure and temperature. It has been in use continuously throughout the year and gives most satisfactory results. The Kullberg sidereal clock is also mounted in the clock room on a separate pier. The mean time transmitting clock, the chronograph, electrical and other apparatus used in connection with the time service are in the office. The mean time master clock, used for hourly synchronizing clocks on circuit in different parts of the city, is also mounted in the office. There has been considerable extension of this service. Clocks have been installed in public, banking institutions, &c.

The electric clock, in charge of the manager of the Western Union office at Halifax, for use in connection with the time ball service there, was cleaned while the time ball was dismantled. This clock is synchronized daily from the observatory and automatically sends the signal to drop the ball at 1 p.m. It is fitted with a break circuit attachment for sending a return signal to St. John and comparisons on our chronograph with standard rarely show an appreciable difference.

Halifax Time Ball.—In accordance with your instructions to arrange for the construction and installation of a new time ball for Halifax to replace the temporary apparatus which had been in operation since October 1, 1904, I at once proceeded with the plans and specifications for tower and machinery. Towards the end of April the temporary apparatus was dismantled and construction of new tower commenced. The ball outside guides and machinery, were contracted for, constructed and set up by W. W. Howell & Company, of Halifax. The electric release was made by the Vaughn Electric Company, St. John and the tower built under contract by Walter Lownds of Halifax. The whole apparatus was finally completed on July 31, and put in operation on August 1. The time ball machinery was patterned after that for many years in use at St. John, it being more suitable to the climatic conditions prevailing during winter months than a ball moving on a staff which frequently failed, owing to sleet, snow or ice.

The ball is 3 feet 8 inches in diameter, constructed of 16-oz, copper, with a reinforcing band of copper ½-inch thick and 6 inches wide riveted and soldered around the centre. It is firmly attached to a piston head which drops into an iron cylinder of 15 inches internal diameter and 12 feet in length. When the ball is hoisted full elevation, it is held by a brake. At the instant of 1 o'clock brake is electrically released and ball

drops rapidly at first, then gradually settles down as the air compresses in bottom of cylinder, which is fitted with air valves to control the drop. During the past winter little or no trouble was experienced and the frequent failures of the old appartus avoided.

> I have the honour to be, sir, Your obedient servant,

> > D. L. HUTCHINSON, Director, St. John Observatory.

#### APPENDIX B.

QUEBEC, April 26, 1909.

The Director, Meteorological Service, Toronto.

SIR,-I have the honour to transmit my annual report for the fiscal year ending March 31, 1909.

All the meteorological observations have been taken three times daily as hereto-

fore, and the bi-hourly temperatures continued at the Citadel.

Standard stars were observed on every fine night, and the correct time given to the city by means of the noon gun, and by telephone. The number of calls, which has increased constantly during the past few years, has reacehd the enormous number of nearly 8,000 in 1908, and on many occasions interfered with my daily work.

The time ball was dropped in a satisfactory manner during navigation season. During my inspection in the month of November last, I found that certain repairs were necessary to keep the whole apparatus in good working order, and a special report was sent accordingly.

These repairs were made as authorized, before the opening of navigation this

year.

All the meteorological instruments are in good order, but the sunshine recorder

would require a new post, the old one being rotten.

The transit instrument is now rather old, and the foundations are not properly fixed to the ground. I often noticed considerable changes in deviation and inclination, especially at the beginning of winter and during the spring.

The equatorial telescope, which was purchased from Alvan Clarke, of Boston, in 1864, would require some repairs, but, before putting it in good order the tower should also be repaired and the old dome replaced, to protect the instrument.

The whole respectfully submitted.

ARTHUR SMITH. Director.

## APPENDIX No. 8.

### HYDROGRAPHIC SURVEY.

OTTAWA, July 20, 1909.

SIR,—I have the honour to respectfully submit the following report upon the operations of the Hydrographic Survey for the fiscal year 1908-9.

During the period above mentioned the following parties were actively engaged in the field: on the great lakes, under Captain F. Anderson; on the Atlantic coast, under Captain Irving Miles; on the Pacific coast, under Captain P. C. Musgrave; upon Lake of Two Mountains, under Mr. A. J. Pinet, and in Cumberland Basin, under Mr. Chas. McGreevy. The survey of the St. Lawrence river between Montreal and Quebec being completed, only such field work was performed as was found necessary to obtain information regarding recent changes or improvements.

Great Lakes: the steamer Bayfield under command of Captain F. Anderson. assisted by Messrs. A. G. Bachand, A. E. Humphrey and R. J. Fraser, left Owen Sound on May 10 and proceeded to Lake Superior to take up work in the eastern approaches to Nipigon bay, and continued there until August 1, when a move was made to carry on the triangulation and the traverse of the shore from Simmons harbour to Isacor point to obtain a more correct delineation than is shown on the existing charts. This was completed and the vessel laid up at Owen Sound on November 23.

The north shore of Lake Superior from Pigeon river (the boundary line between Canada and the United States) to the eastern entrance of Nipigon bay, with the exception of Nipigon and Black bays, has now been carefully and accurately surveyed and charted; that between Simmons harbour and Isacor point, a distance of fifty miles has been traversed and plotted in detail, but no sounding has been done off it. There still remain eighty miles between Wilson island and Simmons harbour and fifty miles between Isacor point and Cape Gargantua as well as Slate islands, Michipicoten and Caribou islands yet to be completed.

During the winter of 1908-9, the staff was employed in plotting the season's work

and preparing it for the engraver.

I regret to report that upon June 23, the steamer ran upon a well known nock in the eastern channel into Nipigon bay and sustained damage to the extent of \$5,884.13. An investigation was held in Collingwood and the blame was found to rest upon the sailing master and he was discharged and replaced by Captain J. F. Lunan.

Atlantic Coast.—The steamer La Canadienne under command of Captain Irving Miles, assisted by Messrs. Chas. Savary, G. C. Venn and W. R. McGee, left Sorel on May 18, and took up the survey of the mouth of Saguenay river, and the St. Lawrence river, between Red island and Razade islands.

A large scale plan of the mouth of Saguenay river was undertaken and completed showing accurately the many shoals and banks obstructing the navigation of this important river. The general work of charting the St. Lawrence river was proceeded with and carried out as far as Razade islands on a scale of two inches to the nautical mile. No important discoveries were made, but with the greater accuracy of detail, the new chart of this important locality cannot fail to be of vast benefit to mariners.

Work is very much delayed in this locality by the strong tides which La Can-

adienne is unable to stem.

The staff was fully occupied during the winter of 1908-9, in plotting the season's work and in preparing sheets for the engraver, two of which will be issued before the spring of 1910.

Pacific Coast.—On April 3, the party under command of Captain P. C. Musgrave, assisted by Messrs. H. D. Parizeau, and L. R. Davies left Victoria by passenger steamer for the Skeena river to take up quarters in camp at Inverness and continue the survey of the southern approach to Prince Rupert harbour and the mouth of Skeena river.

On May 11, Captain Musgrave left camp and returned to Victoria to take over and commission the new steamer *Lillooet*. This was done and the steamer left for her station on June 10. The camp party was moved on board and the survey of Chatham sound, east of Lucy and Rachel islands and from Tree Bluff to Island point, undertaken and completed. This will give two charts on scales of three inches to the nautical mile.

One important result of this survey has been the finding of a shoal head of eleven feet upon Alexandra patch where not less than ten fathoms was supposed to exist and nearly on a direct line between Brown passage and the Coast island range for entering Prince Rupert harbour.

On May 30, the staff was increased by the appointment of Mr. F P. V. Cowley.

The steamer *Lillooet* is the first vessel constructed especially for the Canadian Hydrographic Survey. She was designed by Mr. R. L. Newman of Victoria. B.C., and built by the British Columbia Marine Railways Company, Limited, at Esquimalt, at a cost of \$150,000, is 170 feet long, 27 feet in breadth and 15 feet in depth. has a displacement of 760 tons, and she is fitted with twin screws driven by two engines of 800 horse-power, giving a speed of eleven knots per hour. She is equipped with the latest surveying devices and is found to be eminently suited for the service.

During the winter months this party took up offices in Victoria, B.C., for plotting

work and preparing charts for the engraver.

Lake of Two Mountains.—On May 1, this party in charge of Mr. A. J. Pinet, assisted by Messrs. G. B. St. Pierre and Henri Ortiz, left Montreal and resumed operations on the lake using the yacht Josephine and a houseboat. Fair progress was made and it is hoped that the survey will be completed in 1909.

Cumberland Basin, N.S.—In May, 1908, a small party in charge of Mr. Chas. Mc-Greevy, assisted by Messrs. Paul Jobin and E. Jodoin, was organized at Amherst, N.S., to undertake a survey of Cumberland basin with a view to supplying charts in more detail for vessels trading to Amherst, &c., on the high water. This method of surveying such waters is not highly satisfactory and it is hoped that when operations are extended a vessel may be available for a base.

This party likewise spent the winter months in the office at Ottawa plotting the season's notes and preparing for the engraver.

In the office, in addition, Mr. Amos assisted by Messrs. Henri Melancon, Fred. Delaute and O. Soulière, has been engaged in preparing a full report upon the operations of the various parties that were engaged in the survey of the St. Lawrence river between Montreal and Quebee, from 1896 to 1906, and the charts resulting from these various surveys.

Work upon the charts of Lake St. Francis has made some progress.

Charts Issued.—During the fiscal year the following charts were engraved and issued to the public: 'Lake St. Peter.' 'White Island to Orignaux Point.' 'Lake St. Louis' and 'Key Harbour, Georgian Bay.'

The following were photolithographed:-

Chart No. 15. Cap Levrard to Ste. Emelie.

- No. 16. Ste. Emelie to Deschambault.
- " No. 17. Portneuf to Cap Santé.

" No. 18. St. Croix to St. Antoine.

The second edition of No. 8, Head of Lake St. Peter.

The second edition of No. 7A, Berthierville to Lake St. Peter.

In connection with the St. Lawrence river charts, it was deemed advisable to prepare sailing directions covering the distance, Quebec to Kingston, and for this purpose the services of Captain J. G. Boulton, Retired Royal Navy, of Quebec, were secured to assist the officers in charge of the various branches affected.

Resignations.—At the close of the year the following officers resigned: Mr. Robert Bickerdike, Mr. A. E. Humphrey and Mr. W. R. McGee.

Appointments.—On January 26, Mr. T. L. Killen was appointed stenographer to the survey.

I am, sir, your obedient servant,

WM J. STEWART, Hydrographer.

## APPENDIX No. 9.

# REPORT OF THE CHAIRMAN OF THE BOARD OF STEAMBOAT INSPECTION.

CHAIRMAN'S OFFICE, OTTAWA, June, 1909.

To the Acting Deputy Minister of Marine and Fisheries, Ottawa.

SIR,—I have the honour to submit the annual report of the Steamboat Inspection Service for the fiscal year ending March 31, 1909.

It contains the work of the service during the time stated, giving the number of steamboats inspected in the several divisions and their gross tonnage, with the amount of dues collected from steamers employed in the carriage of passengers between Canadian ports but registered elsewhere than in Canada, and the amount of fees received for engineers' examinations.

At the port of Montreal in addition to the steamers inspected, the ships' tackle and hoisting gear used for loading and unloading the vessels to the number of 343 were also inspected by the steamboat inspectors.

Number of steam vessels reported as known by the Inspectors of Steamboats in the Dominion for the year ending March 31, 1909, also the number of steamers inspected but not registered in the Dominion for the same date.

Division.	Number of Dominion Registered Steamers,	Gross Tonnage of Dominion Registered Steamers.	Number of Steamers Inspected but not Registered in the Dominion.	Gross Tonnage of Steamers Inspected but not Registered in the Dominion.
Toronto	365 172 160 206 87	85,722 75,990 28,399 22,161 23,881	46 17 19 16	54,907 29,257 5,390 43,479
Sorel Quebec. Nova Scotia New Brunswick and Prince Edward Island. Vancouver and Yukon. Victoria, B.C. Manitoba and Northwest Provinces.	109 148 156 171	20,882 34,648 19,854 21,028 50,610 15,345	10 31 8 14 22 1	17,249 56,741 13,104 20,836 40,631 681
	1,897	403,550	184	282,275

Number of Dominion registered steam vessels inspected and their gross tonnage, with amount of fees collected on account of steamboat inspection during the year ended March 31, 1909.

Division.	Number of Dominion Registered Steamers Inspected.	Gross Tonnage of Dominion Registered Steamers Inspected.	Amount of fees Collected on Account of Steamboat Inspection.
Toronto Collingwood Kingston Montreal Sorel, Quebec Nova Scotia New Brunswick and Prince Edward Island Vancouver and Yukon Victoria, B.C. Manitoba and Northwest Provinces Engineers' Certificates	316 154 150 177 83 105 146 137 154 144	82,865 74,163 28,040 15,058 27,927 20,576 36,624 18,604 20,447 46,022 11,844	\$ cts.  138 40 45 68  30 40  458 32 3,246 96  1,263 36 729 92  2,014 50
Total	1,680	382,170	7,927 54

#### BOARD MEETINGS AND APPOINTMENT OF INSPECTORS.

Owing to Mr. Richardson retiring from the service as boiler and machinery inspector at Vancouver, Mr. Hugh G. Robinson of that place, having passed the necessary examination, assumed the duties on May 12, 1908, and was appointed to the position by Order in Council of June 2, 1908.

The work having rapidly increased in the British Columbia district it became imperative to increase the staff to meet the demands, and Mr. Wm. J. Callum of Victoria, who passed the required examination was appointed as a boiler and machinery inspector by Order in Council of June 2, 1908, with office located at Victoria, B.C.

In order to meet conditions arising owing to the passing of the Act 7-8 Edward VII, Chapter 65, an Act to amend the Canada Shipping Act, a meeting of a quorum of the Board of Steamboat Inspection was convened at Ottawa, December 1, for the purpose of revising the rules for the examination of engineers, which was adopted and approved by His Excellency the Governor in Council, the 21st day of December, 1908.

Prosecutions with penalties enforced for violation of Part VII. of the Canada Shipping Act, Steamboat Inspection.

On July 25, 1908, a complaint was received by the department, charging that the steamer Aletha of Kingston was being overloaded by carrying more passengers than that allowed by her certificate of inspection, and also for plying on a route with an excursion of passengers for which she was not permitted by her certificate of inspection.

The case came up for trial before the police magistrate at Belleville on September 14 and 22, when the captain was fined \$175, and costs, on the charge of the vessel plying on a route for which she was not licensed, a cheque for same being received by the department, October 14, 1908.

#### CASUALTIES.

The following are the casualties reported from the several divisions as having occurred during the year ending March 31, 1909.

#### TORONTO DIVISION

May 9, 1908.—The steamer *Brockville* of Montreal, while lying at the wharf at Toronto fitting out, preparatory to being placed in commission, with the fires partially banked, an 8-inch flue in starboard boiler collapsed, whereby four of the crew including the chief engineer were killed. On investigation, it was found the boiler had been shut off from all other connections, with no steam gauge connected to it, and the safety valves had been screwed down so as to render them useless, hence it was impossible to ascertain the pressure to which the flue was subjected which was the cause of the accident.

June 12, 1908.—The steamer Wenonah, of Toronto, was totally destroyed by fire on Cecebe lake—cause of fire unknown.

November 21, 1908.—The steamer City of Mount Clemens, of St. Catharines, collided with the United States steamer Neilson on Lake St. Clair and sank. She was raised and towed about four miles when she again sank east of the old channel at St. Clair flats where she is still lying.

January 16, 1909.—The steamer *Tecumseh* of Sarnia was totally destroyed by fire at Goderich. Ont., which started about 3 a.m., and is supposed to have originated from the kitchen range, which was in use by three people engaged in repairing the steamer and who were living on board, and barely escaped with their lives.

The following steamers stranded or ran aground, viz.:—May 28 and October 13, 1908, the ss. F. B. Osler, of Toronto. June 4, 1908, the City of Montreal, of Toronto. August 17, 1908, the ss. Neepawah, of Port Glasgow, G.B. November 17, 1908, steamer Bickerdike, of Ottawa. December 17, 1908, the ss. Beaverton, of Newcastle, G.B., all of which were released, placed in dock and thoroughly repaired.

#### COLLINGWOOD DIVISION.

June 14, 1908.—ss. J. G. Gidley, of St. Catharines, was totally destroyed by fire on the south side of Manitoulin island. Cause of fire unknown. No casualties.

October 15, 1908.—The tug R. A. McLean, of Sault Ste. Marie, caught fire at Sterling bay and became a total loss. Cause of fire unknown. No casualties.

October 24, 1908.—Steamer *Iroquois*, of Goderich, on her trip from Little Current to Cutler in a dense fog ran on a submerged rock, listed badly, then caught fire and is practically a total loss. Cause of fire is not definitely known. No casualties.

November 1, 1908.—The ss. *Telegram*, of Collingwood, on her trip from Owen Sound to Providence bay, ran ashore and filled with water, then listed and caught fire and was abandoned as a total loss. No casualties.

November 3, 1908.—The tug W. E. Gladstone, of Owen Sound, was blown ashore in Lion's Head harbour during a heavy gale and became a total loss. No casualties.

#### KINGSTON DIVISION.

July 22, 1908.—The ss. Stranger, of Port Hope, on a trip from Port Perry to Lindsay was destroyed by fire on Scugog lake. No fatalities occurred.

July 16, 1908.—The steam barge *Robert McDonald*, of Kingston, while plying on Lake Ontario from Peninsular point to Stoney point, was partially destroyed by fire. No fatalities.

#### MONTREAL DIVISION.

July 9, 1908.—The steamer *Pontiac*, of Ottawa, 116 gross tons, while lying at the wharf at Arnprior, was totally destroyed by fire. No casualties. Cause of fire unknown.

November 10, 1908.—The ss. *Temiscamingue*, of Ottawa, 295 gross tons, while on her trip from New Liskard to Temiskaming, the furnace crown of her boiler, it being of the locomotive type, collapsed, whereby the two firemen and one deck hand were killed by the escaping steam and water; one passenger jumped overboard and was drowned and seven others were badly scalded, including the engineer.

An investigation as to the cause of the accident was held by the chairman of the Board of Steamboat Inspection, when it was clearly demonstrated it was due solely

to low water.

### QUEBEC DIVISION.

June 6, 1908.—The ss. *Lady Eileen*, of Gaspé, 526 gross tons, when on her trip from Campbellton, N.B., to Gaspé, ran ashore on the New Port island in a dense fog, becoming a total loss. No loss of life.

November 15, 1908.—ss. King Edward, while at anchor, was driven ashore by a severe gale of wind in the English bay, Anticosti island. No fatalities,

November 26, 1908.—The passenger steamer *Otranto*, of Quebec, stranded at Bonaventure, becoming a total loss. No casualties.

November, 1908.—Steamer *Rodolphe*, of Montreal, was destroyed by fire at the wharf in Sorel harbour and sank. The cause of fire is unknown. No lives lost. The machinery was taken out of her.

March, 1908.—Steamer *Dream*, of Quebec, was destroyed by ice at Grandes Piles. Machinery was taken out.

#### NOVA SCOTIA DIVISION.

Casualty returns nil.

#### NEW BRUNSWICK AND PRINCE EDWARD ISLAND DIVISION.

June 17, 1908.—Steamer Aberdeen, of St. John, N.B., caught fire at her moorings, Cole's island, Washademoak lake, and was totally destroyed. No loss of life. Cause of fire unaccounted for.

July 9, 1908, ss. Arcola of St. John, N.B., when on a voyage from Great Britain to Chatham, N.B., was wrecked at St. Paul's Island, on the coast of Cape Breton, becoming a total loss. No loss of life.

November, 1908. The ss. Calluna of Richibucto, N.B., when on a voyage from Richibucto to St. John, N.B., got lost on Pictou Island and became a total wreck. No casualities.

#### MANITOBA AND NORTHWEST PROVINCES DIVISION.

June 7, 1908. The steamer City of Medicine Hat while on her trip down the Saskatchewan river at Saskatoon, came in contact with telegraph and other wires which too late to go back on account of the strong current, whereby some of the wires getting into the boat's rudder the control of her was lost, and she was carried broadside against a pier of the bridge and broke in two, becoming a total loss. No fatalities.

August 14, 1908. Steamer La Rien of Winnipeg, while lying at anchor on the Red river at Winnipeg, caught fire and was totally destroyed. No person being on board at the time. Cause of fire unknown.

August 6, 1908. The steamer *Premier* of Winnipeg, 414 gross tons, while lying at her dock on Lake Winnipeg between one and two a.m., caught fire and was totally destroyed. Three of the crew and five passengers were burned in their staterooms. An investigation was held by Commander Spain, but failed to locate the cause of the fire as supposed to have originated about the boiler.

#### BRITISH COLUMBIA AND YUKON DIVISION.

The following steamers stranded or ran aground:—On April 23, 1908, ss. *Hope* of Victoria, April 25; ss. *Vadso* of Victoria, October 26; ss. *Iroquois*, November 17; ss. *Owen*, December 5; ss. *Hope* of Victoria. The following steamers were damaged through collision:—September 19, 1908, steamers *Amur* and *Vadso*, of Victoria, November 8, 1908, steamer *Princess Royal*, December 3, 1908; ss. *Charmer*, all of which were repaired, made seaworthy and placed again in commission.

The following steamers stranded and became a total loss:—August 8. 1908, tug Albatross, of Victoria; October 15, steamer Caledonia, of Victoria; January 12, 1909, steamer Favorite, and January 10, 1909, John P. Douglass, both of which were caught in ice and destroyed. March 18, 1909, tug Daisy, of Victoria, grounded on a reef and slid off into deep water, a total loss.

May 6, 1908. SS. Otter of Victoria, on a voyage from Kyuquot to Victoria broke the tail shaft of the engine. She was picked up by steamer Tees and towed to Victoria, where a new one was fitted.

March 27, 1909. The gasoline passenger launch Ariadne, of Vancouver, caught fire burning to the waters edge, afterwards sinking, a total loss.

January 25, 1909. SS. *Venture* of Victoria, when loading at Inverness, Skeena river, at 2.30 a.m., caught fire, supposed over boilers, and was burned to the water's edge. Hull a total loss.

I am, sir.

Your obedient servant.

E. ADAMS, Chairman Board of Steamboat Inspection.

# APPENDIX 10.

STATEMENT giving Names of Stations and Lightkeepers. &c., in the Dominion of Canada.

# PRINCE EDWARD ISLAND.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ · cts.
Alberton Range			130 90
Block House. Brush Wharf.,			385 00 80 00
Crapaud, Outer	Abner J. Howatt	July 22, 1893	130 00
Inner	James Inman	Aug. 13, 1901	$\frac{120\ 00}{100\ 00}$
Cape Bear	Luther Jordan	Apr. 12, 1905	400 00
Cape Egmont	Jos. J. D. Gallant	Oct. 21, 1902	270 00
Cape Tryon	William Bell		270 00
Cove Head Range.  Darnley Range.	Geo. W. Wigglns		90 00 150 00
Darnley basin	Chas. Taylor	June 14, 1897	75 00
East Point			760 00
Fish Island Georgetown, Inner	Jesse G Clark	Dec. 7, 1906	270 00 150 00
Georgetown Railway Wharf			130 00
Grand River, East Lot 56			130 00
Grand Tracadie			130 00 75 00
Outer Range			80 00
Indian Point	J. S. Allen	May 18, 1898	400 00
Little Channel	William Hardy	26, 1875	130 00 70 00
Murray Harbour, Inner	Lemuel McLeod		70 00
Miminegash, Inner			70 00
Now London			75 00
New London North Cape.	James H. McLeod	Jan., 29, 1896 Sept. 4, 1897	150 00 345 00
North Rustico			150 00
Orwell			80 00
Point Prim			300 00 380 00
" F. A	Mathias Condon	5 tine 5, 1501	380 00
Sandy Island, (Cascumpec)	Jas. C. Tuplin	May 5, 1897	345 00
Savage Harbour.	Jas. A. McDonald	July 11, 1889	130 00
Sea Cow Head. Souris, East.	M. P. O'Roneghan John D. Lavie	Apr. 21, 1865 June 23 1905	330 00 395 00
Summerside Wharf	John Fraser	Apr. 12, 1897	130 00
Summerside Range	George Stavart	Sept. 8, 1895	95 00
St. Andrew's Point. St. Peter's Island.	George Connor	June 3, 1901 May 1, 1897	150 00 $240 00$
St. Peter's Harbour	Albert Anderson	July 25, 1900	150 00
Tignish Run	Agapè Gaudet	Aug. 30, 1897	150 00
Warren Farm Range	A. S. McNeil.	May 16, 1907	100 00
West Point	Roderick W McKay	Apr. 11 1899	345 00 295 00
Wood Island Range	James Young	Nov. 14, 1902	95 00
Wright's Range	Charles Wright	June 14, 1894	130 00
	1	,	

# STATEMENT giving Names of Stations and Lightkeepers, &c.—Continued.

# NOVA SCOTIA.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			S ets.
Abbott's Harbour Pole	W. H. D'Entremout	May 22, 1888	100 00
Advocate Harbour	John H. Morris	Aug. 10, 1904	300 00
Amet Island	Lloyd Rogers	Nov. 11, 1902 May 21, 1908	460 00 180 00
Annapolis.	Jos. McMillan	Mar. 1. 1908.	100 00
Apple River Light and Fog Alarm	Hill E. Elderkin	31, 1905	800 00
Argyle	Unas. A. Amiro	reb. b, 1893	$\frac{460\ 00}{320\ 00}$
Arisaio	Hugh R. McAdam	Nov. 14, 1898	130 00
Baccaro . Barrington Lightship	Wm. L. Smith	Janv. 9, 1907	485 00
Battery Point	Henry Naas	June 18, 1897 Mar. 12, 1897	800 00 370 00
Battery Point. Bear River, Beaver Harbour	Wm. Hunt	Apr. 10, 1905.	180 00
Beaver Harbour	L. G. Cameron	Feb. 15, 1902	150 00
Beaver Island Beaver Island Beaver Island Belliveau Cove Betty Island	W. E. O'Leary	Dec. 7, 1906 Feb. 22, 1900 16, 1889	300 00 460 00
Belliveau Cove	J. H. Belliveau	16, 1889	95 00
Betty Island	P. E. Christian	June 29, 1904	530 00 460 00
Bird Island Black Rock	Chas. Robinson	May 21, 1901 Mar. 16, 1885	360 00
Black Rock Point	M. D. Morrison	June 8, 1892	295 00
Boar's Head. Bass River.	F. Ruggles	May 24, 1901	$\frac{395}{100} \frac{00}{00}$
Bon Portage	Angus Greenwood	Oct. 24, 1907 Jan. 14, 1907	420 00
Briar Island Light	J. N. Peters	June 6, 1901	460 00
Briar Island Fog Aların	B. H. Morrell	Feb. 6, 1901 Feb. 6, 1885	460 00 100 00
Bon Portage. Briar Island Light Briar Island Fog Aların Brooklin Pier Pole Bunker's Island North End	F. H. Doane	July 27, 1904.	395 00
North End	Jas. H. Schoville	July 27, 1904 Jan. 16, 1907	240 00
Budget . Burnt Coat . Bourgeois Inlet .	Wm V Falkner	Dec. 7, 1905 June 22, 1898 Dec. 1, 1902 Feb. 16, 1907	240 00 295 00
Bourgeois Inlet.	Marian Burke	Dec. 1, 1902.	75 00
Campbell's Island	John A. McDonald	Feb. 16, 1907.	140 00
Candlebox Island	Joseph Long	Nov. 1, 1892 Dec. 31, 1896	370 00 370 00
Canso Harbour and False Passage Canso Harbour Range. Cape D'Or Fog Alarm. Cape Fourchu Light and Fog Alarm.	Wm. J. Mathews	Dec. 17, 1904	240 00
Cape Fourthy Light and For Alarm	F. H. P. Dewis	Apr. 13, 1898 Dec. 31, 1904	800 00 920 00
Cape George	John Murray	11\OV. 0. 1002	265 00
Cape La Ronde. Cape North. Cape Rosebay Light and Fog Alarm	John J. Manger	16, 1898	370 00
Cape Rosebay Light and Fog Alarm	John L. McKenna	Oct. 14, 1899 Mar. 31, 1899	400 00 920 00
Cape Sable	Arthur Cunningham	July 16, 1902.	920 00
Cape St. Coorgo	John Myrick	Cont 0 1909	1,950 00 510 00
Cape St. Lawrence	Chas. Jamieson	Sept. 8, 1898 " 21, 1893 July 5, 1886 June 30, 1902	460 00
Cape St. Mary's	Benj. H. Robichau	July 5, 1886	395 00
Cape Rosebay Light and Fog Alarm Cape Sable "" Cape Race """ Cape St. George Cape St. Lawrence Cape St. Mary's Cape Sharpe Canning River, Inner	Freeman Yorke	June 30, 1902 Apr. 29, 1902	800 00 100 00
Cariboo Island	Fred W. Bishop	29, 1904	130 00
Cariboo Island	D. Falconer	Dec. 20, 1902	370 00 325 00
Carter's Island Caveau Point Range	Germain Chiasson	Aug 20 1897	180 00
Charlo Cove Light	Stephen C. Richard	Nov. 4, 1901	170 00
Charlo Cove Light Chebucto Head Light and Fog Alarm Chester Ironbound.	Capt. Richard Holland	Oct. 1, 1906 Feb. 15, 1884	920 00 460 00
Cheticalnp	Marcelin Muise	Nov. 27, 1896.	345 00
Cheticamp Range	Philip Burgeois	May 23, 1898	180 00 200 00
Church Point. Clarke's Cove.	Roderick McDonald	Aug. 8, 1878 Apr. 2, 1904	130 00
Coffin's Island.	Chas. M. Firth	June 30, 1880	460 00

# STATEMENT giving Names of Stations and Lightkeepers, &c.—Continued.

# NOVA SCOTIA-Continued.

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Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ cts.
Coldspring Head	L. Brownell	March 27, 1901	150 00
Cole Harbour Pance		April 23, 1907	70 00
Country Harbour	Henry Burke.	Oct. 21, 1898 June 11, 1902	180 00 460 00
Country Harbour	James P. Hanlon	April 10, 1905	920 00
Creighton's Head			240 00 920 00
Croucher's Island		Jan. 31, 1883.	345 00
Crotch	C. J. O. Hanley	May 6, 1906	200 00
Dartmouth. Devil's Island.			130 00 490 00
Digby Pier Pole.		29, 1897.	100 00
Dover Harbour	Edward Morash	Oct. 1, 1906	240 00
Duffus Point, inner		Jan. 13, 1903	$130 00 \\ 125 00$
Economy Pole	Ingersoll L. McLellan	May 16, 1899	60 00
Egg Island.	Jos. B. Stoddard	6, 1907	555 00
Eddy Point	Edward Mundell	July 28, 1903 1, 1899	485 00 295 00
Flint Island	Michael Brean	Aug. 20, 1904	460 00
Fourth Point		May 18, 1908	150 00
Fort Point. Freestone Island.	J. E. Misener	16, 1896	205 00 180 00
Fisherman's Harbour	Théodore Beiswanger	Dec. 8, 1905	180 00
	Jas. McDonald		180 00
Gilbert Point	Jos. W. Melanson Robt. Ross	Aug. 18, 1894 Jan. 18, 1876	300 00 320 00
Gillies Point	Hector McLean (M's. son)	Dec. 18, 1897	180 00
Glasgow Point	Abram Clory	July 25, 1894	180 00
GrandiqueGrandique	Daniel Clough	July 4, 1884	75 00 60 00
Grand Etang	Sévérin B. LeBlanc	Mar. 25, 1905	75 00
Grand Passage, Briar Island	Chas. Buckmen	Jan. 7, 1901 . Dec. 28, 1900	295 00 205 00
Granville Centre	A. J. Sallow	Dec. 28, 1900 Feb. 24, 1904	90 00
Green Island	Wm. A. Duann	May 12, 1903	530 00
Gull Rock. Guyon Island	L. D. Orchard	Jan. 1, 1877	485 00 490 00
Glace Bay Range	Michael McNeil.	Nov. 19, 1907.	75 00
	Augus McFarlane	19, 1907	90 00
Guysboro Harbour au Bouche.	Moses C. Scott	April 19, 1884 Feb. 19, 1896	$     \begin{array}{r}       300 \ 00 \\       295 \ 00     \end{array} $
Hawke Island		Dec. 7, 1904	265 00
Herring Cove		Aug. 28, 1897	130 00
Henry Island	D. A. McLennan W. A. Hennessy	May 6, 1905	460 G0 60 00
Hobson's Island	John D. Smeltzer	April 10, 1900	345 00
	Mrs. S. M. Rathburn	Sept. 3, 1879	295 00
Hubbards Cove Harbour Island	Chas. G. Hodgson	Oct. 31, 1903 June 16, 1908	295 00 330 00
Indian Harbour	Henry Boutilier	6, 1901	180 00
Ingonish	Robt, F. Warren	Sept. 17, 1903	400 00 170 00
Ironbound Island	Matthew Hawley	May 13, 1897 June 22, 1895	355 00
Isaac's Harbour	Ira L. Griffin	April 28, 1894	265 00
Isle au Haute	Percy E. Morris	Aug. 2, 1904 Nov. 16, 1901	530 00 130 00
Iona.  Jeddore Rock.	John W. Mitchell	Sept. 29, 1882	460 00
Jeddore Harbour Range	Jeremiah Harpell, jr	Jan. 21, 1901	240 00
Jerome Point	Alphonse Théricult	July 30, 1901 1, 1905	320 00 370 00
Jordan Bay. Kidstone's Island.	John Frederick	Dec. 19, 1906.	130 00
Kidstone's Island	Donald McRae	May 17, 1892	240 00

# STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of Canada.

# NOVA SCOTIA-Continued.

NOVA	A SCOTIA—Continued.		
Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ cts.
Kingsport. Ketch Harbour.			$100 00 \\ 95 00$
Lahave	W. H. Palmer	July 22, 1878 July 4, 1904	240 00
Lingan Head. Liscomb.	John Walsh		240 00 370 00
Little Dyke	S. Stewart	May 1, 1906	60 00
Little HopeLittle Loraine, Harbour	Capt. Almon Doggett Patrick Gallant		680 00 120 00
Little Narrows	Alex. W. Ross	May 23, 1902	150 00
Louisbourg Harbour Range		Nov. 8, 1897 Oct. 6, 1897	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Louisbourg Fog Alarm	D. A. Campbell	March 20, 1902	920 00
Low Point	John C. Peters	Oct. 1, 1865	460 00
Low Point Fog Aların	Thos. O'Neil	May 2, 1904 June 14, 1897	500 00 80 00
" Inner	Roderick McLean	Dec. 7, 1906	70 00
Main à Dieu Margaree	John A McRae	Sept. 11, 1902 Feb. 28, 1907	370 00 460 00
Margaree, Harbour Inner	R. McLellan	June 8, 1901.	70 00
Margaret's Bay	Miles A. Dunn	May 12, 1903.	70 00
Margarets ville	Mrs. Ruth Early	Sept. 1, 1908 Feb. 19, 1887	510 00 240 00
Marie Joseph	David Turner	Jan. 6, 1905	285 00
Marjories, İsland Masstown Pole	Norman McDonald	July 4, 1884 June 29, 1898	130 00 60 00
Mauger's Beach Light and Front Light	Wm. Iceton, sen	July 6, 1903	800 00
Meteghan	L. C. Comeau	Oct. 12, 1875	130 00
Mitcheners Point	Samuel Moser	Nov. 6, 1885	150 00 360 00
Mullin's Point	James Mullins	June 8, 1892.	240 00
Munro Point		Oct. 25, 1905 Aug. 20, 1890	150 00 180 00
Musquodoboit Harbour Range 'B'	John Kent	Apr. 29, 1904.	100 00
" " F'	Fred. Kent, assistant	Mar. 11, 1908	50 00 125 00
McNeil's Beach		Apr. 29, 1904 Aug. 6, 1884	75 00
McMillan's Point.	John B. Chisholm	Dec. 2, 1905	205 00
McNab's Island		June 23, 1905	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Negro Island	Byron Nickerson	July 26, 1897	370 00
Neil Harbour North Canso	A. A. Buchanan Robie McKay	Aug. 14, 1899 Feb. 4, 1882	180 00 360 00
Noel	Geo. C. Davidson	Apr. 25, 1906	112 50
Ouitique Island	Fred. A. Burke	Feb. 16, 1907.	420 00
Page Island	Alfred M. Powell	Dec. 5, 1905 . 6, 1888	$265 00 \\ 400 00$
Pease Island	Thos. Baker	May 19, 1879	420 00
Peggy's Point Pennant	Sydney H. Garrison P. A. Gray	Dec. 22, 1902 June 30, 1903	395 00 130 00
Petite de Grat	E. Landry	Feb. 23, 1897	240 00
Pictou Bar	Wm. Munro		$\frac{460\ 00}{100\ 00}$
Pictou Custom House		" 8, 1892	460 00
Pictou Island Pier, West end	Chas. D. Patterson	Mar. 29, 1905	460 00
Pictou Harbour Range	Hugh McLean	June 24, 1905 July 12, 1897	$100 00 \\ 210 00$
Piper's Cove	John C. McNeil	Dec. 18, 1897	150 00
Pointe Aconi Point Edward Front.	John Charles Bonner	Nov. 6, 1903 Jan. 15, 1905	$240 00 \\ 295 00$
Back	A. J. Lewis	May 22, 1905	180 00
Pointe Prim Light, Fog Alarm, Digby	W. E. Ellis	Mar. 8, 1875	920 00
Pointe Tupper	M. Murphy.	Apr. 1, 1906. Dec. 18, 1890	345 00 395 00
21—11		,	

# STATEMENT giving Names of Stations and Lightkeepers, &c.—Continued. NOVA\_SCOTIA—Concluded.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ cts.
Port au Pique. Port Bickerton	Sam Creelman	May 2, 1901 Jan. 26, 1901	$\begin{array}{ccc} 60 & 00 \\ 205 & 00 \end{array}$
Port Felix	W. C. Boudrot	July 16, 1902	295 00
Port George. Port Greville Range.	Geo. M. Foster	Nov. 19, 1897 June 29, 1908.	130 00 $225 00$
Pope's Harbour	Jas. Bollong	Aug. 6, 1877	345 00
Port Hood	J. Allan McDonald	May 10, 1890	$\frac{300\ 00}{180\ 00}$
Port Mouton	J. Oscar Campbell	April 29, 1898 .	370 00
Port Medway			300 00 100 00
Port Lorne	George D. Corbett	May 31, 1904.	300 00
Port Wade	Geo. D. Amero	Feb. 6, 1893	50 00 355 00
Pugwash	Murdock McLeod	Dec. 10, 1897	345 00
Queensport			345 00 245 00
Red Island*Sable Island Humane Station	John P. Campbell	Nov. 30, 1901	130 00 700 00
St. Ann's	Alex. Nicholson	June 5, 1905	170 00
†St. Paul's Island			700 00 490 00
St. Esprit St. Paul's Island, West Point St. Paul's Island Fog Alarm	John McKenzie	April 12, 1905.	400 00
St. Paul's Island Fog Alarm St. Paul's Island, N. E. Point.	M. J. McLeod	July 10, 1906.	500 00 400 00
Salter's Head	Callo Smith	June 21, 1888	75 00
Sambro Light and Fog Alarm	Alfred Gilkie	Jan. 8, 1867	800 00 130 00
Sambro Inner Island Light	Ephraim Smith	Jan. 3, 1900	130 00
Scattarie Light and Fog Alarm Seal Island Light and Fog Alarm	John T. Martell	July 30, 1897 Oct. 14, 1899	1,200 00 920 00
Seal Island	Simon Joyce	July 4, 1884	180 00
Shafner's Point	D. A. McCarthy	May 29, 1897 Jan. 1, 1906	180 00 530 00
Sheet Harbour Passage Sand Spit (Shelburne Harbour)	James Wambolt	May 11, 1887	$\begin{array}{ccc} 70 & 00 \\ 325 & 00 \end{array}$
Ship Harbour	Howard Palmer		295 00
Shule Harbour Sissiboo.			$\frac{200\ 00}{240\ 00}$
S. E. Beaver Island	Theodore Sampson	Oct. 13, 1892	95 00
Spencer's Island Spencer's Point	R. A. Spencer	July 21, 1904 April 1, 1870	130 00 130 00
Stoddart's Harbour.	Ephraim Larkin	Mar. 18, 1806.	265 00
Sydney Bar Terrence Bay	Samuel P. Slaunwhite	Oct. 13, 1903	345 00 130 00
Three Top Island. Tor Bay	W. L. Munroe	1 28, 1879	360 00
Troop Point	Ralph Troop	Jan. 23, 1906.	345 00 130 00
Victoria Beach. Wallace Harbour.	James Hinds	Mar. 7, 1901	130 00 180 00
Walton Harbour	Lewis E. Burgess	13, 1903	180 00
Wedge Island West Head Barrington	Wm. R. Church	Mar. 27, 1907 April 12, 1890	515 00 240 00
West Arichat Range, Front Station	Edward Delory	Sept. 1, 1904	100 00
Westhaver's Island.	Michael Gerrior	1, 1904. 1, 25, 1888.	$\frac{100}{240} \frac{00}{00}$
Westport	E. W. Suthern	April 12, 1890	420 00
Whitehead Whycocomah.	Murdock Matheson	Sept. 11, 1884	555 00 75 00
Wood's Harbour Wolfville	Jas. E. Goo win	Aug. 27, 1900 .	265 00 120 00
Wolf Point	Howard Palmer	Oct. 14, 1899	250 00
Yarmouth Harbour (see Bunker Island)			

<sup>\*</sup>With board for self, family and assistants and allowance for salaries of staff. † With 5 boatmen at \$32 per month.

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—Continued.

# NEW BRUNSWICK.

	EW BRUNSWICK.		
Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ ets.
Anderson's Hollow Light	Aron B. Copp	Mar. 30, 1903	130 00
Beaver HarbourBeacon (St. John Harbour)	J. Melvin Eldridge	May 2, 1904 Nov. 4, 1901	320 00
Bliss Island	James H. McLeod	Oct. 17, 1900.	445 00 465 0 <b>0</b>
Bathurst	Geo. C. Sutherland	Mar. 20, 1882	240 00
Belyea's Point	Mrs. Westfield A. Day		100 00 240 00
Buctouche Beacon	H. B. Robicheaud		180 00
Bar	Jadus P. Cormier	July 26, 1902	240 00
Big Duck Island Fog Alarm	Rupert Burnham	June 25, 1906	670 00 95 00
Belle Isle (Hatfield's Landing)	Thos. W. Spragg	June 27, 1903	95 00
Bellony Point	Edward H. Egan	May 17, 1902	140 00
Black Lands Gully			130 00 800 00
Cape Jouriman	A. J. P. Bent	Jan. 26, 1901.	345 00
Cape Tormentine			150 00
Caraquet Lower Light	G. Laintaigne Frederic F. Doucet, ir	Oct. 14, 1903.	240 00 70 00
11 11 11	Patrice L. Legere	11 14, 1903	70 00
Cox's Point	Alexander McBain	May 26, 1898	95 00
Cassie's Point	Fred. G. Blacklock	Mar. 4, 1872 Mar. 3, 1888	320 00 460 00
Cherry Island	Harry Chaffey	Oct. 14, 1903.	205 00
Cocagne Range			150 00
Church Point (Buctouche)	James Arseneau		180 00 130 00
Dipper Harbour	Fenwick Belmore	Mar. 12, 1895	155 00
Douglas Island and P.W. Montgomery's Isld.			295 00
East Hd. Musquash Escuminac Alarm and Light	Chas. P. Hamm Kenneth R. McLennan		345 00 880 00
Fox Island, Upper, Light	Seymour Williston	June 4, 1902	300 00
Fanjoy's Point.	George Mills	Dog 15 1897	240 00
Flewelling's Wharf	Mary Flewelling	April 12, 1890.	95 00 95 00
Flewelling's Wharf Fort Folly Gagetown	Amos. P. Belliveau	June 23, 1903	265 00
Grindstone Island Alarm	Fraser Fox	April 22, 1904	95 00 800 <b>00</b>
Grindstone Island Alarm	Coleman Dalzell	July 1, 1904.	1,100 00
Green Head	Thos. E. Looney	July 14, 1886	200 00
Green Head. Grant's Beach. Gull Cove.	Lewis Frankland	Nov 14 1902	150 00 100 00
Goose Lake	John D. Brune	May 11, 1888	295 00
Grand Harbour. Grand Manan, Fog Alarm. Gray's Landing	Lloyd C Dakin	2, 1904	485 00
Grav's Landing	B. F. McCutcheon	Oct. 16, 1866 Mar. 6, 1907	800 00 80 00
Head Harbour Light and Fog Alarm	Chas. D. Hyliard	June 29, 1904	800 00
Heron Island	John A. D. Robertson	April 1, 1902. L	240 00
Hay Island	Joseph Allain	May 21, 1895.	$95\ 00$ $180\ 00$
Harper's Point	Lawrence Blakley	Sept. 9, 1887	90 00
Hampstead	Edgar B. Palmer	Nov. 6, 1900.	95 00 180 00
Jemseg	Geo. F. Nevers	Nov. 24. 1884	95 00
Kouchibouguac. Letete Fog Alarm and Light.	Henry Gagnon	June 26, 1908	180 00
Light Ship (Miramichi)	Capt Robt McLean	Mar. 27, 1907	$640 00 \\ 825 00$
Light Ship (Miramichi)	J. A. Roberty	Feb. 21, 1905.	295 00
Little Belledune (Miscou Gnlly).  Little Shippegan.	Robt. McConnell, jr	Sept. 9, 1887	130 00
Long Point Bellisle Light.  Machias Seal Island Light and Fog Alarm.	W. L. Harvey	June 1, 1907 July 8, 1904	95 00 1,150 00
Midgie Bluff Light	Arthur Henderson	Oct. 4, 1894	200 00
21—11½			

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—Continued.

NEW BRUNSWICK-Continued.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ c
liscou.	. Joseph L. Robichaud	Nov. 11, 1902	800 (
firamichi Draw Bridge	. Edward Sinclair, Company	T	
[usquash			145 (
liddle Island		Nov. 7, 1903.	240 ( 150 (
CMann's Point	Harvey R. McMann	Jan 2, 1901	95
[ulholland's Point	Alvin Parker	June 13, 1901	200
eguac	John Robinson	п 30, 1895	200
eguac Range			130
egro Head Submarine Bell	Alfred Splane	Mon 5 1070	250 460
egro Town Point	E. Ross	Mar. 5, 1878	100
ewcastleak Point, St. John River Light	Mrs. Bessie May Francombe.	Dec. 20, 1907	95
romocto Shoals Light			120
ak Point (Miramichi) Light	. John Bowie	June 2, 1906	130
artridge Island Light and Fog Alarm	Hugh Andrews		1,200
okemouche Lightortage Island	. Michael Hayden		300
		May 17, 1892	325 450
t. Lepreaux			900
ea Point Light	Elias C. Dickson	Nov. 16, 1898	320
assamaquoddy Bay Light, West Eastreston's Beach	. Joseph Kilpatrick	Feb. 3, 1898	485
n East	. Theobald Rooney		395
reston's Beach	. Stanislaus Preston		150
etit Rocher			180 490
eck's Point L. and F.Aoquesuide Light	. Edwin Lockhart	Oct. 20, 1903 July 12, 1881	250
almer's Point.			95
ointe Brulee			80
onite du Chene			95
ointe Spain	. Victor Daigle	May 28, 1903	60
erry's Point	John Carney	Sept. 25, 1900	95 400
JuacoBreakwater		Nov. 25, 1884 . Mar 25 1892	155
" Fog Alarm			400
Cobertson's Point			95
ichibucto			230
Beacon	Jude Robichaud		200
Bar N., Beach			$\frac{180}{150}$
eid's Point		Nov. 15, 1908	80
ailway Wharf, Moffat's Ledge	Geo. Cumming	Jan. 1, 1880	130
outh Tracadie	. Wm. C. Ferguson	Mar. 23, 1898	180
wallow Tail	. Geo. Y. Dalzell	Mar. 18, 1893	485
t. Andrew's		April 10, 1889	320 150
pruce Point		Sept. 15, 1892 June 7, 1883	95
nediac			295
outhern Wolf	Ethelbert Wright	Mar. 6, 1906	555
aippigan	Adelard Savoie	April 2, 1906	350
neldrake Island.	. Duncan Morrison		300
conehaven			555 130
he Cedars			95
racadie	Fabien D. Basque	Aug. 20, 1904	300
iner's Point Fog Alarm	. Alfred Splane	Aug. 21, 1905	800
/ilmot's Bluff	. J. H. True	Sept. 12, 1899	95
asnademoak Lake	See Hendry's Farm	,	
** Died February 9, 1909. BETWEEN MONTREAL	AND QUEBEC AND BELO	OW QUEBEC.	
lgernon Rock	. Geo. Leclerc	July 30, 1901	700
mherst Island nticosti, east point nse St. Jean	. Wm. Cormier	April 26, 1871	395
	CU 1 . I YT 1	T 1 00 1000	760

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—Continued.

# BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC.—Continued.

	1	1	
Name of Station.	Name of Lightkeeper.	Appointed.	Salary
			\$ ets.
Anticosti, south point	Emile Laprise	April 18, 1903	920 00
south-west point	Z. Lemieux	July 10, 1900	700 00
west point	Jas Alex McGee	July 1, 1877 May 26, 1903	850 00 240 00
*Barachois de Malbaie	F. X. Lemieux	Mar. 6, 1903.	75 00
			240 00
Batre à Boulard	Phileas Abel	June 23, 1903	95 00
Batisean "F"	L. Fugère	April 29, 1868	95 00 95 00
Becancour "F"	Omer Gineras	Oct. 24 1905	180 00
" "В"	A. Tourigny	Oct. 24, 1905.	130 00
Bellechasse	Jos. Bilodeau	June 15, 1903	400 00
Belle Isle	Jean Louis Thibadeau		1,600 00
Belle River Park.	Chas Roy	July 8, 1904	1,350 00 200 00
Bersimis	Henri Grenier	Aug. 5, 1904 Aug. 8, 1903	130 00
Bicquette	Louis Pinault	Oct. 6, 1900	800 00
Bird Rocks	W. Bourque	Nov. 15, 1905	1,350 00
Boucherville			95 00
Brandy Pots. Bryon Island.	Propule Chevrier	Oct. 7, 1878	460 00 460 00
Cap aux Corbeaux	Edward Coudé	Oct. 26, 1905.	80 00
Cap au Saumon	Louis Bouchard	May 16, 1896	760 00
Cap aux Oies.	Capt. Thos. Tremblay	May 1, 1888	295 00
Cap Bauld. Cap Charles "B".	Edmond Fontaine	Sept. 1, 1905	920 00
Cap Charles "B"	Alleide Boisvert	June 26, 1901 July 26, 1901	100 00° 95 00°
Cap Chatte	Luc Coté	Dec. 3, 1901	670 00
*Cap Despair	Charles Bourget	Nov. 1, 1897	460 00/
Cap Gaspé	Frs. Le Huquet	Oct. 22, 1896	700 00
Cap Madeleine "B"	J. F. Sasseville	June 9, 1886.	800 00
(A) "P"	Moïse Hébert. G. Vaillaneourt. Pierre Toupin.	May 11, 1888	95 00 130 00
"F"	Pierre Toupin.	April 26, 1905	95 60
Upper Lts. B	Elzéar Beaumier	Oct. 1, 1905	130 00
	Ernest Lacourse		200 00
Cap Anguille	Alfred Petry	1 10 1000	1,150 00
Cap Norman	E H Rennie	Oct 19 1884	880 00- 920 00-
Cap Rosi r. Carleton Point.  Wharf.	Eug. Costin	Nov. 4, 1890.	920 00
Carleton Point	Louis Bujoid	May 25, 1899	345 00
Wharf	Francis Cullen	July 12, 1907	75 00
Champlain "B".	Philippe L. Carignan	Sept. 12, 1902	130 00 95 00
Chambly Basin Range Lights.	Jos. de Senneville	Oct. 1, 1902 May 23 1907	150 00
Chambly Canton Range Wharf	Joseph Savage	July 10, 1907	240 00
Chicoutimi Lighto-			
Chicoutimi Wharf Riviere Caribou "B".  Riviere du Moulin "B".  "F".  Rivière Valin (Range)	André Harvey	May 30, 1889	60 00
Riviere Caribou "B	John Savard	Mar. 1, 1905	70 00 70 00
Riviere du Moulin "B"	Luce Gourdeau	May 9, 1905	70 00
" "F"	George Tremblay	Sept. 19, 1899	70 00
itiviere vann (itange)	Maximin Lavoic,	Summer, 1000.	120 00
Savard's Valin (Range). Poste St. Martin "F"	Dorilas Savard	July 18, 1904	120 00
roste St. Martin F	Alfred Pilote	April 22, 1907	70 00 70 00
('hlorydormo	Maglaina Caulomba	Ook 15 1004	130 00
Chlorydorme Contrecœur, Course "B". " "F". " Traverse "B". " "F".	Norbet Duval	April 22, 1904	130 00
Traverse " D."	Joseph Arpin	Sept. 12, 1902	100 00
Traverse "B"	Loseph Aleidag Lagrain	April 14 1004	130 00 90 00
St. Ours	J. B. Laporte,	April 26, 1904.	150 00
ii ii ii ira verse	Anasthasa (Landat	100s 1	100 00
Verchères "B"	Ernest Guyon	Nov. 11, 1904	150 00
Crane Island	Honoré Tétrault	Nov. 11, 1904	150 00
Orane Island	Desire Vezina	April 25, 1904.	360 00
** Died Feb. 9, 1909. * \$25 extra for blov	ving log-horn.		

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—Continued.

BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC—Continued.

		1	
N			
Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
Domaine F. Range	Edward Gerard	May 30, 1908.	80 00
Domaine B. Range	Xavier Emond	11 11	80 00
Duthies PtEboulements	B. W. Willette.	Oct. 16, 1903	90 00
Egg Island	Wilfrid Bouchard Tancrède Pelletier	April 25, 1906 July 1, 1901	65 00 530 00
Entry Island	Geo. F. Cullins	*July 30, 1901	295 00
Etang du Nord	Nectaire Arsenau	July 21, 1891	395 00
Escoumains Range LtsFame Pt	Saguenay Lumber Co Jas. Ascah.	Sept. 10, 1906 Sept. 2, 1880	150 00 $1,200 00$
Father Point	Jno. McWilliams	May 20, 1893	450 00
	J. G. Blanchet		800 00
Flower IslandForteau	Jos. Lavallée Thos. Wyatt	April 12, 1905 Oct. 18, 1899	$700 00 \ 1,200 00$
Fox River	André Samuel		130 00
Gallia Bay Upper Range	Elz. Cantara	May 3, 1904.	350 00
Gallia Bay Lower Range Gascons Wharf	Louis Peloquin	June 8, 1906.	350 00 75 00
łasné Basın	William Lindsay	Tune 14 1900	60 00
Gentilly "B" Gentilly "F"	Delphis Mailhot	April 2, 1907	150 00
Frande Entrée	Adolphe Lebleu	April 6, 1907	250 00
rande Rivière	William Risson	Oct 99 1896	70 00 150 00
Frand River Wharf	J. B. Couture		60 00
rande Vallee	A Fournier	April 14 1900	130 00
Green Island. Greenly Island	Man Côtá	Sept. 28, 1888 Oct. 12, 1903	700 00 $1,150 00$
riffons Cove.	H. Boulet	June 29, 1908.	130 00
irondines "R"	Loc Sangrageons	Tuno 90 1004	130 00
Grondines Pt. "B"	Engle Houde	11 11	170 00 130 00
"F"	Achille Sauvageau	11 11	295 00
Grosse Roche	Nazaire Morin	June 25, 1906	500 00
Hochelaga "R"	Alphones Chartier	Sept. 10, 1907 Aug. 5, 1904	500 00 200 00
dospital Rock	Victor Lavoie	April 1, 1909.	240 00
sle Ronde.	Herman Chartrand		500 00
le à la Baguele à Aigle "B"	Louis Dubois Eug. Savarie	April 14, 1903 May 1, 1903	$180 00 \\ 130 00$
le a Aigle "F"	F. X. Lapointe	11 11	130 00
le aux Coudres	Eustache Boudreault	April 20, 1906.	60 00
le de Grâce "R"	Omar Salvail. Louis Letendre	May 6, 1897 April 1, 1906.	295 00 130 00
"F"	Ed. Paul	Sept. 7, 1871	240 00
le du Pads Range	Zotique Courscheine	Aug. 8, 1907.	300 00
le du Moine "B".	Paul Mongeau Etienne Provencal		$150 00 \\ 130 00$
le aux Raisins Range	Louis Boucher		285 00
le Bouchard	F. Ivan Laporte		150 00
le Bouchard le Deslauriers		June 16, 1903	95 00
le Ste, Thérèse (Upper Range).	Nap. Langevin	Dec. 18, 1906 Oct. 12, 1870	150 00 300 00
le Ste. Thérèse (Lower Range)	Jos. Malo	Feb. 1, 1897	150 00
le des Lauriers "B"	P. Choquet	March 13, 1908	95 00
le au Bélier Lac St. Jean	Arthur Levesque	Oct. 30, 1901 Feb. 19, 1901	$100 00 \\ 460 00$
acone	W 12 Whitman	Ion 18 1001 i	150 00
ongue Pointe Traverse "R"	Onésime Plante	June 23, 1907	150 00
aure michiebutemanon.			150 00
Black Pt. Lead Mines	Jas. P. H. Peters	June 1, 1891	60 00
Lead Mines	W. Wheeler	11 11	60 00
Molsons Island Georgeville	C. E. Martel	May 19, 1905	80 00 60 00
,	O. 23. 2.100 001	10, 1000.	
Wadleigh Pt. Witch Rock.	J. A. Patterson	June 1, 1891	60 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—Continued.

# BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC-Continued.

		(	
Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ cts.
Lavaltrie (Range).  Lake St. Peter Lt. Ship No. 1	Denis Giguère Desiré Laflèche Hector Fiset J. B. Weaner	April 12, 1887 April 22, 1875	300 00 510 00 530 00 490 00
L'Islet Richelieu. Lotbinière "B". "F" Magnie "B"	Jos. Auger	Jan. 20, 1905.	150 00 95 00 95 00 120 00
Martin River Matane Metis	A. Bertrand Aug. Leclerc Jos. Banville Elisée Caron	Sept. 3, 1902 Feb. 1, 1897 Mar. 28, 1906	**345 00 920 00 370 00 345 00
Montée du Lac (Range)		" 22, 1906 April 13, 1878	460 00 130 00 95 00
Natashquan Newport Nicolet Range "B"	Elie Landry	June 3, 1897 Dec. 5, 1906	250 00 150 00 130 00 210 00 50 00
New Carlisle Wharf North Half Way Point (Range) Oak Point Orleans Range— Ange Gardien "B"	Jos. Lord	May 5, 1903 Jan. 1, 1907 Nov. 10, 1902	180 00 130 00 80 00
Orleans Range— Ange Gardien "B"  "F"  Ste. Famille "B"  "F"  St. Pierre "B"  **Paspebiac.  Parré	F. Gagné Pierre Pâquet. Alfred Poulin. Honoré Roberge	0ct. 19, 1885 26, 1896 19, 1885	80 00 75 00 80 00 75 00
**Paspebiac Percé Perroquet	Olivier Vézina	28, 1897 Aug. 27, 1894 Mar. 18, 1893 Sept. 19, 1892	80 00 180 00 200 00 625 00
Perroquet. Petite Traverse (Contreceur) "B".  Pilgrims. Plateau.	Louis Caisse H. Morin Geo. St. Croix Chas Pean 'et	April 22, 1904 " 22, 1904 " 29, 1898 Oct. 22, 1896 Aug. 24, 1894	130 00 100 00 385 00 460 00 150 00
Plateau Platon (Range). Pte à Basile "B" "F" Pointe à Garde Light-ship. " aux Citrouilles.	Linas Brown	June 20 1904	150 00 150 00 150 00 370 00 240 00
aux Orignaux Bleue. des Monts.	Dominique Levesque Armand Tessier Victor Fafard Sylvis Pagnin	June 9, 1904 Aug. 1, 1899	360 00 60 00 700 00 130 00
" Echouerie " Noire " Riche " St. Jean	J. E. Boulaine N. Breton	July 25, 1903 Jan. 18, 1904 May 16, 1896 Sept. 26, 1896	210 00 240 00 530 00 300 00
**Port Daniel  **Port Daniel  West  Portneuf (a) Range.	F. X. Langlois	April 15, 1904 Feb. 22, 1907	300 00 75 00 130 00 295 00
Point aux Esquimaux. Port St. François (Range).	Joseph F. Boudreault.	Oct. 29, 1907	130 00 345 00 130 90 285 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada.—Continued.

# BETWEEN MONTREAL AND QUEBEC AND BELOW QUEBEC-Continued.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ ct
Quebec Harbour	Harbour Commission P. T. Fraser	Amil 19 1900	60
Repentigny "B"	L. L. Rivet	28, 1894.	510 ( 90 (
"F"	J. Bte. Lachapelle		90
Rimouski	Ubalde Lavoie		65
Rivière à la Pipe	. Alex. Morin		77
du Chène, Anglais Pt		July 11, 1888	150
du Loup			80 180
" St. François			100
Sand Beach	Thomas Kennedy	Aug. 9, 1904.	460
St. Alphonse		June 19, 1895	60
St. Antoine	Leonidas Frechette	March 4, 1902	95
n or 1	Francois Doré	April 14, 1903	130
t. Siméon	. Henry Savard	Oct. 25, 1906	60
to Anne de Sorel "F"	X. Lafrançois		130 100
te. Anne des Monts te. Anne de Sorel "F"	Pierre Cournoyer		130
Ste. Croix	Willie A. Thurber		180
Bar			80
te. Croix			80
te. Emélie, Back Light			95
Front Light	. A. Laliberte		100
t. Francois, I.O. "F"	Jos. Lepage		90
t. Petronille, I.O.	Nap. Ferland		250
t. Pierre les Becquets			80
te. Felicité Fog Alarm	Frs. Belanger	Jan. 14, 1905	640
t. Valentin Range	Paul Martin		150
even Islands	Alfred Arcand		960
even Islands te. Anne Range "F"	Cezare Dufour		75 75
orel Harbour	R. & O. Nav. Co. Assistant		**85
rois Pistoles	Cyrille LeBel		125
hree Rivers		1	
pper Traverse Pier	Alfred Fournier	April 14, 1900	760
pper Traverse Pier. pper Champlain Basin ,, B "	Louis Pothier	1, 1906.	130
arennes	Joseph Massicotte	1, 1906	100
arennes	Azarie Geoffrion	May , 1903 April 21, 1902	80
" " " " " " " " " " " " " " " " " " "	F. X. Chicoine	21, 1902	95
verchères Traverse, "B".  verchères, Village, "B".  verchères, Village, "B".	Felix Bourquet	21, 1902	80
" "F"	Joseph Guyon	21, 1902	95

<sup>\*\*</sup>Continued from "Trinity House." \$120 per annum with \$10 per annum increase to maximum of \$160.

## ABOVE MONTREAL.

Aylmer, P.Q.	Francis Boucher	May	3, 1907	180 00
Amprior Island (Lower)	William Kilrov	Oct.	1, 1905	180 00
Allumette Island (Lower)			7. 1907	130 00
			22, 1887	130 00
Argenteuil Bay				100 00
Bamford Island				320 00
Barriefield Common Range				180 00
Baskin's Wharf	Silas Sullivan	Dec.	22, 1896	130 00
Battle Island				555 00
Beauharnois				260 00
Belleville			4. 1901	240 00
Blind River Range	W. H. McGaulev	- 11	28, 1908	60 00
Boyd Island (see Spanish River)				
Bois Blanc	Agnes Hackett	June	22, 1901	460 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Domoinion of of Canada—Continued.

# ABOVE MONTREAL—Continued.

ABOVE MONTREAL—Continued.			
Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ cts.
Black Bear Island	Daniel Matheson	June 22, 1899	270 00
Blind River Wharf, Ltd Brown's or Knapp's Pt Bishop's Bay Range	The Eddie Co	May 9, 1905.	60 00 205 00
Bishop's Bay Range.	F. Cutler	July 20, 1908	150 00
Bredeuf Range	W. Baxter	May 23, 1885	400 00 540 00
Brighton Range	Chas, Osborne	Oct. 20, 1906	250 00
Buckom's Point	Godfrey Ouillet	Feb. 23, 1884	200 00
Burlington Beach			485 00 425 00
Cabot Head	Charles Webster	May 10, 1898	880 00
Campbell Island			180 00
Caribou Island		May 3, 1907 Oct. 2, 1896	1,150 00 360 00
Cape Croker	R. Chapman	Nov. 13, 1902	1,050 00
Caron Point	Honore Sauvé Wm. Doré		75 00 385 00
Cerebe Lake	John Schade	Aug. 29, 1906	250 00
Centre Brothers Island	D. Wemp	Jan. 9, 1901 April 1, 1907	240 00 530 00
Chantry Island	II. S. Johnson	Nov. 5, 1883	300 00
Christian Island	Allan Collins	Mar. 25, 1891	485 0)
Clapperton Island	Henry F. Baker	Dec. 2, 1895 May 16, 1883	385 00 225 00
Colchester Reef	John Manson	May 1, 1888	850 00
Cole's Shoal	R. P. Boyd *	April 9, 1884 Jan. 2, 1904	295 00 420 00
Collingwood	J. J. Rosseau	June 27, 1904	130 00
Corby Point	Joseph Davieau	May 27, 1890	385 00
Cornwall Canal and Hamilton Range	W J Scott	23, 1901	300 00 150 00
Coteau Landing	Thos. Filiatreault	May 27, 1890	150 00
Coulonge Lake	Kenneth McLeod	April 2, 1892 .	130 00 880 00
Darlington	Port Darling Har. Co	1886	100 00
Deep River Island		Oct. 14, 1884.	130 00 200 00
Dorval and St. Claire	Benjamin Cloude	Aug. 1, 1907	400 00
False Ducks	Darland Dulmage	May 19, 1903	800 00 240 00
Ferris Island. Flower Pot Island	John Parker	1 n 3, 1907. 7	300 00
Fort William, Upper Ottawa	Jas. McCool, sr	May 23, 1887	90 00
Frenchman's Bay French River and Bustard R	Mrs E B Borron	April 14, 1904. Jan. 20, 1903	150 00 555 00
Fox Island, Lake Simcoe	John Prosser	Sept. 14, 1896	250 00
Gananoque Narrows and Jackstraw Shoal Gargantua	Mrs. Manly Cross	Jan. 2, 1908 Oct. 26, 1899	550 00 485 00
Giant's Tomb	A. H. Griffith	Sept. 17, 1898	300 00
Gibraltar Point	P. J. McSherry	May 2, 1905 June 9, 1886	400 00 460 00
Goderich Gore Bay	Angus Matheson	July 10, 1903	385 00
Gravenhurst	Isaac Barnes	Mar. 20, 1906	130 00
Graham FrontBack	W. Graham X. Sicard	Dec. 19, 1904 April 29, 1905	75 00 75 00
Great Duck Island	John Purvis	May 9, 1898	880 00
Green ShoalGrenadier Island	Albert Root	Dec. 15, 1863	200 00 180 00
Griffith Island	W. T. Boyd	May 14, 1889	485 00
Grosse Point	William Shannon		460 00 530 00
Gull Island Gull Harbour	Thor. Fjeldstedt	May 6, 1904	180 00
Gull Harbour.  George's Island (Lake Winnipeg)	Chas. T. Whiteway	June 16, 1906 . April 20, 1899.	400 00 450 00
Hope Island	Charles Vanee	21 111 20, 1000.	100 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada—Continued.

## ABOVE MONTREAL-Continued.

Name of Station. Name of Lightkeeper.	Appointed.	Salary.
		\$ cts
Isle Perrot Ank. McNabb	May 20, 1905	130 00
Jackfish Bay Ben Almos	Oct. 1 1907	50 00
Jones Island, Georgian Bay Ed. Taylor Range, Ottawa River. John Paquette.	June 3, 1901	800 00
Kagawong W. M. Boyd.	April 13, 1893	100 00 80 00
KaministikwaJohn Armstrong	April 28, 1894	300 00
Killarney Frank Roque Thos. McGaw, jr	Feb. 28, 1905 June 13, 1889	400 00 460 00
Kingsville W. H. Black	July 27, 1902.	180 00
Kitchener Island	Oct. 25, 1997.	400 00
Lamb Island	April 26, 1897	555 00 425 00
Leamington F. H. C. Conover	April 28, 1883.	180 00
Lima Kiln Crossing Stankon Determine	Min 11 1000	350 00
Little Current David Boyter Little Gross Cap W. T. Richardson.	Oct. 28, 1903	75 00
Little Gross Cap	April 22, 1903 Sept. 27, 1900	360 00 200 00
Lonely Island Jean Haitse Long Point, east end S. B. Cook West end F. E. Mason	May 11, 1885	725 00
Long Point, east end	June 9, 1897	800 00
L'Orignal Gregoire Seguin	May 3, 1901 8, 1894	460 00 130 00
L'Orignal Gregoire Seguin.  Lower Narrows. J. B. Leblanc	Jan. 4, 1904	130 00
Lyal Island John McKay	Oct. 27, 1884	510 00
Manitowaning John Gourley, jr  Meaford Samuel Dutcher	July 3, 1900 May 7, 1877	150 00 200 00
Meaford Samuel Dutcher. Michipicoten Island Hyacinthe Davieau.	July 1, 1881	460 00
Michipicoten Harbour W. T. Richardson Middle Island John L. Lidwell	Sept. 27, 1900	270 00
Middland Range	July 10, 1889 June 19, 1900	395 00 240 <b>0</b> 0
Mississagi Strait	May 7, 1900	880 00
Mississagi Island L. D. McDonald	. May 16, 1896	460 00
Mohawk Island R. O. Smithers. Morris Island Mrs Catherine Rowan	March 31, 1896 April 1, 1908	460 00 150 00
McKay's Point Joseph Harvey	July 10, 1907	300 00
McKie's Point Dosithèe Daoust	Sept. 21, 1893l	180 00
McQuestion Point. Elizabeth McLeod McTavish J. Campbell	Feb. 22, 1904 Nov. 18, 1896.	130 00 130 00
Narrow Island A B. Boyter	Jan. 3, 1898	320 00
Nine Mile Point Stannes Veech	Mar. 7, 1894	800 00
Nine Mile Point Stannes Veech Nigger Island Carson Jeffrey Niagara on the Lake Fred Masters	April 28, 1894 Nov. 12, 1904	240 00 460 00
" Range	Jnlv 19, 1907l	180 00
Nottawasaga IslandJ. F. Burmister	May 2, 1904	555 00
Oakville Pier Maurice Felan Oka and Wharf H. Lacroix.	April 28, 1894 Nov. 10, 1898	180 00 150 00
Owen Sound Archibald McLean	Dec 23 1897	150 00
Otter Head Robert McMenemy. Papineauville. Joseph Chabot.	Nov. 17, 1903 .	460 00
Pelee Island Joseph Chabot	June 17, 1897 July 10, 1869	$125 00 \\ 325 00$
Pelee Passage F. Malott	Nov. 11, 1902	500 00
Pelee Island         J. R. Lidwell           Pelee Passage         F. Malott           "         F. F. Goulin	Nov. 11, 1902 Aug. 2, 1904	550 00
Peninsula Harbour. Louis Langlois. D. B. Hawkins.	Feb. 29, 1903	650 00 555 00
Pie Island James Forbes	April 1, 1908.	325 00
Pigeon Island J. H. Davis	May 16, 1896	420 00
Point à Cadieux Simeon Poirier Point au Baril Ole Aanson.	! 11 4, 1904]	180 00 345 00
Point Aux Anglais Lucas H. Masson	Sept. 4, 1897.	240 00
Point Aux Anglais Lucas H. Masson Point Aux Pins Alexander McKinnon Point Clark M. McDonald	May 16, 1904	400 00
Point Clark	Jan. 8, 1897 May 23, 1908	$\frac{460\ 00}{180\ 00}$
Louis Madi	Litay 20, 1000	100 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of Canada.

## ABOVE MONTREAL—Continued.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
			\$ cts.
Point Peter	G. J. Scott	June 6, 1901	800 00
Point Pleasant	Frank Connors		345 00
Point Porphyry	Andrew Dick		450 00 265 00
Port Burwell	John Sutherland	June 18, 1894	400 00
Port Colborne	D. A. Fortier	April 11, 1865 May 30, 1904	550 00 850 00
Port Collorne Fog Alarm Port Credit Port Dalhousie Fog Alarm	John Miller	Dec. 16, 1897	180 (0
Port Dalhousie	Bernard McGrath)	Oct. 2, 1907	345 00
			120 00
Port Elgin. Port Dover	Silas L. Butler	Mar. 14, 1896 . July 15, 1897	345 00
Port Maitland	Mrs. James Grant	June 29, 1907	385 00
Port Stanley	John L. Oliver Hugh H. McKenzie	Dec. 16, 1907 May 7, 1907	345 00 205 00
Presqu' Isle	Hugh H. McKenzie Hugh E. Smith	April 29, 1898.	350 00
H H	W. B. Ainsworth	Oct. 12, 1907	600 00
Providence Bay	John B. Sinclair	Mar. 6, 1906 Ang. 1892	325 00 70 00
Rain's Wharf	Patrick O'Conuor	June 23, 1904	295 00
*Red Rock	(see Snug Harbour)	1	•
Red River Range	William Hughes	Feb. 12, 1892 1907	395 00 60 00
Richard's Landing. Rigaud.	Capt. A Malette	Oct. 27, 1907	150 00
Rondeau. Rosseau	W. R. Fellows, jr	Dec. 18, 1888	420 00
Rosseau	J. G. Dixon	July 21, 1890 Aug. 1, 1892	130 00 80 00
Sailors' Encampment. Salmon Point	Amos McDonald		345 00
Sauceen	D. McAulay	Mar. 16, 1899	150 00
Scotch Bonnet	Cyrus R. Spencer	April 7, 1903 May 18, 1905	425 00 130 00
Silver Islet Shoal Point	E. E. Rains	Nov. 24, 1884.	320 00
Slate Island	Alex. B. Sutherland	July 21, 1908	490 00
Snake Island	John Whitmarsh		350 00
*Snug Harbour	Adam Brown	June 29, 1904	180 00
South Bay Point	Marcellus Vorce	Nov. 21, 1902	240 00
South Baymouth	John A. Ritchie Frederick Beacher	Sept. 10, 1903	$150 00 \\ 120 00$
South River South East Bay	Thomas Darling	Jan. 31, 1891.	90 00
Spanish River or Boyd Island Ste. Anne de Bellevue	Mrs. Elizabeth Martin	6, 1905	295 00
Ste. Anne de Bellevue	Jos. L. Stocker F. X Demers	May 20, 1902	150 00 85 00
St. Anicet Bar		June 8, 1892.	285 00
St. Anicet Bar	Joseph Lafleur	May 25, 1907	170 00
Squaw Island Stag Island	Neil McDougall	April 25, 1901. Nov. 3, 1903.	240 00 180 00
Stokes Bay	Alex. Smith	May 14, 1908.	240 00
Stripping Point	David Humes	Aug. 27, 1902	225 00
Strawberry Island. Sulphur Island.	William McKenzie		370 00 345 00
Thames River.	J. J. King H. J. Cartier	Oct. 19, 1884	425 00
Thessalon	James HarveyThomas Sweeney	Nov. 28, 1897	370 00
Tomahawk Island	Thomas Sweeney	Sept. 19, 1902. April 12, 1887.	95 00 $240 00$
Thornbury Telegraph Island	Robert Lowe	Oct. 25 1895	240 00
Thunder Cape	William Craig	May 17, 1892	880 00
Tombermory	Archibald Currie William Fitzpatrick	Oct. 12, 1903	250 00 150 00
Trenton Harbour Toronto, East Gap	George McKelvie	June 13, 1905.	960 00
	<u> </u>		

<sup>\*\$2.00</sup> per day for this and Snug Harbour Light.

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada—Continued.

#### ABOVE MONTREAL-Continued.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
Welcome Island Way Shoal Warren's Landing. Wabbi River Weller's Bay West Sister Rock Western Island Whitby. Whiskey Island and Penetanguishene. Wiarton. Wilson's Channel	Moise Beauchamp. Hugh McDonald. A. M. Ross H. J. Chase J. Thibault Thos. J. Richardson Whitby Hbr. Co. Christopher Columbus. William Gilbert	May 10, 1906. Nov. 20, 1906. Aug. 25, 1905. Oct. 25, 1895. Nov. 4, 1898. Dec. 7, 1905. June 27, 1.01. 1905. Mar. 18, 1893. Sept. 13, 1907. Aug. 25, 1905.	\$ cts. 420 00 760 00 150 00 400 00 600 00 150 00 420 00 920 00 100 00 400 00 75 00 860 00 250 00

#### BRITISH COLUMBIA.

		1		
Active Pass	H. Georgeson	July 21.	1884	960 00
Amphitrite Point			1906	270 00
Berens Island	S G Harrison	Nov 4	1897	397 50
Brockton Point	W I) Jones	Aug. 20	1890	397 50
Brotchy Ledge	Thos Sparks	Ton 1	1903	120 00
Bare Point	T Consider	I 10	1897	210 00
Bare Point	J. Crozier	June 12,		922 50
Ballenas Island	. M. Brown	Oct. 3,	1901	
Birnie Island			1905	270 00
Balfour	J. W. Gallup	Jan. 1,	1900	142 50
Cape Beale	. W. L. Thompson	Sept. 16,	1908	1,380 00
Carmanah Point	. W. P. Daikin	Nov. 4,	1890	1,350 00
Cape Mudge	. J. Davidson		1898	450 00
Coffin Island	. R. Harrap	April 15,	1903	150 00
Crofton Light	. R. Allan	May 31,	1907	195 00
Discovery Island	M. A. Croft	April 1.	1902	960 00
Dryad Point.	C Carnenter	Nov. 7.	1899	397 50
Dock Point	Hugh Moore	May 15	1903	270 00
Danger Reef	R Harran	April 15		150 00
Denman Island	I A MoMillon	April 10,	1906	450 00
Entrance Island	M C Cloub	Non 96	1897	1.200 00
Egg Island			1905	1,380 00
Estevan Point			1907	668 50
				770 00
Fisgard	Capt. Geo. Johnston	July 20,	1901	500 00
Fiddle Reef	. D. H. McNeill	Mar. 21,		450 00
Fraser River Lights and Garry Pt	. A. A. Parker	July 1,	1907	450 00
Gallows Point.	. Western Fuel Co	May	1906	120 00
Green Island	. S. Baker	June 21,	1907	1,200 00
Ivory Island	. F. Reuter	May 2,	1905	922 50
Joan Point	R. Harran	April 15.	1903	180 00
Kaslo Spit			1897	240 00
Kyuquot Light			1906	270 00
Lawyer Island.	F W B Flatorman		1905	600 00
Lennard Island	D Dollook	Luly 1	1908	1.500 00
Lennard Island	E C Comend	Man 21	1905	800 00
				557 50
Lucy Island	Amos Hanson		1908	997 90
Lund Light	. Gas Beacon, (No. keeper)			4000 00
Merry Island	. W. T. Franklin	Jan. 8,	1904	427 50
North Arm Lights	. J. F. McMillan		1905	270 00
Nanaimo Harbour			1907	225 <b>0</b> 0
Point Atkinson	. W. Erwin		1880	1,300 00
Portlock Point	W. J. Gillespie	Nov.	1905	487 50
Prospect Point			1898	397 50
Pointer Island			1899	465 00

STATEMENT giving Names of Stations and Lightkeepers, &c., in the Dominion of of Canada—Continued.

## BRITISH COLUMBIA-Continued.

Name of Station.	Name of Lightkeeper.	Appointed.	Salary.
Portier Pass. Proctor. Pilot Bay. Pine Island Pultney Point. Pachena Point. Quatsino Light Race Rocks. Saturna Island. Sand Head's Lt. Ship Sisters. Sechelt Scarlet Point Sechart Light.	G. W. Gallup E. Montreuil A. B. Gurney E. Hukkla (Temporary) W. R. Pillar G. H. Jackson F. Eastwood Jas. Georgeson M. O'Brien B. Blanchard Gas Beacon, (No keeper) Wm. Hunt	Jan. 1, 1900 Oct. 17, 1907 April 1, 1907 Feby. 1, 1907 Sept. 5, 1907 Jan. 29, 1907 21, 1891 Oct. 26, 1889 1, 1904 Feb. 20, 1905	\$ cts. 500 00 270 00 500 00 1,380 00 500 00 1,500 00 1,380 00 660 00 1,200 00 922 50 
Sooke Light. Trial Island Victoria Harbour Walker Rock. Yellow Island.	H. S. O'Kell Thos. Sparks John Georgeson	Aug. 20, 1906 Jan. 29, 1903 Feb. 8, 1900	142 50 1,200 00 180 00 270 00 735 00

APPENDIX

## STATEMENT of Expenditure by the Marine Department

	1868.	1869.	1870.	1871.
	\$ cts.	\$ ets,	\$ cts.	\$ ct
Inintenance of Lights—				
Above Montreal	40,561 28	42,306 69	46,289 05	44,054
Montreal District	23,053 56	25,762 54	21,669 49	22,453
Below Quebec	45,615 35	41,651 73	43,730 61	31,582
Nova Scotia	46,460 72	56,394 88	43,682 86	76,230
New Brunswick	20,488 00	23,893 00	27,485 14	20,542
Prince Edward Island				
British Columbia				
onstruction—	0.100.15		0.0=0.00	0.550
Above Montreal	3,136 15	7 400 50	2,976 83	8,770
Quebec	7,323 75	7,492 59 6,905 80	1,543 06	10.040
Nova Scotia	22,041 42	6,900 80	18,967 23	10,948
New Brunswick.			11,555 91	8,735
Prince Edward Island				
ominion steamers—				
Quebec	69,026 73	37,176 02	34,549 49	59,797
Nova Scotia	14 778 92	26 603 94	19 759 96	13,139
Nova Scotia. New Brunswick	11,110 05	20,000 01	10,100 00	10,100
Prince Edward 'sland				
British Columbia				
xamination of masters and mates			908 12	1,407
ndson Bay expedition				
vestigation into wrecks			140 00	
arine Hospital, Quebec	19,977 36	19,221 45	21,618 73	19,823
arine hospitals	1,070 86	15,615 71	15,652 62	15,728
vestigation into wrecks arine Hospital, Quebec. arine hospitals. eteorological service.	8,200 00	8,950 00	8,950 00	9,370
egistration of Canadian shipping				
emoval of obstructions			2,350 07	1,000
ewards for saving life				
gnal service			# 000 00	0.001
eamboat inspection	7,106 93	7,999 00	7,396 96	8,321
rvey, Georgian Bay		( 10 020 F1	9,323 31	8,030
ater police, Montreal	27,445 35	$\left\{\begin{array}{c} 10,238 \ 71 \\ 12,633 \ 59 \end{array}\right.$	9,038 62	9,379
Quebec			19,401 05	20,220
vil Government	10,000 00	10,004 25	13,401 03	20,220
eam communication— Between Quebec and Maritime Provinces				
Between Prince Edward Island and mainland				
irchase of steamers to replace—				
Glendon				
Lady Head				
inter mail service, Prince Edwar I Island				
dal observations				
ratnities				
rvey, Burrard Inlet				
xport cattle trade				
	371,070 56	360,899 90	36,212 91	389,537

No. 11.
from Confederation to March 31, 1909.

1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.
\$ ets.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ ets.
57,609 16 22,369 00 41,936 00 67,806 24 23,369 12	61,036 47 31,143 14 65,645 00 100,953 80 29,266 85 13,207 09	60,798 75 20,939 13 102,056 09 114,711 91 53,439 04 3,357 71 18,519 50	71,937 18 15,000 00 110,362 00 114,344 51 60,119 02 12,584 64 15,983 72	68,344 18 12,999 48 98,792 93 143,125 56 62,551 61 13,730 53 17,175 97	65,421 00 15,998 00 89,980 41 128,496 00 50,998 00 11,817 00 15,853 00	73,175 11 15,996 00 96,904 00 132,888 95 58,989 00 16,986 66 18,948 78	74,587 78 14,917 95 93,178 61 120,951 33 57,499 02 12,158 72 15,152 73	65,518 61 16,523 88 96,703 87 116,189 60 61,252 82 15,288 17 15,576 99
6,940 45 57,818 35 34,760 12 9,561 14	18,999 38 39,303 87 90,181 79 16,691 06	24,461 86 41,950 82 51,867 94 31,572 60 4,353 93	14,286 65 19,325 00 43,898 63 8,842 97 8,799 07	13,320 40 24,336 47 42,214 55 17,819 85 11,829 61 8,477 67	16,267 98 12,945 29 25,550 00 7,083 82 17,752 00 29 66	7,207 96 12,776 47 13,500 00 12,028 13 2,504 47	11,993 75 4,154 58 17,386 97 22,598 14 2,560 88	13,297 81 7,797 75 7,069 01 4,985 53 6,074 50
47,500 00 20,999 63		64,490 00 30,008 99	79,043 70 22 992 62	62,971 49 133,826 08	49,987 66 38,739 39	42,683 00 43,027 00	44,972 79 42,016 53	49,318 93 49,438 93
12,115 96 4,312 07	15,984 72 6,466 18	10,555 67 4,520 19	41,796 74 5,696 62	16,241 26 10,156 56 4,672 08	61,782 63 16,095 90 4,050 00	28,933 63 12,193 40 4,249 76	16,332 05 7,460 68 4,250 12	14,429 52 9,733 34 4,253 43
874 00 21,000 00 53,536 16 12,618 15		2,313 31 20,456 45 45,986 87 36,700 59 272 30 4,931 78	366 00 21,994 75 37,111 67 33,580 00 1,096 46 450 00 3,552 86	412 06	342 65 19,965 97 42,449 55 44,871 38 842 14 203 00 1,958 55	500 00 19,987 50 37,487 10 46,050 24 1,435 10 462 00 4,071 00	1,691 00, 20,791 77 37,445 57 45,706 13 239 26 305 86 2,533 10	676 73 12,991 23 35,040 00 45,554 51 257 75 825 00 2,263 15
8,500 00	13,266 00	1,000 00 10,291 68	12,200 00	13,081 86	13,073 01	13,228 38	13,076 46	11,854 34
10,000 00 10,348 00 22,644 52	18,200 00	12,370 86 26,526 66 30,087 23	13,395 00 24,500 00 31,328 16	14,090 00 27,136 68 32,789 18	13,524 29 21,482 08 32,304 12	14,062 00 23,498 06 32,682 05	13,462 74 23,023 26 36,610 19	13,131 06 22,094 48 35,033 95
		15,000 00	10,000 00					

9-10 EDWARD VII., A. 1910 STATEMENT of Expenditure by the Marine Department

	1881.	1882.	1883.
		9	
Maintenance of lights	\$ cts	\$ cts.	\$ cts.
Maintenance of lights	65,541 21	71,048 50	70,116 68
Above Montreal	14.326 36	21,643,05	22,260 32
Below Quebec	89,781 29 128,918 59	91,098 66	22,260 32 102,784 99
Below Quebec. Nova Scotia	128,918 59	137,846 15 66,073 00	100,795 17
New Brunswick	63,921 90	16 325 79	75,946 92 17,907 27
Prince Edward Island	12,997 36 17,570 72	16,985 72 17,803 00	18,349 06
Cape Race		11,000 00	10,010 00
Construction—			
Above Montreal	14,180 02	13,581 00	9,782 27
Quebec	7,539 76	3,731 31	9,672 55
Nova Scotia New Brunswick	7,757 52 4,578 52	13,355 00 2,253 80	$9,42270 \\ 1,02257$
Prince Edward Island	8,150 06	3,092 00	1,934 49
British Columbia	8,655 39	3,237 90	1,005 26
Queen's Printer			
Dominion steamers—	0.1.0=0.00	44.000.00	
Quebec	64,973 00	44,923 98	45,156 13
Nova Scotia	36,700 00	31,049 74	37,841 07
Prince Edward Island	15,139 95	23,911 97	19,680 00
British Columbia	11,788 09	8,504 61	25,484 00
Department Examination of masters and mates			
Examination of masters and mates	3,888 41	3,981 00	4,021 20
Hudson's Bay expedition	3)0 48	863 19	000 04
Marine Hospital Ouchea	19,964 33	19,938 12	$\begin{array}{r} 875 \ 64 \\ 19,998 \ 53 \end{array}$
Marine hospitals	32,218 94	33,162 45	29,880 78
Marine hospitals	46,163 54	47,464 07	51,990 25
Registration of Canadian shipping	607 43	2,013 28	158 84
Removal of obstruction	150 00	1,116 51	35 80
Rewards for saving life	1,806 13	2,212 00	2,534 00 3,365 33
Signal service	12,211 65	14,835 00	16,209 00
Steamboat inspection . Hydrographic surveys .			77 81
Water Police, Montreal	21,953 26	21,994 74	15,798 24
Water Police, Quebec	13,497 81	20,221 82	22,520 41
Civil Government	36,447 50	36,789 46	37,988 39
Steam communication— Between Quebec and Maritime Provinces			
Between Prince Edward Island and mainland			
Repairs to wharfs			
Purchase of steamers to replace—			200 77
Stanley			399 55
Glendon . Lady Head			
Winter mail service Prince Edward Island			
Tidal observations			
Gratuities			
Gratuities Survey, Burrard Inlet.			
Export cattle trade Survey, Bay of Quinté. Relief of distressed Canadians			
Relief of distressed Canadians			
Manning ships			
Widow of late A. Warren			
Wallanald Pros			
Parliamentary returns Investigating effect of Chicago drainage canal. John McDonald			
Investigating enect of Unicago dramage canal			
Longitude, Montreal			
Marine biological station			
	761,730 62	774,831 53	825,010 82

SESSIONAL PAPER No. 21 from Confederation to March 31, 1909—Continued.

1884.	1885	1886.	1887.	1888.	1889.	1890,	1891.
\$ cts.	. \$ cts.	\$ cts.	\$ ets.	\$ ets.	\$ cts.	\$ ets.	\$ ets.
70,788 27 22,946 43 101,302 35	23,262 94	33,289 28	16,735 49	17.510 17	12,285 79	84,035 65 118,750 70	93,180 72 122,741 89
142,909 72 86,670 70 19,059 92 18,107 54	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	117,708 53 96 425 28	73,465 49 14,796 62 19,604 63	140,197 15 78,285 79 19,118 51 16,877 12	139,459 56 61,608 91 16,968 80 16,411 49	61,089 31 19,000 46
18,432 68 3,168 48 12,489 35 2,868 70 2,158 60 2,830 38	4,354 87 4,352 42 7,667 42 879 40	5,877 84 5,905 17 2,421 66	5,330 89	2,287 86 5,533 48 1,542 61	8,623 76 12,203 06 6,039 91 2,966 36 	23,863 09	$\left\{\begin{array}{c} 9,796 \ 28 \\ 3,723 \ 14 \\ 4,596 \ 94 \\ 208 \ 16 \\ 410 \ 00 \\ 14,417 \ 25 \end{array}\right.$
43,019 13 27,726 60 19,539 52	42,921 27	51.485.03	50 714 59	150,659 19	126,629 33		
16,111 83 5,580 79	12,485 07	13,430 69	10,809 07 13,288 83 4,858 98		4 381 01		
480 69 830 12 19,990 34	71,374 69 385 15	5,239 28 35,217 10 592 63 16,047 95	14,762 61 520 14 19,706 96	165 00 513 91	516 67 18,643 14	888 94 10,279 08	1,172 77 751 75
31,401 30 56,418 16 189 27 342 76	45,371 29 56,625 40 237 88 2,259 21	32,229 02 56,898 33 157 13 1,237 34 8,147 22	32,545 35 57,140 74 233 13 4,190 83	18,777 62 30,667 67 59,986 10 897 02 2,500 94 6,825 48	33,089 20 58,577 07 179 21 3,603 65	31,450 03 58,452 10 647 52 5,737 26	33,303 37 62,457 10 1,207 07 3,633 65
2,614 91 6,704 17 21,893 28 26,745 54 19,021 93	3,881 05 23,235 04 20,454 68 17,683 59	4,622 00 21,775 57 17,759 36 20,933 75 22,922 82	7,363 94 5,082 17 22,847 57 21,592 55 17,413 47 22,935 65	4,441 59 21,430 45 19,424 14 18,725 95	5,503 44 5,092 54 22,213 03 17,808 46 16,948 82	8,150 92 4,976 80 20,989 52 17,969 23 13,164 00	4,952 20 4,700 79 22,183 76 17,677 51 573 80 7,279 85 42,253 67
22,958 79 38,775 00	29,900 83	30,453 57	37,193 62		14,698 68 43,501 96	8,620 61 42,835 78	
					133,505 60		
56,164-71	47,228 03	**************************************					
		5,985 42	6,312 93	7,740 25	1,842 47	2,752 67 244 75	7,012 70 1,888 71
					200 00	80 00	1,025 00 $1,690 12$ $520 85$
*********							
927 241 61	1,129,901 14	980,120 59	917,557 31	883,250 85	1,023,801 34	807,417 53	885,410 11

9-10 EDWARD VII., A. 1910
Statement of Expenditure by the Marine Department

	1892.	1893.	1894.	1895.	1896.	1897.
	1005.	1000.	200/21	1000.	10000	1001.
	e oto	© ota	e sta	e oto	9 ok	S
Maintenance of lights -	\$ cts.	\$ ets.	\$ cts.	\$ ets.	\$ cts.	\$ cts.
Above Montreal	87,033 61	87,598 15	78,090 69	82,541 16	82,256 28	80,961 06
Montreal District						
Below Quebec	116,531 27	120,404 19	124,348 80	124,763 81	124,143 66	126,186 00
Nova Scotia	148,815 26	150,445 26	137,339 73	140,977 53,	123,234 65	124,671 19
New Brunswick Prince Edward Island		71,079 46 16,819 64	59,917 96 15,569 39	69,654 46 17,976 67	63,018 64 17,988 15	56,871 02 16,429 23
British Columbia		24,413 27	27,240 77	21,734 18	24,770 44	25,679 52
General Account						
Construction—						
Above Montreal		8,766 62	12,581 15	2,699 40		9,527 94
Quebec	809 27	10,097 18	4,743 13 3,104 77	3,004 14 4,737 03	3,300 30 1,842 94	
Nova Scotia New Brunswick	1 845 35	4,381 24 1,271 15 2,958 61	115 45			61 71 1 60
Prince Edward Island	1 56	2,958 61	1,604 00	1,001 00	200 00	452 90
British Columbia	9,478 81		6,356 43	180 83	225 50	569 99
Lake St. Peter						
New Dredge						• • • • • • • • • • • • • • • • • • • •
Dominion Steamers—						
Quebec						
New Brunswick	145,899 61	163,097 46	178,183 97	169,661 64	145,315 28	136,940 11
Prince Edward Island.		Í		• 1	Í	
British Columbia						
Naval Schools						
Examinations of masters		4,116 99	3,745 33	2,757 29	4,062 82	3,536 29
and mates		1,110 00	0,110 00	2,101 20	4,002 02	19,091 32
Investigation into wrecks	603 21	643 49	850 81	351 15	483 98	565 25
Lighthouse depot, Georg-						
ian Bay		05 656 08		00 500 05	00 000 00	07 004 71
Marine Hospitals	34,106 83		38,403 94	38,589 05 64,588 34	36,682 96 66,600 29	
Meteorological service Registration of Can ship-	67,138 06	01,105 00	66,440 96	04,000 04	00,000 23	01,001 11
ping		1,476 19	394 00	207 40	517 60	531 55
Removal of obstructions	2,878 68	1,554 53		2,217 36	456 38	631 86
Rewards for saving life		7,432 64	8,014 67	6,591 34	8,004 38	5,955 19
Signal service		5,040 58 24,386 95	4,668 93	5,311 54 26,385 88	5,33876 $26,32127$	5,986 12 26,837 83
Steamboat inspection Hydrographic surveys		17,542 11	25,961 36 31,461 76		15,099 63	
Ship channel		5,436 23	01,101 ,0		10,000 00	
Civil Government		56,477 23	54,988 88	71,373 82		74,801 37
Repairs to wharfs		84 90	1,007 67	824 38	2,644 69	1,795 56
Purchase of steamer Minto	2 200 44	4.950.00	6 407 09	C 190 10	eo	91 021 05
Winter mail service, P.E.I.	3,309 44	5,000,17	6,497 03	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
Purchase of steamer Minto Winter mail service, P.E. I. Tidal observations. Gratuities. Survey, Burrard Inlet. Export cattle trade. Survey, Bay of Quinté. Relief of distressed Cana.	711 55	0,0.70 17	3.261 32	11,507 24	0,021 40	10,100 20
Survey, Burrard Inlet	2,580 45					
Export cattle trade	1,411 57	1,711 73	1,350 83	2,268 74	2,887 24	
Survey, Bay of Quinté		2,085 45				• • • • • • • • • • • • • • • • • • • •
Relief of distressed Canadians						
Parliamentary returns				7 50	291.08	
Investigation effect Chica.					201 00	
go grain canal	ļ					
John MacDonald					200 00	
Unforeseen expenses						
Marine biological station.						
New life-saving station, Long Point						
Salaries temporary clerks						
Steamer to replace Raufield						
Observatory, Sulphur Mtn. Charles Morrison						• • • • • • • • • • • • • • • • • • • •
Charles Morrison	********					
Montreal Pilotage Commis- sioners						
Montreal wireless tele.						
graphy						
Purchase land for wharf at	- 7					
Halifax, N.S.	· · · · · · · ·		J			

SESSIONAL PAPER No. 21

from Confederation to March 31, 1909-Continued.

1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.
\$ cts.	\$ ets.	8 cts.	8 cts.	S cts.	8 cts.	\$ cts.	S cts.
87,841 22	92,751 23 136,134 79	82,810 92 122,112 42	93,708 16, 132,147 88				
116,279 88 126,356 00	65,072 35	122,414 86	142,359 01	149,572 14	142,725 69	164,339 92	204,157 27
67,369 98 18,112 93 26,862 03	128,674 15 20,569 81 29,530 20	52,491 93 42,878 40 33,545 95	65,247 80 28,031 85 31,938 25	69,133 51 24,223 73 35,119 03	25,575 33 35,758 43	79,464 50 25,603 09 39,068 34	36,760 32
6,867 69	3,729 62	7,094 64	12,499 99			••••	
3,649 90 4,067 99 1,423 34	37,838 80 3,123 16	40,319 03 4,884 22	17,060 13		399,487 73	540,675 07	1,447,202 77
1,423 34 1,409 60 6,414 19	91 49 616 96 19,305 60	5,586 91	922 00 4,160 74				00.000 (.0
			660 03				93,938 90 10,745 36
117,644 39	145,270 75	180,430 65	195,484 75	452,526 92	369,813 97	306,171 01	475,907 20
						6,106 54	3,123 24
3,335 40 27,050 66			3,730 25	3,305 59	4,968 36	7,761 17 178,638 94	5,884 74 236,469 00
312 77	982 17	773 06	1,022 65	1,824 55	4,968 36 1,367 45	3,570 28	5,111 34
38,162 56 64,135 71	37,353 29 73,148 05	76,692 42			48,750 15 87,293 00		
818 33 704 17	966 48 745 49	266 43 252 19	546 62 1,000 00	607 23 1,325 25	417 25 382 98	1,203 56 752 60	1,215 14 9,521 68
5,081 40 4,993 88	7,049 09 6,067 90	7,007 97 5,906 83	8,519 92 8,950 17 29,247 59	1,325 25 8,278 55 6,452 56	9,306 25 6,863 75	11,763 12 7,740 01 33,723 12	9,592 91 8 755 44
26,342 29 15,306 66	28,035 49 13,664 97	72,965 72 12,600 98	29,247 59 16,170 20	27,493 80 25,488 64	30,172 09 35,243 97	33,723 12 41,366 95	50,187 75 103,926 98 511,171 41
74,644 05 1,618 97	72,833 97 144,365 29	63,331 61 697 87 41,951 88				91,985 07 1,300 89	102,735 31 1,590 61
9,575 31 3,081 45	8,439 70 5,186 35	1,503 70 4,372 18	2,093 93 7,060 20	8,835 86 8,925 33 136 85	6,211 28 14,520 00 1,050 00	8,912 57 21,871 71 1,210 00	23,802 24
2,499 80	2,737 85	2,762 24	2,746 84	3,321 23	3,026 25	3,504 43	3,300 35
				•••••	. ,		
				• • • • • • • • • • • • • • • • • • • •	95 10		269 20
		0.4*0.01			4 000 70	0.0577 (0.0	0.029.10
	5,709 10	3,452 21 739 61	2,630 62 1,990 58	3,490 29 1,998 85	4,822 78 2,000 00	3,977 63 2,996 54	2,953 19 2,001 69
				1,780 52 2,967 35	6,945 96	11,448 10	15,881 35
				50,000 00 55 00 223 00	3,167 62		
				3,691 69			
					1,745 23	2,050 00	10,776 51
211	21				3,528 25	18,847 31	40,785 1

9-10 EDWARD VII., A. 1910 STATEMENT of Expenditure by the Marine Department

_	1892.		1893. 1894.			1895.				1896.			1897.			· .				
	8	(	ets.		;	ets.		8	cts.		Ş	;	ets.		\$	ets	-	3	ŝ	ct«.
Purchase land for wharf at Charlottetown, P.E.I Schools for navigation									 											
Naval militia								• • •	  		 				  					 
1ce-breaking steamers S. Shaw Salaries, lightkeepers Agencies, rents, &c			٠	• • •					 		٠.									
Maintenance and repairs Repairs to lightships Construction and apparatus						!			  		 									
,,		,426			8,720				 4 34	-			8 28							72 90

SESSIONAL PAPER No. 21 from Confederation to March 31, 1909—Continued.

1898.	1899	),	190	00.	190	01.	19	002.	190	3.	190-	l	1905	
\$ ets.	8 1	cts.	8	cts.	\$	ets.	8	ets.	\$	ets.	\$	ets.	\$ ct	ts.
												19 11		
												00 00		
												36 29		
												35 87		
												35 52		
												00 00		
										• • • • •				
											242,4			
											29,7			
											531,9			
												60 00		
1											1,605,7	78 59		
856,192 50	1,102,6	01 90	982,5	61 97	1,029,	925 32	1,50	,618 88	1,671,	494 77	2,150,9	40 31	4,747,722	81

STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—Continued.

<del></del>	1906.	
	\$	et
Dominion steamers—		
Quebec		
Nova Scotia	507 005	. 0
New Brunswick. Prince Edward Island.	587,885	0.
British Columbia		
vanipation of masters and mates	7,068	3 1
Judson's Bay expedition	132,707	5
nvestigation into wrecks	7,476	
Inning hospitals	50,120	
Teteorological service.	99,719	
Registration of Canadiau shipping	4,967	
Removal of obstructions	11,991	
ignal service	8,194	
teamboat inspection	37,590	
Indrographic surveys	120,359	
Shin channel	587,957	
Panaire to wharfe	2,960	
Vinter mail service, Prince Edward Island.	16,680 $28,047$	
Cidal observations.  Juforeseen expenses.	3,765	
Inforeseen expenses.  Iarine biological station	2,914	
Colomics temporary clarks	19,947	
Purchase land for wharf at Halifay N S	88,032	2 8
schools for navigation	5,036	
Vaval militia	9,13	
attle invection	3,33	
Vrecking plant.	25,000 $161,41$	
ce-breaking steamers. Shaw		$9 \ 2$
salaries, lightkeepers	242,403	
Agencies rents &c	29,739	
Tointonence and require	531,920	
Repairs to lightships	23,560	
Construction and apparatus	1,605,77	5 5
Submarine signal apparatus	50,54° 12,060	
Administration of pilotage. Parry Sound Buoy Depot.	11,71	
Compensation re explosion of gas buoys.	38,68	
	2,95	
Observatory Toronto	2,87	
Montreal	50	
Avdrographic steamer Atlantic coust	45,50	
Pacific coust	37	
New dredge No. 15	150,00	
" Galveston	159,84 59	
Shipwrecked and distressed seamen	48	
Gratuities	61	
Civil Government, salaries.	88.45	
" contingencies	19,50	6 4

STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—Continued.

Service.	Amount.	Total. 1907.
	S cts.	\$ cts
Ocean and river— Dominion steamers Examination of masters and mates. Rewards for saving life—life-boats, &c. Investigations into wrecks. Schools for navigation. Registration of Canadian shipping. Removal of obstructions in navigable waters. Tidal service. Winter mail service. Marine biological stations. Cattle inspection Wrecking plant. Hudson's Bay expedition.	19,214 79 11,998 01	
Tuesding Stay Experience  " patrol boat.  Ice-breaking steamer Lady Grey  Quebec Coal Company's claim.  Arresting two sailors of the Hector  H. M. Stewart, clothing destroyed by fire  Unforeseen expenses.	29,977 91 66,293 51 1,000 00 148 75	669,717 0
sighthouse and coast— Salaries and allowances of lightkeepers. Agencies, rents and contingencies Maintenance and repairs to lighthouses. Construction of lighthouses and apparatus Breaking ice in Thunder Bay Signal service. Marconi stations Pilotage. Repairs to wharfs. Salaries, temporary clerks. Georgiau bay and Parry Sound buoys	22,076 58 499,597 86 1,159,906 40 21,303 85 6,859 68 53,532 19	2,002,727 0
cientific institutions and hydrographic surveys— Observatory, Toronto.  "Kingston" "Montreal  Meteorological service Hydrographic surveys.	2,313 67 375 00 375 00 75,163 20 84,435 32	_,,
Dredge No. 15 Cap à la Roche. Galveston. Ship channel. Compensation to L. O'Brién. Marine hospitals Shipwrecked and distressed seamen	37,362 11	161,662 1 150,000 0 1,347 8 50,089 7 419,398 1 2,200 0
Steamboat inspection. Returns for Parliament. K. Falconer, reorganizing system of bookkeeping.	634 36	38,156 6 32,459 5
Civil Government, Salaries	68,995 81 14,182 31	25,634 3 83,178 1
Total, Marine Branch.  " Fisheries Branch Fishing bounty.		3,637,569 8 534,669 9 159,015 7
		4,331,255 4

STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—Continued.

EXPENDITURE for the fiscal year ended March 31, 1909.

EXPENDITURE for the uscal year end	ed March 51, 1909.
	Amount. Total, 1908.
Ocean and River Service—	
Dominion steamers and ice-breakers	• /
Examination of masters and mates	
Rewards for saving life	31,642 41
Investigations into wrecks	6,543 08
Schools of navigation	7,378 07
Registration of shipping	1,982 70
Removal of obstructions	26,009 59
Tidal service	30,977 40
Winter mail service	11,019 79
Cattle inspection	3,503 90
Wrecking plants	30,000 00
Unforeseen expenses	1,301 61
Naval militia	9,078 17
Patrolling waters in northern portion of	
Canada	34,706 39
New ice-breaking steamer	5,974 61
Returns to Parliament	
	\$881.054 56
Public Works—Chargeable to Capital—.	
Ship channel	\$761,916 84
Permanent piers in Lake St. Peter, &c	116,063 87
Dredging, Cap à la Roche	75,000 00
Dredge Beaujeu	100,000 00
Spur line, Sorel shipyard	8,815 05
Montreal and Quebec Signal Service	12,232 15
	\$1,074,027 91
Lighthouse and Coast Service—	
Agencies, rents and contingencies	\$ 29,359 26
Salaries and allowances to lightkeepers	285,050 14
Maintenance and repairs to lighthouses	689,319 86
Parry Sound buoy depot	41,983 93
Construction of lighthouses, &c	715,572 91
Construction of apparatus	801,636 83
Wireless stations	114,986 60
Signal service	9,350 28
Administration of pilotage	31,087 22
Maintenance and repairs to wharfs, &c	1,456 86
Maintenance and upkeep of dock yards	30,656 22
Breaking ice, Lake Superior, &c	37,053 32
Salaries of temporary clerks, &c	16,728 99
Telephone reporting stations below Mon-	
treal	7,820 68
Steamer for the Great Lakes	
Service of expert accountants	13,066 34
Charter of steamer, Lime Kiln Crossing.	6,650 00
Keeping lights on 'Castle' and 'Arminia'	3,680 00
-	2,835,459 44

STATEMENT of Expenditure by Marine Department from Confederation to March 31, 1909—Concluded.

EXPENDITURE for the Fiscal year ended March 31, 1909—Concluded.

Scientific Institutions and Hydrographic Surveys—		
Meteorological service \$122,572 86		
Magnetic observatory		
Montreal observatory		
Kingston observatory		
Hydrographic surveys 115,631 31		
Hydrographic survey steamer for B.C 107,250 00		
	\$349,373	37
Marine hospital \$ 59,957 92	<b>4</b> /- · ·	
Shipwrecked and distressed seamen 342 25		
Marine hospital at Yarmouth, N.S 7,285 00		
	67,585	17
Steamboat inspection \$ 42,210 43	ĺ	
Fisheries	800,081	73
Civil Government Salaries, Marine and	000,001	10
Fisheries		
Contingencies of Marine and Fisheries 21,146 77		
	125,063	30
_		
Total expenditure Marine and Fisheries	6,174,855	91
Fishing bounty	156,114	50

Expenditure for 1908-9 is Appendix No. 5 in this report to be added to statement of expenditure since confederation.

## APPENDIX No. 12.

## LIVE STOCK SHIPMENTS SEASON 1908-9.

## SHIPPED FROM MONTREAL.

Months.	Cattle.	Sheep.	Horses.	Hay.	Grain for Feed.	Men.	U. S. Cattle.
1908.				Lbs.	Lbs.		
May	9,312	305	29	2,449,150	756,180	372	
June	9,462	1,478	13	2,467,820	760,908	381	
July	15,886	1,485	3	4,634,870	758,880	629	
August	17,962	1,399	13	5,283,610	741,840	702	
September	15,796	2,435	18	4,769,170	821,090	636	
October	16,332	1,416	24	4,928,450	729,630	636	
November	15,080	1,593	16	4,727,910	590,760	598	
	99,830	10,111	116	29,260,980	5,159,360	3,954	10,398

United States cattle included in the total of 99,830.

## FROM THE PORT OF ST. JOHN, N.B.

Months.	Cattle.	Sheep.	Horses.	Hay.	Grain for Feed.	Men.	U.S. Cattle.
1908.				Lbs.	Lbs.		
December	5,448		27	1,827, 37	209,612	218	
1909.							
January	7,032	151		2,135,256	£57,585	280	
February	2,729		12	798,340	212,272	111	
March	3,259			949,150	266,030	133	220
April	4,455		12	1,375,325	359,500	178	
	22,923	151	65	7,086,008	1,604,999	920	220

United States cattle included in the total of 22,923.

## FROM THE PORT OF HALIFAX, N.S.

Date.	Cattle.	Hay.	Grain for Feed.	Men.
1908.		Lbs.	Lbs.	
December.	1,119	347,671	46,420	44
1909.				1
January	1,536	520,870	122,376	62
February	252	79,400	25,200	11
March	74	20,000	6,100	3
April	116	29,250	9,300	6
	3,097	997,191	209,396	126

DIFFERENT Ocean Lines by which the Live Stock was shipped during season 1908-9, from Montreal.

Ocean Line.	Cattle.	Sheep.	Horses.
Allan Line	14,656		18
Dominion Line	13,580	6,141	
Thompson Line	15,117		
Donaldson Line	22,727	678	55
Canadian Pacific Steamship Co	29,120	3,224	8
Furness Withy Line. Elder Dempster Line.	4,620	68	
Ender Dempster Line			* * * * * *
	99,820	10,111	81

Total shipments of Live Stock from Canada and Ports in Great Britain, &c., to which the Live Stock was shipped.

London	48,502	2,654	40
Liverpool	39,336	7,389	10
Glasgow	26,760	151	73
Manchester	7,192		
Bristol	4,060		
South Africa	* * * * * * *	68	
	125,850	10,262	123

COMPARATIVE STATEMENT of the number of Cattle shipped from Canada to British ports from the years 1902-3 to 1908-9.

		Horses.	181 225 718 647 492 423 503
5	I OTALS.	Cattle.	125,850 127,187 159,308 161,456 143,131 164,905 188,510
		Sheep.	10,262 15,753 12,162 23,048 66,715 82,644 80,753
		Halifax.	Nii.
T Consumer	HORSES.	St. John.	65 51 73 79 213 31
		Montreal, St. John.	116 174 174 661 568 279 279 373
		Halifax.	3,097 Nil. 1,042 745 5,456 3,856
CATTLE.		St. John.	22,923 20,210 31,148 33,543 33,833 25,855 37,453
		Montreal. St. John.	99,830 96,977 128,160 126,871 108,553 133,594 147,201
		Halifax.	Nil. 
Sugg.		Contreal. St. John.	151 4,168 1,371 3,971 17,293 23,428 19,310
		Montreal.	10,111 11,585 10,791 19,077 49,422 57,741 61,017
			1908-9. 1907-8. 1906-7. 1904-5. 1903-4.

#### APPENDIX No. 13.

## MARINE HOSPITALS AND PORTS AT WHICH SICK SEAMEN WERE TREATED.

George J. Desbarats, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

SIR,—I have the honour to submit the annual report of the transactions in the Marine Hospitals Service, for the fiscal year ended March 31, 1909.

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

C. H. GODIN, M.D., Med. Supt. Marine Hospitals' Service.

#### MARINE HOSPITALS SERVICE.

#### EXPENDITURE FOR 1908-9.

Amount of appropriation	 \$55,00	00 00
Amount of expenditure	 54,99	99 85
Ralance	\$	0.15

Province.	Number	Number	Total
	of Seamen.	of Days.	Expenditure.
Nova Scotia New Brunswick Prince Edward Island Quebec British Columbia General Account	424 366 683 485	13,569 2,336 1,265 4,144 5,177 26,491	\$ ets.  23,871 32 6,514 09 4,259 58 9,231 25 9,363 92 1,759 69  54,999 85

# Nova Scotia. Table showing the Expenditure for each Port.

		1	
Port.	Number of Seamen.	Number of Days.	Total Expenditure.
Advocate. Amherst. Annapolis Royal. Apple River. Arichat. Baddeek. Barrington. Barton. Bear River Belliveau's cove. Bridgewater. Canning. Canso. Chester. Cheverie. Cheverie. Cheverie. Cheverie. Clementsport D'Escousse. Digby. Economy. Freeport, Westport, Tiverton Glace Bay. Guysborough. Halifax City Hospital. Halifax Victoria Hospital. Hantsport. Ingram Docks. Isaac's Harbour. La Have. Liscomb Liverpool. Lockport Louisburg. Mahone Bay Margaree. Margeretsville. Meteghan. North East Harbour. North Sydney. Parsboro. Pictou. Point Tupper Port Dufferin. Port Gréville. Port Hastings. Port Hood. Port Hastings.			
Port Morien Port Mulgrave. Port Wade. Pubnico. Pugwash River Bourgeois. River Hebert Salmon River Sandy Cove. Sheet Harbour. Marble Mountain Shelburne. Sherbrooke	22 4 8 12 10 9 6 1 14 3 1 3	91 40 250 23	125 00 17 50 168 75 181 00 20 50 71 25 45 50 112 15 487 62 10 00 3 00 73 50 42 75
Carried forward			18,547 00

## NOVA SCOTIA—Concluded.

## Table showing the Expenditure for each Port .- Conclued.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
Brought forward.  Ship Harbour Springhill Stoney Island St. Peters Sydney Tusket Wedge Wallace Weymouth Windsor Wolfville	1 1 1 24 62 1 4 28 22 22 2	8 59 14 1,586	\$ cts. 18,547 00 5 00 7 20 17 70 201 00 2,142 40 17 00 43 15 367 90 117 25 2 00
Yarmouth.	1,826	1,138	2,403 72

## NEW BRUNSWICK.

## TABLE showing the Expenditure for each Port.

Port.	Number	Number	Total
	of Seamen.	of Days.	Expenditure
Baie Verte Bathurst Beaver Harbour Buctouche Cambellton Cape Tormentine Caraquet Dalhousie Dorchester Douglastown Grand Manan Grand Harbour Harvey Hillsborough Moncton Point Wolfe Richibucto River Louison St. Andrews St. John St. Martins St. Stephens Spediac Shippegan	1 4 1 7 98 7 5 23 4 78 7 9 2 10 13 1 5 8 8 1 125 6 1 6 2 2	17 3 276 117 108	\$ cts. 7 50 289 69 16 00 13 00 484 86 147 75 10 75 13 75 66 40 1,220 16 68 10 313 22 12 30 352 80 200 00 42 00 42 00 3 75 2,566 10 55 46 86 50 200 00 8 00 6,514 09

## PRINCE EDWARD ISLAND.

## Table showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
Alberton Cardigan Charlottetown Hospital P.E.I. Hospital P.E.I. Hospital Crapaud Georgetown Miminegash Montague Murray Harbour Souris Summerside Tignish Vernon River	13 10 3 15 6 16 37 177 70	501 469 7 288	\$ cts.  13 95 22 65 756 55 679 30 11 25 69 05 84 75 26 35 545 20 1,128 58 785 50 130 45 6 00
	366	1,265	4,259 58

QUEBEC.

## TABLE showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
Batiscan Carleton Chicoutimi Frazerville Gaspé General Account Grand River Magdalen Islands Matane Montreal Alexandra Hospital Montreal Notre Dame Hospital Montreal Victoria Hospital New Richmond Pasbebiac Percé Port Daniel Quebec Hotel Dieu Quebec Hotel Dieu Quebec Jeffery Hale Rimouski St. Jean St. Jean St. Thomas de Montmagny Seven Islands Sorel. Three Rivers	5 3 5 8 44 1 1 146 158 158 1 7 11 114 5 24 53 19 4 103 3 11 11 23	34 28 14 15 21 35 999 2,048 4 10 177 647 8 8	\$ cts.  40 00 7 50 99 60 61 30 208 00 400 60 5 75 99 25 183 25 73 00 1,704 20 3,011 50 6 00 85 90 218 75 57 50 20 50 265 50 961 50 80 75 52 80 80 70 40 20 310 00 38 50 392 30
	683	4,144	9,231 25

## BRITISH COLUMBIA.

## Table showing the Expenditure for each Port.

Port.	Number of Seamen.	Number of Days.	Total Expenditure.
Chemainus Nanaimo Port Simpson Union Bay Vancouver, St. Paul's Hospital. Victoria St. Joseph Victoria Marine Hospital	54	378 191 33 235 1,968 114 2,258	\$ cts. 719 99 845 50 56 90 927 15 2,952 00 179 00 3,683 38 9,363 92

#### GENERAL ACCOUNT.

Superintendent's salary to 1st of September, 1908\$ Superintendent's travelling expenses	
Doctor Grenfell's grant	204 16
Stationery	77 55
Express charges	
-	1 10
\$1	759 69

N.B.—The superintendent's salary was charged to civil government after September 1, 1908.

## TABLE SHOWING EXPENDITURE FOR TREATMENT, BOARD, SUPPLIES, ETC.

<del></del>	Nova Scotia	New Brunswick.	Prince Edward Island.	Quebec.	British Columbia	General Account.
	\$ cts	\$ cts.	\$ cts.	\$ ets.	\$ cts.	\$ ets.
Board in hospitals and private houses	8,528 09	2,760 57	1,607 57	6,222 30	5,607 05	
ment	6,262 30	947 31	2,328 55	988 20	621 15	
ers' salaries Fuel	796 28		312 50	1,518 75	2,250 00 214 50	500 00
ments	1,483 60 133 69				361 20 66 00	281 71
Water Transportation	17 00 188 25 781 94	34 86	5 25	77 00	39 60 19 30 15 85	777 98
Repairs and maintenance Special nursing Burials	120 87 42 00	16 25	5 71	25 00	72 75	
Miscellaneous Grants Light		200 00		400 00	96 52	200 00
Totals		6,514 09	4,259 58	9,231 25	9,363 92	1,759 69

## TABLE SHOWING AMOUNT OF SALARIES PAID TO MEDICAL OFFICERS AND KEEPERS DURING 1908-09.

Nova Scotia.	\$	cts.	New Brunswick.	\$	cts
Bear River—			Bathurst		
Medical officer	150	00	Medical officer	150	00
Canso —	055	0.0	Campbellton—	0 20 0	
Medical officer	315	00	Medical officer	350	00
Digby— Medical officer	950	00	Douglastown— Medical officer	595	6 00
Keeper		00	Keeper		00
Freeport—		00	Hillsboro—	200	.50
Medical officer	300	00	Medical officer	250	00
Liverpool—			Moneton—		
Medical officer	100	00	Medical officer	200	00
Louisburg-			Richibueto—		
Medical officer	250		Medical officer	200	00
Keeper	350	00	Shediac— Medical officer	900	00
Lunenburg— Medical officer	287	50	Medical onicer	200	00
Keeper	150			2,125	00
North Sydney—	100	00	British Columbia.		
Medical officer	400	00			
Parrsboro—			Chemainus—		
Medical officer	300	00	Medical officer	450	00
Pictou—	200		Nanaimo—		
Medical officer	698		Medical officer	600	00
Keeper	200	00	Victoria— Medical officer	(100	
Point Tupper— Medical officer	100	00	Keeper		00 (
Keeper	144		recepet		-03
Port Morien—				2,250	00
Medical officer	125	00	Quebec.		
Sydney					
Medical officer	625		Gaspé—		
Keeper	300	00	Medical officer	200	00
Yarmouth— Medical officer	362	50	Paspebiac—	010	75
Medical officer		90	Medical officer	218	75
	5,517	33	Medical officer	750	00
	0,017		Three Rivers—	100	00
			Medical officer	350	00
Prince Edward Island.			General Account - Superintendent's		
			salary up to Sept. 1, 1908	500	00
Summerside—	010	~0		2,018	75
Medical officer	312	90	Total amount of colonics	10 009	50
			Total amount of salaries	12,223	50

## TABLE SHOWING EXPENDITURE FOR TREATMENT, COMPRISING DOCTORS' SERVICES, DOCTORS' TRAVELLING EXPENSES, DRUGS AND BOARD.

#### Nova Scotia.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
Advocate Amherst Annapolis Apple River Arichat. Barrington Baddeck Barton Belliveau's Cove.	\$ cts. 9 00 97 00 85 00 11 00 327 00 150 00 14 00 134 50 3 00	\$ cts. 27 00 35 00 147 50 159 00 18 00 93 00	\$ cts. 3 00 29 25 23 00 3 00 212 15 24 00 8 00 39 85 2 00	\$ ets.  3 85 26 00 16 70 15 00 236 25 39 00 69 42	\$ cts. 15 85 179 25 124 70 65 00 922 90 372 00 40 00 336 77 5 00

## TABLE SHOWING EXPENDITURE FOR TREATMENT, COMPRISING DOCTORS' SERVICES, DOCTORS' TRAVELLING EXPENSES, DRUGS AND BOARD.

NOVA SCOTIA—Continued.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	§ cts.	\$ ets.	\$ cts.	\$ cts.	§ ets.
Canning	22 00		7 75	34 50	64 25
Chester	275 00			37 00	326 50
Canso	4 00	20 00		135 6S 5 00	135 68 29 00
Chitecamp	57 50		12 00 8 90		69 50
Church Point	$\frac{49}{225} \frac{00}{00}$	40 50 126 75	8 90 96 40	35 00 112 60	133 40
Clark's Harbour	37 00	73 00	6 05	46 29	560. 75 162 34
Bear River				38 50	38 50
D'Escousse				$\begin{array}{cccc} 6 & 00 \\ 199 & 72 \end{array}$	6 00 199 72
Economy.	17 00		12 55	21 00	67 55
Freeport, &c.			11.00	553 29	553 29
Glace Bay	294 00 5 00		0 (0)	104 00	412 00 5 75
Halifax City Hospital	10 50	12 00		10 68	33 18
Halifax Victoria General	1 00		1 00	4,110 90	4,110 90 2 00
Hantsport		21 00	2 75		31 75
Isaac's Harbour	6 00	0 50	1 25		7 75
La Have Liscomb Lockeport Liverpool	8 00 6 00 39 00 50 00	21 00 0 50 100 50 330 00	19 25 32 50	54 00	158 75 466 50
Lockeport.	94 75		19 25	105 70	219 70
Liverpool				172 50	172 50
Louisburg				99 08 516 63	99 08 516 63
Mahone Bay	<b>36 00</b>		18 95		54 95
	\$6 00 3 00				3 00
Margaretsville	15 00 1 00	7 50	1 00		28 50 2 00
Metegnan	122 00	9 40	38 60	91 61	261 61
North East Harbour	31 00	18 00	16 00	· · · · · · · · · · · · · · · ·	65 00
North Sydney	11 00				18 60 67 65
Pictou				65 63	65 63
Port Dufferin	5 00 76 00	25 00 22 00	0 50 21 50	15.50	30 50
Port Gréville	21 00	13 00	20 75	45 50	165 00 54 75
Port Hood	1 00	0 50	1 00		2 50
Port Latour	62 00 10 00	70 25	3 50 7 50	12 00	147 75 17 50
Port Mulgrave	16 00	88 00	24 25	40 50	168 75
Point Tupper				21 01	21 01
Pubuico. Pugwash	$\begin{array}{ccc} 70 & 00 \\ 12 & 00 \end{array}$	85 00	26 00 8 50		181 00 20 50
River Bourgeois	18 00	40 00	13 25		71 25
River Hebert.	23 00	14 00 72 05	8 50 5 00	17 15	45 50
Salmon River	18 00 213 75	130 00	51 60	$92 \ 27$	112 15 487 62
Sheet Harbour	4 00	1 00	5 00		10 00
Sherbrooks	48 00 13 00	3 50 17 50	4 00 12 25	10 00	65 50 42 75
Sherbrooke. Ship Harbour	3 00	11 00	2 00		5 00
St. Peters	49 00	103 50	40 50	6 00	199 00
Sydney	8 00	6 00	3 00	675 44	675 44 17 00
Tusket Wedge	19 00	15 00	9 15		43 15
Weymouth	124 00	46 75	59 70	109 60	340 05
Windsor	63 00 1 00		29 75 1 00	24 50	117 25 2 00
Yarmouth				487 69	487 69
Springhill				7 20	7 20
Stony Island				17 70	17 70
	3,138 00	2.008 65	1,115 65	8,528 09	14,790 39

Table showing expenditure for the treatment comprising Doctor's services, Doctors' travelling expenses, Drugs and Board.

## NEW BRUNSWICK.

Ports,	Doctor Service		Doctors' Travelling Expenses.	Drugs.	Board.	Tota Expen	-
	8	cts.	\$ cts.	\$ ets.	\$ cts.	ŝ	cts
Baie Verte	5	00			$\frac{2}{36} \frac{50}{42}$		50
Beaver Harbour	2	00	10 00	4 00			00
Buctouche		00		4			3 00
Campbellton	100					100	00
Cape Tormentine	63	00	40 00	19 25	25 50	147	75
Caraquet		50	1 00	5 25			75
Dalhousie		00	1 50	41 80	6 20		-50
Dorchester	56	00	5 00	5 40			3 46
Douglastown			10.00	45 40	118 33		33
Grand Manan		00	13 00	15 10 29 50	106 72		3 10 3 22
Grand Harbour	105	00	72 00 4 00	4 30	100 12		30
Harvey	4	00	7 00	7 00	102.80		80
Hillsboro Point Wolfe	1	00	14 00	1 00	102 00		75
River Louison		50	29 00	1 50		42	00
St. Andrews		00		75		3	75
St. Stephens	51	00	25 00	10 50	·		50
St. John					2,362 10	2,362	
St. Martins		00	25 00	6 46			46
Shippegan	2	00		6 00		8	8 60
	553	00	239 50	154 81	2,760 57	3,707	88

## PRINCE EDWARD ISLAND.

Ports,	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	\$ ets.	\$ ets.	\$ ets.	S ets.	8 cts
Alberton	7 00		6 95		13 95
Cardigan	15 00		7 65		22 75
Charlottetown Hospital				754 05	754 05
Prince Edward Island Hospital				679-30	679 30
Crapaud	8 00	50	$\begin{array}{ccc} 2 & 75 \\ 32 & 05 \end{array}$		11 25 69 05
Georgetown	33 00 22 00	41 00	21 75		84 75
Miminegash	272 00	124 00	146 20	3 00	545 20
Murray Harbour	605 00	124 00	343 90	171 22	1,120 12
Summerside	473 00				473 00
Fignish	87 00	4 00	39 45		130 45
Vernon River	4 00		2 00		6.00
Montague	18 00		8 35		26 35
	1,544 00	173 50	611 05	1,607 57	4,136 12

Table showing Expenditure for treatment, comprising Doctors' services, Doctors' travelling expenses, Drugs and Board.

## QUEBEC.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Expenses.
	§ ets.	\$ cts.	\$ ets.	\$ ets.	\$ ets.
Batiscan	29 00		11 00		40 00
Carleton			4 50		7 50
Chicoutimi	27 00		21 00	51 60	99 60
Fraserville		3 50	9 80	28 00 8 00	61 30 8 00
Gaspé Grand River	5 00		75	8 00	5 75
Magdelen Islands		33 00	25 50	11 25	97 75
Matane		6 00	17 75	31 50	183 25
Montreal Alexandia			21 10	70 00	70.00
Montreal General.				1,660 20	1,660 20
Notre-Dame Hospital				2,985 00	2,985 00
Victoria Hospital, Montreal				4 00	4 00
New Richmond	24 00	20 00	31 90	10 00	85 90
Quebec Hotel-Dieu				265 50	265 50 961 50
Jeffery Hale, Quebec		17 00		961 50 3 50	80 75
Rimouski		3 00	10 50	3 30	20 50
Percé		14 00	20 50		57 50
Ste. Anne Des Monts.		31 00	12 80		52 80
St. Jean				57 70	57 70
St. Thomas de Montmagny	27 00		5 95	7 25	40 20
Seven Islands	109 00	151 00		25 00	285 00
Sorel		5 00	17 50		38 50
Three Rivers				42 30	42 30
	490 75	283 50	213_95	6,222 30	7,210 50

## BRITISH COLUMBIA.

Ports.	Doctors' Services.	Doctors' Travelling Expenses.	Drugs.	Board.	Total Éxpenses.
Chemainus. Nanaimo. Port Simpson Union Bay. Vancouver. St. Paul's. Victoria, St. Joseph. Victoria Marine Hospital	34 00 281 00	120 00	186 15	\$ cts. 269 99 239 50 22 90 340 00 2,952 00 179 00 1,603 66	\$ cts. 269 99 239 50 56 90 927 15 2,952 00 179 00 1,603 66
	315 00	120 00	186 15	5,607 05	6,228 20

## DETAILED EXPENDITURE FOR FUEL.

Nova Scotia—       \$105 00         Louisburg Marine Hospital.       192 75         Pictou Marine Hospital.       171 78         Sydney Marine Hospital.       100 25         Yarmouth Marine Hospital.       226 50         — \$796 28
New Brunswick—       \$22 92         Bathurst Marine Hospital
British Columbia—         Victoria Marine Hospital
Total expenditure for fuel\$1,106 83
DETAILED EXPENDITURE FOR WATER SUPPLY.
Nova Scotia—Sydney Hospital
Total expenditure for water\$56 60
DETAILED EXPENDITURE FOR TELEPHONE SERVICE.
Nova Scotia—         Lunenburg Marine Hospital.         **. \$41 66           Sydney Marine Hospital.         30 75           Yarmouth Marine Hospital.         61 25           **. \$133 66
New Brunswick—  Douglastown
British Columbia—         Victoria.       66 00         —       66 00
Total expenditure for telephone \$276 73
DETAILED EXPENDITURE FOR REPAIRS AND MAINTENANCE.
Nova Scotia—       ,         Louisburg.       \$246 88         Sydney.       234 66         Yarmouth.       300 40
New Brunswick— Douglastown
British Columbia—       1 00         Victoria.       15 85         —       15 85
Total expenditure for repairs and maintenance \$798 79  Total expenditure for telephone \$276 73

SESSIONAL PAPER No. 21

DETAILED Expenditure for Drugs, Surgical Instruments, Furniture, Stationery, etc.

· · · · · · · · · · · · · · · · · · ·	Drugs a Surgic Instrum	al	Other Supplie		Tota	1.
Nova Scotia—	8	cts.	\$	ets.	\$	cts.
Louisburg. Lunenburg. Sydney	58	38 80 50			67 157	38 80 30 39
Pictou Point Tupper Yarmouth	21 6 <b>3</b> 2	00 37	324		21	00
	1,046	05	437	55	1,483	60
New Brunswick— Bathurst	12 150	10 09	25	54		10
	162	19	25	54	187	73
British Columbia— Victoria	326	85	34	35	361	. 20
General account			281	71	281	71
Total expenditure for drugs, &c					2,314	24

## GRANTS TO SEAMEN'S SOCIETY.

Montreal Sailor's Club	200 00	1
Montreal Seamen's Institute	200 00	
St. John's Seamen's Mission	200 00	,
Dr. Grenfell's Deep Sea Mission	200 00	į
~		
Total amount.	\$800.00	,

#### AMOUNT OF EXPENDITURE FOR TRANSPORTATION.

Nova Scotia—	
Barton \$ 10 40	
Church Point	
Glace Bay 2 00	
Halifax City Hospital	
Halifax Victoria Hospital	
Louisburg 18 07	
Lunenburg 2 23	
North Sydney	
Parrsboro' 2 45	
Weymouth	
Yarmouth 8 25	
<del></del>	5
New Brunswick—	
Campbellton \$ 34 86	
34 80	6

AMOUNT	OF	EXPENDITURE	FOR	TRANSPORTATION.
--------	----	-------------	-----	-----------------

Prince Edward Island Charlottetown\$ 2 50	
Charlottetown	
5001718	
Quebec— 5	25
Magdalen Islands \$ 1.50	
AUDITEM General Floratol	
	0
British Columbia—	U
Nanaimo \$ 6 00	
Victoria	
General Account— 19 3	0
Travelling expenses	
Express charges	
777 9	S
	_
Total amount for transportation\$1,102 6	1
TOTAL EXPENDITURE FOR NURSING.	
Nova Scotia—	
Barton\$ 53 00	
Chester	
Lockeport	
Shelburne S 00	
St. Peters	
St. Peters	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00	
St. Feters.       2 00         Sydney.       2 00         Freeport.       10 00	
St. Feters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71	
St. Feters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00         Victoria.       72 75	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00         Victoria.       72 75         — 72 75	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00         Victoria.       72 75	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00         Victoria.       72 75         — 72 75	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 87         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00         Victoria.       72 75         — 72 75	
St. Peters.       2 00         Sydney.       2 00         Freeport.       10 00         Prince Edward Island—       \$120 S7         Souris.       \$ 5 71         Quebec—       5 71         Magdalen Island.       25 00         British Columbia—       25 00         Victoria.       72 75         Total expenditure for nursing.       \$224 33	
St. Peters.	
St. Peters.	
St. Peters.	

5

3

13

905

Poisoning by tobacco.
Scurvy.
Alcoholism.

Alconorism.
Rheumatism.
Gout.
Osteoarthritis.
New Growths non-malignant.
Xew Growths malignant.
Anemia.
Diabetes Mellitus.

Congenital Malformations.. .. ..

Total.. .. .. .. .. .. .. .. ..

#### SESSIONAL PAPER No. 21

TA

Mumps.
Diphtheria.
Cerebro Spinal fever.
Enteric fever.
Choleric Diarrhæa.

Epidemic Diarrhea........ Dysentry.
Beriberi.
Malarial fever.

Erysipelas.....

Septicemia.....

Tubercle.....

Nova Scotia— Total expenditure for burials.	
Halifax Vict	0
New Brunswick—       \$12 25         Dalhousie	ŏ
Total amount for burials \$58 23	- 5
TOTAL EXPENDITURE FOR MISCELLANEOUS,  New Brurswick—	
Bathurst\$ 68 23	5
Total amount of physicians' travelling expenses in outports, where there are no marine or other hospitals \$2,825 13	- 5
Amount of expenditure for drugs supplied to sick seamen, outside of hospitals, or outside of ports where physicians received a fixed salary	1
Total number of vouchers for each province— General account	S
New Brunswick11Nova Scotia57Province of Quebec9	1
Total	- <del>1</del>
BULAR STATEMENT showing Diseases for which Seamen received treatmen 1908-9.  General Diseases—905.	at dur
Small-pox         8         Diseases dependant on animal pa           Measles         10         sites:—           Scarlet fever         3         Scabies           Influenza         11         Tenia           Mumps         1         Poisoning by tobacco	• •

1 13

93 18

4 49

28

28

45

78 157

Tabular Statement showing Diseases for which Seamen received treatment during 1908-9—Continued.

## Local Diseases—2,239.

Diseases of the nervous system	126	Diseases of the Digestive system: 757.	
1. Of the nerves—		Inflammation of the mouth	2
Neuritis	22	Ulceration of the mouth	1
Of the Spinel and and arrangement	3	Abscess of dental periosteum	18
Inflammation		Tootache	51
3. Of brains and membranes—	2	Necrosis alveoli	7
Hemorrhage	2	Sore throat	65
Meningitis. Anemia. 4. Functional nervous diseases with other diseases of undetermined	3	Inflammation of the pharynx	19
Anemia	ĭ	Post pharingeal abscess	9
4. Functional nervous diseases with		Inflammation of stomach	169
other diseases of undetermined		Ulceration of the stomach	8
nature—		Hemorrhage of stomach	5
Apoplexy	1	Dilatation of stomach	1
Paralysis	7	Indigestion	67
Spasm. Epilepsy.	2 2	Vomitting	2
Vertigo.	ī	Gastralgia	9
Headache	4	Inflammation of the intestines:	39
Neurastnenia	19	Enteritis	7
Neuralgia	51	Colitis	13
Hysteria	2	Appendicitis	27
o. Mental diseases :		Duodenitis	2
Insanity	4	Intestinal obstruction	1
Discuses of the eye: 137.	0.0	Constipation	13
Conjunctivitis	68 4	Diarrhea	55
KeratetisUlceration of Cornea	5	Fistula in ano	4
Iritis Optic Neuritis Abscess of lacrymal sac	23	Prolapsus of rectum	2
Optic Neuritis	2	Ulcer of rectum	43
Abscess of lacrymal sac	9	Piles Inflammation of the liver	38
Diednarius marginaus	7	Jaundice	7
Abscess of eyelid	6	Hernia	42
Disposes of the car 57	13	Inflammation of hepatic ducts and	
Diseases of the ear: 57. Inflammation of external meatus	6	gall bladder	13
Accumulation of wax or epidermus	1	Calculi	5
Inflammation of middle ear	42	Biliary colic	2
Abscess axilla.	8	Innammation of the peritoneum	16
Diseases of the nose: 13.	-	Dropsy	_
Inflammation of septum	1	Disease of the lymphatic system: 352. Inflammation of lymphatic glands	52
Necrosis of septum	2	Diseases of the thyroid body: 1.	02
Inflammation of sinuses	1	Goitre	1
Inflammation of neso-pharynx Diseases of the circulatory system: 95.	9	Diseases of the urinary system: 104.	_
Pericarditis	4	Acute nephritis	10
Endocarditis	7	Bright's disease	39
Valvular diseases	29	Abscess perinephritis	3
Aneurism heart	2	Calculi in kidney	2
innammation muscular substance		Calculi in ureter	5
herat	4	Haematuria	6 2
Angina Pectoris	4	Albuminuria	1
Arteritis	3	LithuriaPhosphaturia	i
Phienitis	6 5	Inflammation of bladder	$3\hat{5}$
Varicose ulcer	31	Diseases of the generative system: 233.	
Varicose ulcer  Diseases of the Respiratory system: 406.	01	Urethritis	4
inhammation of farynx	22	Urethritis Stricture of urethra	19
Bronchitis	217	Inflammation of the prostrate	12
Spasmodic Asthma	16	Phimosis	9
Congestion of lungs	4	Paraphimosis	5
Hemorrhage of lungs	9	Soft chance	$\frac{1}{62}$
Pneumonia	34 10	Soft chancreInflammation of the scrotum	21
Abscess of lungs.	4	Inflammation of the spermatic cord	18
Phthisis	42	Varicocele	34
Pieurisy	46	Varicocele	29
Empyema	1	Epididymitis	18
Injury to lungs	1	Cryptorchidism	1

TABULAR STATEMENT showing Diseases for which Seamen received treatment during 1908-9—Continued.

## Local Diseases—Continued.

Diseases of the organs of lecomotion:         120.         Inflammation of the bones.         Osteitis.       1         Periostitis.       7         Caries.       1         Inflammation of the joints.       22         Dislocation of ankle.       9         Dislocation of spine.       1         1 Psoas, lumbar and other abscesses.       26         Lumbago.       24         Sciatica.       23         Inflammation of bursea.       6         Diseases of connective tissues: 21.       Cellulitis.       18         Abcess.       1         Gangrene.       2	Diseases of the skin: 117.       2         Erythema.       2         Urticaria.       2         Ezzema.       25         Herpes.       5         Dermatitis.       1         Acne.       1         Seborrhea.       16         Ulcer.       16         Boils.       42         Carbuncle.       9         Whitlow.       9         Onychia.       1         Ringworm.       1         Frostbite.       2         Total.       2,239		
Injuries—640.			
General Injuries: 29.	Sprain of hand.         5           Wound of upper extremeties.         31           Fracture of clavicle.         16           Fracture of scapula.         11           Fracture of humerus.         46           Fracture of radius.         17           Fracture of radius and ulna.         20           Fracture of carpus metacarpus and phalanges.         8           Dislocation of humérus.         14           Dislocation of phalanges or thumb.         5           Contusion of lower extremities.         9           Sprain of hip.         8           Sprain of knee.         10           Sprain of foot.         19           Fracture of femur.         16           Fracture of femur.         16           Fracture of tibia.         15           Fracture of tibia and febula.         4           Fracture of tibia and febula.         4           Fracture of bones of foot.         1           Malingery.         2           Vaccination.         1           Incomplete reports.         8		

#### APPENDIX No. 14.

## REPORT OF THE CHIEF EXAMINER OF MASTERS AND MATES.

George J. Desbarats, Esq.,

Acting Deputy Minister of Marine and Fisheries, Ottawa, Ont.

Sir.—I beg to submit my annual report giving details of the work I have the honour to supervise respecting examinations of masters and mates throughout the Dominion.

The statistics herewith submitted are from the 1st of September, 1908, date of my last report, to the 1st of April, 1909, covering a period of seven months.

Compared with a corresponding number of months, the records show a marked increase in the number of examinations. It will also be noted that a greater number of failures have occurred, which, conclusively, demonstrate that greater supervision and care have been and are now exercised in order to secure but able and competent men ready to meet the actual requirements of the rapid development of traffic by water.

I am happy to state that the examiners under my supervision are men of high qualifications who have so far performed their onerous duties under trying circumstances in a conscientious and satisfactory manner.

Yearly, more problems are added and a greater knowledge is required from all candidates, and this is, as it should be, the sea-faring class is waking to the fact that higher qualifications are now needed on their part and they have submitted willingly to the inevitable. Shipowners have testified that the class of seamen now available is superior to what was on hand a few years ago; therefore I claim that as the exigencies of traffic become more exacting; for instance, if ship's tonnage increase as well as their number, so must the standard of knowledge of officers who will be placed in charge of property running into hundreds of thousands of dollars.

I contend that as the knowledge in matters pertaining to that profession is increased greater will be the confidence and coolness in times of danger, and as after results, men holding certificates under those conditions, will be inspired with greater self-respect, and it will serve to raise their professional status in a very marked degree.

In connection with those examinations, I beg to bring to your kind attention that in order to secure the highest efficiency, a very exact and conscientious supervision must be exercised, and to expect a devotion to the work so that the best results may accrue, it would be well that the remuneration to examiners be such as to inspire them with the idea that their labours and conscientious attendance to their duties are duly appreciated by the department.

Examination of masters and mates may rightly be classed as first aid to navigation; lights, beacons and buoys are certainly secondary in importance.

In the erection of lighthouses every effort is made to introduce the highest and most efficient illuminating apparatus in order that the lights may warn the navigators of the dangers and its proximity, and all these lights and precautions taken to indicate obstacles in the way of the mariners will be fruitless unless the men in charge are fully conversant with the means and methods to utilize these aids to navigation to the best advantage.

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

L. A. DEMERS, Chief Examiner.

#### STATEMENT.

Inland, coasting and minor waters—			
,	Passed.	Failed.	
Masters	70	21	
Mates	93	25	
Sea-going—			
Masters	s	()	
Mates	15	8	
Second mates	12	8	
Service certificates—			
Masters	2		
Temporary certificates—			
Masters	4		
Renewed certificates of competency for inland and coasting—			
Masters	8		
Mates			
Renewed certificates of competency for sea-going—			
Masters	4		

The ports where examinations for all grades are held are:—
Victoria, B.C., Capt. James Gaudin, examiner.
Vancouver, B.C., Capt. Charles Eddie, examiner.
Halifax. N.S., Capt. W. R. Lugar, examiner.
Yarmouth, N.S., Capt. J. E. Murphy, examiner.
Lunenburg, N.S., Capt. A. J. Wolff, examiner.
North Sydney, N.S., Capt. J. Sutherland, examiner.

Examination for local certificates only held at:—
Montreal, P.Q., Capt. J. Riley, examiner.
Quebec, Que., position at present vacant.
Toronto, Ont., Capt. Charles Moller. examiner.
Collingwood, Ont., Capt. Geo. C. Coles, examiner.
West Selkirk, Man., Capt. M. Thordarson, examiner.
Edmonton, Alta, Capt. A. Grand, examiner.
Nelson, B.C., Lt. Gordon Hallet, examiner.

## APPENDIX No. 15.

### MARINE SCHOOLS.

George J. Desbarats, Esq.,
Acting Deputy Minister of Marine and Fisheries,
Ottawa, Ont.

SIR,—I beg to herewith submit my annual report and statement of attendance at the marine schools under my supervision for the winter of 1908-9.

These marine schools have been instituted with the view of enlightening those who are preparing themselves to enter the sea-faring career as well as those who already have experience in that profession, by delivering a series of lectures treating on all subjects most important to prospective candidates for examination of masters and mates, as well as for pilots and prospective pilots.

By the statement herewith submitted it will be seen that nine lecturers assisted at these lectures.

Through an amendment to the Shipping Act passed last session, by which coasting vessels of hundred and fifty tons are allowed to sail from any port in Canada on a coasting voyage extending to Venezuela, without a qualified master, and that vessels of three hundred tons are allowed to sail without a qualified or certificated mate, has had the effect of diminishing somewhat the attendance at the schools established in Nova Scotia, such as Lunenburg and North Sydney. It will be noted that Vancouver had the largest attendance.

These lectures are given by the examiners of masters and mates, who are thoroughly competent to discuss any matters pertaining to shipping. This subject being of a dry nature, it requires besides the knowledge on the part of the examiners also the talent and fluency of speech, in order to deliver those lectures in an interesting and attractive manner, and I think that those in charge of those schools are fully competent in that way. They have all been supplied with instruments and materials to help them in their task. By means of a reflectoscope, drawings and illustrations are thrown on the screen enabling and helping the lecturer to develop more fully the subjects under analysis.

Though the attendance at Lunenburg and North Sydney is not exactly satisfactory, still I think that sooner or later, our seafarers will come to realize the importance of the matter, and by their steady attendance to the lectures, will convey to the government the expression that the efforts made for their welfare and their education, are fully appreciated.

Owing to the fact that the examiner at Quebec had resigned and that there were no candidates applying for the position, no lectures were given this winter at that port.

I herewith submit a statement of attendance, minimum and maximum at each school.

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

L. A. DEMERS, Superintendent of Marine Schools of Canada.

# STATEMENT OF ATTENDANCE.

Schools.	Lecturers.	No. of Lectures.	Minimum.	Maximum.	Average.	Total Attendance.
Victoria, B.C	D. Jones	33	12	28	18:87	623
Vancouver, B.C		32	15	50	29 22	934
Yarmouth, N.S			0	14	7:25	232
Lunenburgh, N.S			0	18	4.34	139
Halifax, N.S	" Lugar	. 31	4	27	12:42	385
North Sydney, N.S	" Suther-					
	land	32	0	11	5.3	176
Midland, Ont	" Watkins.	36	3	30	19:61	706
Collingwood, Ont	" Coles		2	28	17: 4	419
Toronto, Ont	" Moller	32	7	18	12.	384

## APPENDIX No. 16.

### INVESTIGATIONS INTO WRECKS AND CASUALTIES.

GEORGE J. DESBARATS, Esq.,

Acting Deputy Minister of Marine and Fisheries, Ottawa, Ont.

DEAR SIR,—I beg to submit the annual report with reference to investigations into shipping casualties, held by Captain Spain, during 1908-9, a list of which is annexed.

Besides the casualties mentioned, there are few others, which, through pressure of business, were not investigated at the time, and owing to the long interval between the casualties and the return of the vessels to ports during the present season, it was found, in several cases, useless to deal further with them, as the most important witnesses were unavailable.

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

L. A. DEMERS.

#### INVESTIGATIONS HELD BY CAPTAIN SPAIN, 1908-09.

Date.	Name of Vessels.	File Number.	Occurred at.
1908.			
April 29	Bona Vista	28,988	Stranded below Traverse.
July 5	Imperial-Quebec	29,139	Poulier Varennes.
" 12	Portsmouth	29,148	Off Cape Chatte.
u 16	India	29,151	Below Pt. Citrouille Light.
August 7	Premier	29,194	Lake Winnipeg.
. 8	Catalone	29,223	Red Island.
,, 11	Sagamo-Kenosha	29,224	Beaumaris.
	Southwark	29,198	West Point, Forteau Bay.
	Sverre	29,221	Traverse Lower Light.
September 5	King Edward	29,263	Chantey Island.
n 6	Gustaf Adolf.	29,256	Goose Island.
	Corinthian-Malin Head	29,269	Below Quebec, off St. Laurent
	Marina	29,276	Ashore near Varennes.
	Regulus-Ocland	29,288	M. F D ab D. C.
October 2	Amur-Vadso	29,309 29,308	McKays Beach, B.C. Ashore 5 miles above Quebec.
		29,349	Ashore 5 lines above Quebec.
10	Ariel-Energy	29,326	Halifax Harbour.
19	SS. Virginian.		Montreal Harbour.
96	SS. Ashanti	29,334	Isle of Orleans.
	Iroquois	29,343	Gulf of Georgia, B.C.
November 6		29,361	Red Island Reefs.
	C.P.R. Liner and Japanese	20,	
	Liner	29,360	Vancouver Harbour.
1909.		,	
January 16	Hartfield	29,191	Vancouver Island.
	Bruce	29,228	Baldwins Reefs.
	Dillico	-0,0	ANTOLOGICA TO A COUNTY

## APPENDIX No. 17.

### WIRELESS TELEGRAPHY.

GEORGE J. DESBARATS, Esq.,

Acting Deputy Minister of Marine and Fisheries, Ottawa, Ont.

SIR,—I beg to submit herewith my annual report on the wireless stations belonging to this department.

There were twenty wireless stations operated by the department during the past year, located at the following points:—

Father Point, River St. Lawrence.

Clarke City, Fame Point,

Heath Point, Anticosti.

Cape Bear, Prince Edward Island.

Pictou, Nova Scotia.

Cape Race, Newfoundland.

Whittle Rocks, Gulf of St. Lawrence.

Point Amour, " "
Belle Isle " "
Point Rich, "

Cape Ray, Newfoundland.

Sydney, Nova Scotia.

Cape Sable, Nova Scotia.

Partridge Island, New Brunswick.

Point Grey, British Columbia.

Victoria, "
Pachena, "
Estevan "
Cape Lazo "

All stations have worked satisfactorily.

On account of not having received complete returns I cannot give the number of messages sent and received from the different stations.

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

> C. DOUTRE, Supt. Govt. Wireless Stations.

### APPENDIX No. 18.

#### SABLE ISLAND.

SIR,—I beg to submit the following report on equipment, repairs to buildings, stock, patrol, &c., for the year ending December 31, 1908.

#### WRECKS AND CASUALTIES.

No known wrecks have occurred during the year.

'White Point' buoy drifted ashore on the northeast bar January 12. 'Sambro' automatic gas buoy drifted ashore near the east end light January 18, both of these buoys were taken off by the D.G.S. Lady Laurier early in the season.

Two fishermen's dories, no name, came ashore during October.

#### BOATS AND APPARATUS.

The beach apparatus (Lyle gun) at Nos. 1, 3 and 4 stations are in good condition, also the boats at the different stations. In my report for the year 1907, I pointed out the necessity for another cargo surf boat and a life boat to replace the old boat *Relief* sent off during that year and condemned.

#### PATROL.

The island was patrolled forty-two times in the morning and thirteen times at night.

#### STAFF CHANGES.

Wm. H. Horne, keeper of east light, resigned and was succeeded by John Grigoire, April 23.

#### BUILDING AND REPAIRS.

Men's quarters removed south 100 feet and an addition of seven rooms and cellar built on to it with concrete wall under both main building and addition.

Cattle barn.—Concrete wall under north side and concrete floor under cattle. Drill pole erected.

No. 4 Station.—Keeper's dwelling raised and concrete blocks placed under for foundation to replace old rotten posts, chimney retopped and new sheeting put under sills. Roof shingles repaired.

### FARMING.

This was carried on as usual, but owing to the unusual dry season results were not equal to that of some previous years.

#### LIVE STOCK ON HAND.

Seventy head cattle, 30 trained ponies, 3 imported stallions, 5 imported mares, 5 hogs, 200 wild ponies.

#### STOCK KILLED.

	Lbs.
Nine beeves weighing	5,950
Nine hogs weighing	
Six calves weighing	360

Supt., Sable Island

## SESSIONAL PAPER No. 21

## SHIPPED.

Forty-nine ponies, quantity salted hides.

## CENSUS.

CENSUS.
No. 1 Station—
Supt. R. J. Boutilier, daughter and domestic
brook, R. S. Boutilier, M. Noonan
- 11
No 2 Station—
Keeper and coxwain, R. Naugle and family 4
No. 3 Station—
Keeper, Jas. Ritcey and family 4
Surfman, E. Osborne
<del></del> 5
No. 4 Station—
Keeper and chief coxwain, Gustav Soderberg and wife 2
Surfman G. Malally 1
Surfman Jno. Lee
West End Light—
Keeper, A. J. Horne, wife and family
Surfman and assistant, Jas. Horne
<del>-</del> 6
East End Light—
Keeper, John Grigoire and family 5
Surfman and assistant, H. Naugle
- 6
Marconi Wireless Telegraph Station—
Chief, J. D. Taylor; operators, D. Manson, Jas. Surgey, G.
Blackburn; cook, Ted Strickland
Total
(Sgd.) R. J. BOUTILIER,

## APPENDIX No. 19.

### LIFE-SAVING SERVICE OF CANADA.

The Deputy Minister of Marine and Fisheries, Ottawa.

SIR,—I have the honour to report on the life saving service of Canada with respect to the fiscal year 1908-9.

Though I have been connected with this service only about six months, I have visited several of the life-saving stations, my report in regard to which was duly laid before you.

The great purpose of a life-saving station is, as its name indicates, to save human life by providing prompt and sufficient aid, when possible, in cases of shipwrecked and distressed vessels, so as to prevent loss of life by drowning. As a rule the period each year during which a life-saving station is in full operation is during the season of navigation

There are at the present time in Canada 34 life-saving stations of more or less importance and efficiency, established along the sea coasts and on the shores of the great lakes near localities where navigation is the most perilous. The locations of life-saving stations with respect to provinces, are, 3 in New Brunswick, 13 in Nova Scotia. 3 in Prince Edward Island, 4 in British Columbia, and 11 in Ontario (on the great lakes.)

At every life-saving station there is at least a life boat and a crew of seven men including the coxswain under whose immediate care and supervision all manoeuvres and operations of the crew are performed. There is also a boat house. During recent years many of the stations have been supplied with new and up to date life boats costing from \$225 to \$775 each and one \$10,900. Boat houses are built of different sizes according to the number of boats and other equipment to be accommodated, and cost from \$600 up. Besides being always on the alert to add to the efficiency of this service in other respects, care is taken by the department to see that the boat houses and boats of the various stations are kept painted and that all other equipment and apparatus are also properly looked after so that the best results may be obtained.

A coxswain appointed by the department is in charge of each life-saving station and its equipment, and is responsible to the department for the proper care of the same. The coxswain also selects the crew for the life boat which, with himself, consists of seven men, and the crew is directly under his charge when on duty whether in service at a wreck or when performing drills of which the maximum number is fourteen each season. As the position of coxswain is a responsible one, the regulations governing this service require that the person appointed to fill that position shall be of good moral character and of sober and correct habits. He must have a fair education and be familiar with the line of coast embraced within his district, and he must possess a thorough knowledge of the management of life boats and of the use of the various apparatus employed in the service. The coxswain must also understand how to properly treat the apparently drowned, according to the written regulations with which every life-saving station is provided. Besides, it is the duty of the coxswain to be always on the lookout to assist persons in danger of drowning. As a rule, a coxswain is allowed \$75 per annum for taking care of the station and \$2 for each drill. He is also allowed such extra pay when engaged at a wreck as the department considers proper.

The life boat crew at every life-saving station is selected by the coxswain from able-bodied and experienced boatmen residing near the station, so that they will always be available when required. As the efficiency of a life-saving station depends largely upon the good training and discipline of the crew, each crew is required to drill regularly during the season of navigation, in rough water as well as smooth. The number of drills to be performed by a life boat crew is fourteen each season, and must be carried out at regular intervals as fixed by the coxswain, and each drill must occupy at least five hours. Life boat crews as a rule, are paid at the rate of \$2 per man for each drill and extra when performing service at a wreck.

I attach hereto a list of the life-saving stations maintained by the Dominion government, showing the name of each station, when established, name of the coxswain and his annual salary, number of the crew and their pay, description and cost of the

boat in use, and equipment.

During the year four new life-stations have been established, one at Point Escuminac, N.B., and one each at Clo-oose, Ucluclet and Clayoquet, B.C. The life-saving station at Mud Island, N.S., has been discontinued.

The life-saving stations at St. Pauls Island and Sable Island are under the control of the respective superintendents of the humane establishments of those islands and are amongst the best equipped stations in Canada.

At the life-saving station at Long Point, Lake Erie, the men are employed two or three months longer than at the other stations and their remuneration is more.

While some minor casualties have been reported to the department during the last season in which life-saving crews have rendered assistance to vessels, no serious casualties involving danger to life have taken place.

During the past three years there has been an average yearly expenditure of over \$25,000 in connection with this branch of the public service, and a number of the stations have been fitted out with new and expensive apparatus and boats, yet with Canada's almost illimitable stretches of coast lines and ever increasing coasting trade, there is still much to be done to bring this service up to that state of efficiency which its importance demands.

I have the honour to be, sir,
Your obedient servant.

C. E. KINGSMILL, Officer Commanding the Marine Service of Canada.

9-10 EDWARD VII., A. 1910
Life-Saving Stations maintained

Number.	Stations.	Established.	Coxswain.	Crew.	Coxswain's Salary.	Pay of Crew.
1	New Brunswick— Seal Cove	1808	T Renson	7	\$ 75	\$2 per day and extra when saving
1						life.
2	Richibucto		Albert Long	7	75	н н
3	Point Escuminac.	1908	E. F. Fleiger	7	. 75	n
4	Nova Scotia — Baker's Cove	1886	A. Cain	7	75	н п
5	Blanche	1889	W. A. B. Smith.	7	75	0
6	Clark's Harbour	1900	T. N. Nickerson.	7	75	11
7	Devil's Island	1885		7	<b>7</b> 5	H
8	Duncan's Cove	1886	J. W. Holland	7	<b>7</b> 5	0
9	Herring Cove	1885	J. Gorman	7	75	н н
10	Pictou Island	1889	Alex. Currie	7	75	n n
11	Port Mouton	1889	Walter Cook	7	<b>7</b> 5	0
12	Scatarie	1885	J. T. Martell.,	7	75	0
13	Seal Island	1880	Thos. Symonds .	7	250	\$100 per annum
14	St. Paul's Island	1885				\$300 each per annum
15	White Head	1890	Establishment. H. P. Munroe		75	\$2 per drill and extra when saving
16	Sable Island	1885	∫G. Soderberg J. Ritcey		$250 \ 250 \$	life. Paid as island staff
	P. E. Island—					
17	Charlottetown	1907	J. P. Moore	7	75	\$2 per drill and extra when saving life.
18	Souris	1907	N. McIntosh	. 7	75	11 11
19	Alberton	1907	John Champion.	7	75	
20	British Columbia— Clo-oose	1908	D. Logan	· 	60 perm.	\$45 per month for three months.
21	Bamfield	1907	W. H. Gillen		75 perm.	\$50 for engineer, \$45 for two men
22	Ucluclet	1908	A. W. Lyche	6	75 per m.	per month. \$60 per month for men during
				,		season and \$100 per annum when boat is not in commission. Volunteers 50 cents per hour
23	Clayoquot	1908	3 J. Chesterman	7	75	when required. \$60 per month when employed. Volunteers 50 cents per hour when required.
24	Great Lakes—	18-2	D. Rooney	7	75	\$2 per drill and extra when saving
25				7	75	life.
26				7	75	n n
27		1		7	75	11 11
		1		1	1	

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		1		
Description of Boat.	Cost.	When Built.	Equipment.	Remarks.
	3			
Beebe-McLellan surf-boat, self-		Shelburne, N.S.	Full regulation	Iron rails laid in 1901.
bailing, 25 feet long. Race point surf-boat, 24 feet long.	225	0	и	
Beebe-McLellan self-bailing	225	11		
Dobbin's pattern self-righting, 25	575	Dartmouth, N.S.	11	Iron rails laid in 1900.
feet long. Beebe-McLellan surf boat, self-	250	11		New boat, 1901.
bailing, 25 feet long. Beebe-McLellan self bailing, 25	250	11	15	,
feet long, low ends.	575			I ula omn at this station
Dobbin's pattern, surf-boat, self-bailing, 25 feet long.		0 ···		Lyle gun at this station.
Beebe-McLellan surf-boat, self-bailing, 25 feet long.	250	Shelburne, N.S.	11	Lyle gun at this station and new boat in 1903.
п п	250	0	**	
Dobbin's pattern, self-righting and bailing, 25 feet long.	575	Dartmouth, N.S.	11	
n	575	"	11	
Beebe-McLellan surf-boat, self-bailing, 25 feet long.	250	Shelburne, N.S.	ti	New boat in 1903.
Beebe-McLellan boat on east side.	$\frac{240}{240}$	Halifax, N.S	11	п
Beebe-McLellan boat on west side. Beebe-McLellan self-bailing, 25	$\frac{240}{250}$	Shelburne, N.S.	11	Lyle gun here since 1903.
feet long, low ends.  Doobin's pattern, surf-boat, self-bailing, 25 feet long.	575	Dartmouth, N.S.		
Two Dobbin's pattern, self-righting and bailing, and one Reebe-Mc- Lellan surf-boat, self-bailing.	1,100	Halifax, N.S	",	Lyle gun and rocket appar- atus at this station. Cox- swain under control of Supt. of Humane Estab- lishment.
Beebe-McLellan self-bailing	225	Shelburne, N.S.	11	
и и	225	11	11	
	225	11		
Doherty's Improved Beebe-Mc- Lellan, 25 feet long.	575	Vancouver Ship- yard Co., Van	11	
Self-righting self-bailing power	10,900		11	
lifeboat, 36 feet long.  Doherty's Improved Beebe Mc- Lellan, 25 feet long.	575	U.S.A. Vancouver Ship- yard Co.	11	
Benan, 29 feet long.		yard co.		
n	575	"	11	
Dobbin's pattern, self-righting and	750	Goderich, Ont		
bailing. Beebe-McLellan self-bailing, surf-	375	Collingwood, O.		New boat in 1896.
boat.	330			New boat in 1892.
Surf-boat		"		
Beebe-McLellan self-bailing, surf- boat.	350	11	n	New boat in 1903.

9-10 EDWARD VII., A. 1910 Life-Saving Stations maintained

Number.	Stations.		Coxswain.	Crew.	Coxswain's Salary.  Per annum.	Pay of Crev	v.	
28	Long Point	1902	Geo. Wisner	7	75	\$2 per drill and \$40 pe	r month	for
29	Point Pelee	1900	L. Wilkinson	7	75	three months. \$2 per drill and extra	vhen sav	ving
30	Port Hope	1889	W. T. Clark	7	75	life.	н	
31	Port Stanley	1885	J. R. Moore	7	75	H.	11	
32	Toronto Island	1883	Wm. Ward	7	75	ti	tt	٠.
33	Consecon	1898	John O. McLean	7	75	11	**	
34	Southampton	1907	John A. Mac- Auley.	7	75	11	11	

Note—
There are several other places in Canada, not regularly organized, which receive support from the N.S., Cape Tormentine, N.B. and Wellington on Lake Ontario. There is also a life saving station at

SESSIONAL PAPER No. 21
by the Dominion Government—Concluded.

Description of Boat.	Cost.	When Built.	Equipment.	Remarks.
Surf-boat	\$ 500	Collingwood, O.	Full regulation	
11	330	11	11	A tramway has been constructed at this station.
Dobbin's pattern, self-righting and bailing.	620	Goderich, Ont	11	structed at this station.
Beebe-McLellan surf-boat, self-bailing, 25 feet long.	350	Collingwood, O.	и	
Dobbin's pattern, self-righting and bailing.	600	Goderich, Ont	11	Removed from Popular Point in 1900.
n n	750	n	"	Removed from Wellington in 1893.
Beebe-McLellan surf-boat, self-bailing.	330	Collingwood, O.	11	

Dominion Government, where there is a life saving service of more or less importance, such as Halifax, Victoria, B.C., maintained by the Victoria Life Saving Association.

9-10 EDWARD VII., A. 1910

APPENDIX

HALIFAX CITADEL RECORD OF SHIPPING. AS PER RECORD FOLIO,

		Britis n-of-V			Foreig n-of-W			ST CLAS			H) CLA FEAMER	CLASS			
Year and Month.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.			
1908.															
July				1	1		63	69	3	61	61				
August				3	3		54	54		66	66				
September				1	1		54	51	3	61	61				
October	1	1					45	43	2	66	65	1			
November		! 			<i></i> .		58	52	6	52	52				
December	1	1					62	61	1	60	60				
1909.															
January						,	59	57	2	40	40				
February	. ,		J			'	55	51	1	39	39				
March							54	52	2	37	37	•• •··			
	2	2		5	5		504	484	20	482	481	1			

No. 20.

SIGNAL STATION.

FROM JULY 1, 1998, TO MARCH 31, 1999.

SHIPS, BARQUES AND BARQUENTINES.			RIGS AN		3- H	HOONE: Mast Bearing ATE Sig	OR G	2	Monthi Totals	.Y-				==	
Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Reported.	Arrived.	Passed.	Remarks.			
2	2					5	ð		132	129	, 3	<u> </u>	<b>22</b>	53	
1	1		1	1	'	10	10		135	135		1,054	1,033	•	
2	2					5	õ		123	120	3	:	:		
1	1					7	7		120	117	3	:	:	:	
3	3					5	õ		118	112	6		:	:	
1	1		i	,		5	5		129	128	1	<u>ت</u> ::	:	:	
			1	1					100	98	2	Potal vessels reported	arrived	passed	
1	1					3	3		98	97	1	SHE	=	=	
						S	8		99	97	2	otal ve	=	=	
11	11		2	2		48	48		1,054	1,033	21	T			

#### APPENDIX No. 21.

## HARBOUR MASTERS.

Table showing the names of Ports proclaimed under certain Dominion Acts, the provisions of which are found in the Canada Shipping Act, chapter 113, Revised Statutes of Canada, 1906, for the appointment of harbour masters; the dates of proclamation; the names of the harbour masters appointed; the dates of the appointment of harbour masters; the amounts which each of their salaries is not to exceed; the amount of fees collected by each of them during the calendar year ended December 31, 1908, and the overplus, if any, paid to the credit of the Receiver General, for the year ended December 31, 1908.

## PROVINCE OF ONTARIO.

Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remunera- tion Allowed.	Amount paid to Cr. R.G.
			\$ ets	\$ ets.	\$ cts.
					o cus.
Amherstburg	M. Barrett	Dec. 29, 1906.	199 00	200 03	
	J. Wilson		4 50	200 00	
Byng Inlet	C. E. Begin	Mar. 24, 1908.	29 50	200 00	
Collingwood	F. Toner	Dec. 31, 1908.	158 60	300 00	
Depot Harbour	W. H Hoppins	April 15, 1907.	58 00	200 00	
Fort William	J. McAilister	May 12, 1906.	685 00	600 00	*81 75
French River	E. Barron		21 00	200 00	
Goderich	D. McKay	April 21, 1908.	60 00	300 00	
Little Current	J. F. May	July 19, 1906.	185 50	200 00	
	S. McClain		30 00	200 00	
Midland	J. White	13, 1897.	137 00	300 00	
Oshawa	W. T. Henry	Ang. 10, 1904.	Nil.	300 00	
	B. Taylor		47 00	200 00	
Penetanguishene	P. Light	May 7, 1906.	24 00	200 00	
	B. Guérard		335 00	300 00	35 00
	F. F. Shephard			200 00	
Rondeau	W. R. Fellows	Dec. 17, 1888.	23 50	100 00	
Southampton	W. H. Johnston	Oct. —, 1882.	40 00	100 00	
	Geo. McVittie, depy. h.m			1	
Sarnia	R. McAdam	May 3, 1886.	Nil.	300 00	
	1	1		li	
	PROVINCE	E OF QUEBEC	C		
tembonat Hanhaun	J. Cassidy	Sont 9 1979	11 50.	200 00	
	A. Bourque		9 00	100 00	
	J. Scott		1 00	200 00	
Chi	A. Sturton	July 19, 1906.	65 00	200 00	
Chicoutini	J. A. Chenell	Feb. 10 1809	1 50	200 00	
Grand Entry	G. Baudin	1 60. 13. 1032.	18 00	100 00	
			62 50	500 00	
Gaspe	F. J. Eden	3, 1889.		200 00	
House Harbour	G. Lafrance	Dec. 10, 1896.	24 50		
	A. Cyr		1 50	100 00	
	L. J. Levasseur		69 00	200 00	
	P. Lawrence		17 00	200 00	
New Carlisle	J. Chisholm	April 22, 1902.	7 50	200 00	
	F. X. Cormier		25 00	200 00	
Nouvelle	J. Casey	Jan. 3, 1903.	22 00	200 00	
Oak Bay	T. Harper	July 12, 1904.	12 50	200 00	
Paspebiac	W. L. Kempffer	Sept. 21, 1900.	37 50	150 00	
Percé	E. Donohue	Oct. 10, 1903.	5 00	100 00	
Port Daniel	B. Langlois.	Feb. 26, 1997.	7 00	200 00	
Rimouski	A. P. St. Laurent	May 13, 1896.	76 50	200 00	
Riv. du Loup	F. E. Gilbert	Oct. 5, 1902.	55 00	100 00	
St. Ths. Montmagny	. L. Dionne	22, 1896.	24 00	200 00	110.00
St. Johns	G. H. Farrar	Mar. 20, 1897.	718 00	600 00	118 00
Sorel	. J. A. Proulx	June 6, 1901.	563 00	400 00	163 00
Tadousae	A. Gingras	6, 1906.	10 50	200 00	
Trois Pistoles	E. T. Petitgrew	April 11, 1899.	Nil.	150 00	

<sup>\*</sup> For P.O.A., 25 cents.

Table showing names of ports, harbour masters, collections, salaries, &c.—Continued.

PROVINCE OF NEW BRUNSWICK.

	PROVINCE OF	NEW BRUNS	WICK.		
Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remunera- tion Allowed.	Amount paid to Cr. R.G.
			\$ ets.	\$ cts.	\$ ets.
Alma	G. W. Parson Capt. M. Daly	Mar. 2, '98 Apr. 15, '07.	$\begin{array}{c} 16 \ 50 \\ 45 \ 50 \end{array}$	100 00 200 00	
Beaver Harbour	E. W. Cross	Sept. 17, '83	13 CO	100 00	
Campbellton	H. Hutchison	Apr. 17, 97 May 5, 04	7 50 150 50	100 00 200 00	
Cape Tormentine	W. S. Sulis	Dec. 16, '92 May 13, '01.	30 00	$100 \ 00$ $200 \ 00$	
Caraquet	J. A. Albert R. J. Walls	Nov. 7, '05	$\frac{8\ 00}{206\ 00}$	150 00 300 00	
Cocagne	T. Bourque	June 23, '05	50 88 00	100 00	
Dorchester	W. S. Smith	Oct. 25, '00	3 00	200 00 200 60	
Grand Manau North	A. Calder	Mar. 20, '07	$\frac{13}{10} \frac{00}{00}$	200 00 100 00	
Grand Harbour	T. Ingalls G. A. Johnson	Apr. 19, '07	7 50	100 00 100 00	
Harvey	Wm. Wood	June 9, 03	32 00	100 00	
Hillsborough	D. Robertson J. O'Shaughnessy	Apr. 13, '98	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	200 00 150 00	
Hopewell Cape Ledge of St. Stephens	J. H. Christopher Wm. McBean	June 12, '94.	28 50	200 00 100 00	
Letete	H. W. Harris	Feb. 16, '06 Apr. 12, '02	6 50 8 50	100 00 200 00	
Musquash	J. McNulty	Sept. 28, '96	4 50	100 00	
Port Elgin and Baie Verte	J. Russell	Apr. 3, 07.	$ \begin{array}{cccc} 120 & 50 \\ 2 & 50 \end{array} $	300 00 200 00	
Sackville	J. Jardine E. Chase	May 11, '04	$\begin{array}{c} 23 & 00 \\ 14 & 50 \end{array}$	200 00 200 00	
St. Andrews	Capt. R. Keay	Feb. 16, '09	65 50 30 60	100 00 100 00	
St. Martin and Quaco	J. R. McDonough	July 11, '02	39 00	100 00	
Shediac	J. W. Wooster	May 19, '76	$\frac{3}{20} \frac{00}{00}$	100 00 300 00	
Tracadie	J. Degrace T. Savoy	Sept. 23, '99	8 50 6 00	100 00 100 00	
Waterside	W. C. Auderson B. Simpson	May 24, '01 . May 27 '01	8 00 14 00	100 00 200 00	
Whitehead	A. Cheney	Apr. 19, '07	6 00	100 00	
	PROVINCE OF	F NOVA SCO	ΓΙΑ.	3	
Alphot's Harbour	F. D. Entremont	May 92 1001	4 50	200 00	
Advocate	J. W. Knowlton F. A. Gates	Feb. 11, 1908.	7 00	100 00	
Annapolis	J. Lindgren	July 7, 1898.	21 00 76 50	300 00 200 00	
Arichat	J. Langlois	Mar. 22, 1909.	22 00 Nil.	200 00 100 00	
Barrington	B. Kenny. W. McFadden. H. Hawbott D. G. McKenzie	July 6, 1893.	30 50 27 50	200 00 100 00	
Beaver Harbour	H. Hawbott	22, 1888	1 00	100 00	
Bridgewater	W. Uakes	Jan. 28, 1896	0 50 13 00	$\begin{array}{c c} 100 & 00 \\ 100 & 00 \end{array}$	39 00
Cape Canso	J. McLean. G. Oliver.	Feb 14 1905	4 00 77 50	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Cape Negro	A. D. Parry A. C. Corkum	May 18, 1881.	10 00 16 50	200 00 100 00	
Cheticamp	F. Aucoin J. G. Nickerson.	April 15 1876	4 50	100 00	
Clementsport	J. M. LeCain	Oct. 18, 1898.	64 50 10 00	200 00 150 00	
Digby.	M. Martell H. Anderson.	June 19, 1902.	9 50 80 00	$\begin{bmatrix} 100 & 00 \\ 200 & 00 \end{bmatrix}$	
Glasgow and Cape Breton	J. W. Hardy	Nov. 2, 1886.	3 00	100 00	
Pier, Sydney	'A. McQuarrie	Oct. 30, 1880.	33 00	300 00	

## 9-10 EDWARD VII., A. 1910

Table showing names of ports, harbour masters, collections, salaries, &c.—Continued.

PROVINCE OF NOVA SCOTIA—Continued.

Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remunera- tion Allowed.	Amount paid to Cr. R. G.
			\$ cts.	\$ cts.	\$ cts.
Halifax Hantsport. Ingonish So. Bay Ingram River Int. Pier, Sydney. Isaac's Harbour Jeddore	A. M. Peart J. E. Butler W. McCallock J. Doucett E. Huntly M. J. Neville T. D. Cook E. Bakers	Sept. 21, 1893. Jan. 17, 1892. April 30, 1901. Jan. 19, 1907. Oct. 30, 1880. June 19, 1900. Dec. 3, 1903.	2 00 1,523 00 186 50 9 00 48 00 421 50 11 00 29 50	100 00 1,800 00 300 00 100 00 100 00 300 00 100 00 100 00	121 50
La Have or Getson's Cove L'Ardoise Upper and	F. Thorburn. J. Kenny. G. H. Zwicker	April 6, 1908. Feb. 26, 1875.	5 50 0 50 45 00	150 00 100 00 300 00	
Little Bras d'Or Lake, between McKay's Point		Feb. 20, 1900.	4 00 23 00	100 00 200 00	
and Grand Narrows Little Glace Bay Little Narrows to Cran-	D. J. Campbell E. Douglas	April 17, 1899. May 8, 1884.	Nil. 14 00	100 00 200 00	
berry Point.  Liverpool.  Lockeport.  Louisburg.	K. McLennan J. Ryan G. J. Locke H. C. Levate J. Townsend, D.H.M.	Dec. 22, 1906. April 2, 1906. Oct. 13, 1898.	Nil. 162 50 Nil. 333 00	100 00 200 00 100 00 200 00 150 00	
Lunenburg	J. Loye J. McInnis. A. Hyson R. McEachern	Dec. 10, 1896. July 11, 1900. Feb. 18, 1908. Mar. 8, 1875.	122 50 7 00 24 50 Nil.	150 00 100 00 200 00 150 00	
Marble Mountain	J. McGranaghan H. C. Garrisson M. A. Dunn C. Divon	May 29, 1906. Dec. 14, 1901. Mar. 6, 1909. Feb. 2, 1907.	5 00 3 00 3 50 2 00 1 50	200 00 100 00 100 00 100 00 100 00	
Meteghan Hbr Meteghan River	J. MeLair. L. A. Cormeau T. Williams	Nov. 17, 1908. Resigned	2 50 5 50	100 00	
Neil's Harbour Noel	R. Payne S. O'Brien J. Davis R.T. Smith	July 15, 1905. Oct. 26, 1905. Dec. 21, 1902. April 30, 1892.	4 50 4 50 37 50 164 50	100 00 200 00 100 00 300 00	
Petit de Grat	S. Boudrot. J. Nelson. J. Graham. G. L. McLean.	June 5, 1895. April 27, 1888.	12 00 2 00 25 00 98 00	200 00 100 00 200 00 200 00	
Port Hood Port Latour Port Lorue Port Maitland	J. H. Murphy W. Sholds F. Beardsley J. Ellis	July 9, 1875. Feb. 15, 1898. June 9, 1896. Dec. 10, 1896.	2 50 18 50 2 50 5 50	200 00 200 00 200 00 200 00	
Port Mulgrave Port Medway	H. McDonald J. A. McDonald J. Hopkins D. Q. Amireau	June 29, 1908. Feb. 13, 1903. Sept. 27, 1882	29 50 6 00 22 50 44 00	400 00 200 00 200 00 100 00	
River Port. Riviere Bourgeoise	J. McWhinnie G. N. Allen T. J. C. Creaser E. C. Bouchie	May 15, 1907. Jan. 8, 1901. April 9, 1886.	7 50	200 00 100 00 100 00 100 00	
St. Ann's Hbr St. Mary's River	W. Y. Theal	April 16, 1909. June 21, 1909.	8 00	100 00 200 00 200 00 200 00 200 00	
Sambro Sheet Harbour Shelburne	P. McNeil B. Smith H. Hall J. C. Morrisson	May 27, 1890. April 11, 1893. May 4, 1897.	21 00	200 00 200 00 200 00	
Spencer's Island	C. Marks D. McLellan	. May 23, 1899.	20 50 6 00	100 00	

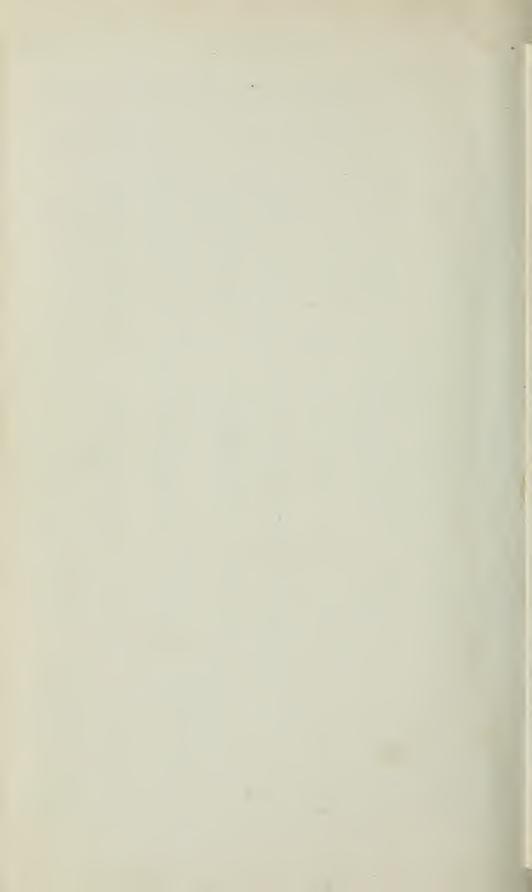
Table showing names of ports, harbour masters, collections, salaries, &c .- Continued. PROVINCE OF NOVA SCOTIA-Concluded.

	PROVINCE OF NO	VA SCOTIA	Concluded.		
Names of Port.	Harbour Masters.	Date of Appointment.	Amount Collected.	Remunera- tion Allowed.	Amount paid to Cr. R. G.
Tatamagouche Tiverton. Torbay. Tusket Tusket Wedge. Wallace. Walton. West Arichat West Port. Weymouth Whycocomagh	C. A. Hilchey W. Rielley J. Blackford S. Fongere C. Doucette J. LeBlanc. S. D. Potton. B. McCulloch. A. B. Poirier. G. Welsh. S. McCormack N. McKinnon J. L. Franklin S. K. Woods E. Scott	June 1, 1900. April 3, 1900. Aug. 25, 1903. Nov. 21, 1902. May 16, 1901. Feb. 14, 1896. Oct. 26, 1905. Oct. 9, 1896. Jan. 29, 1897. Oct. 8, 1875. Aug. 16, 1901.	\$ cts. 10 50 1 00 5 00 14 50 10 00 39 00 2 00 24 50 13 50 33 00 61 00 13 00 30 50 200 00	\$ cts.  200 09 200 00 100 00 200 00 100 00 100 00 200 00 100 00 200 00 200 00 100 00 200 00 100 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00 200 00	\$ ets.
	PROVINCE OF PRI	NCE EDWAR	D ISLAND.		
Charlottetown and Hillsboro River Crapaud Egmont Bay Georgetown Malpeque Minegash Montague Bridge Murray Harbour Murray River New London Pinette Souris East and West Summerside Vernon River Bridge Wood Island Chemainus Comox. Ladysmith	J. White. W. Myers. G. Henry J. Westaway J. Champion. P. Doucette. H. McPherson G. McLeod. G. McLeod. W. Bell. J. D. McDonald. J. Tierney J. Matheson J. Finlay. J. Young  PROVINCE OF B  L. G. Hill. G. H. Rowe. W. Fraser	Mar. 6, 1909. June 17, 1874. Dec. 5, 1906. May 16, 1904. Dec. 10, 1896. Jan. 21, 1908. May 5, 1904. Jan. 19, 1907. Feb. 9, 1897. Aug. 25, 1896 Oct. 22, 1903. May 15, 1905. Feb. 8, 1907. Oct. 9, 1884. May 22, 1899.  RITISH COLUMAR. 2, 1887. April 25, 1896. May 29, 1906.	3 50 4 00 1 50 50 50 30 50 0 50 Nil.	200 00  400 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00  200 00	139 00 1 00
Nanaimo Departure Bay, New Westminster Snug Harbour	J. Kuarston. W. B. Shiles R. Kellahne D. A. McInnis C. E. Clarke	Oct. 26, 1905 Feb. 15, 1908. Mar. 2, 1903	597 50 116 50 3 50	500 00 500 00 400 00 200 00 600 00	97 50 7 00
	RECAPI	TULATION.			
	Province.		Number of Ports.	Amount Collected.	Amount paid to Cr. R. G.
Quebec	Ialifax.		18 25 38 98 16 8	\$ cts. 2,037 00 1,844 00 1,097 00 5,048 50 271 75 2,533 00	\$ cts. 120 75 281 00 121 50 244 50

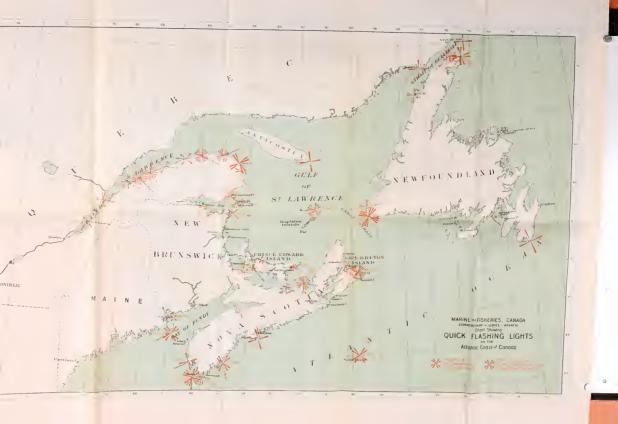
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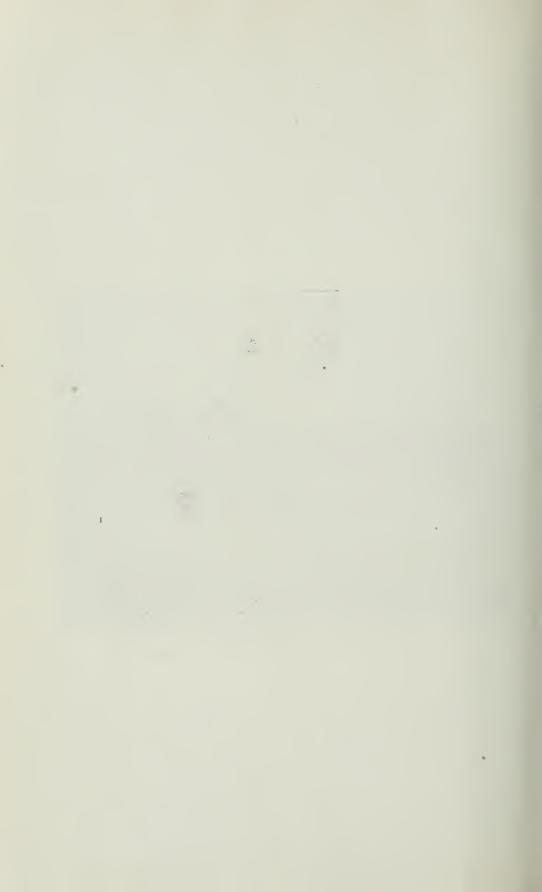


Cape Ray Lighthouse, Newfoundland.





North end of Belle Isle Light Station.





Reinforced Concrete Lighthouse at North end of Belle Isle.





Low Light on South End of Belle Isle.





Fishing Schooners moored in Black Joke Cove, Belle Isle.



Iceberg in Strait of Belle Isle.



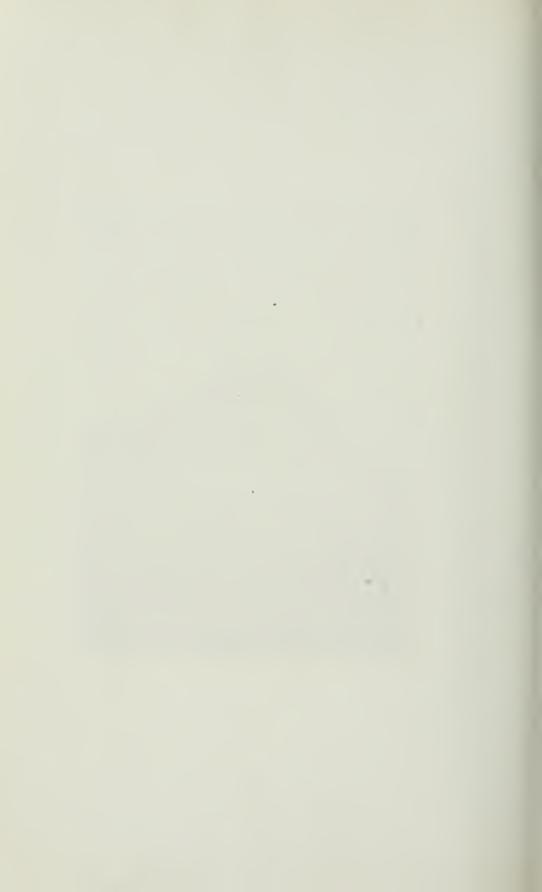


Iceberg in Strait of Belle Isle.



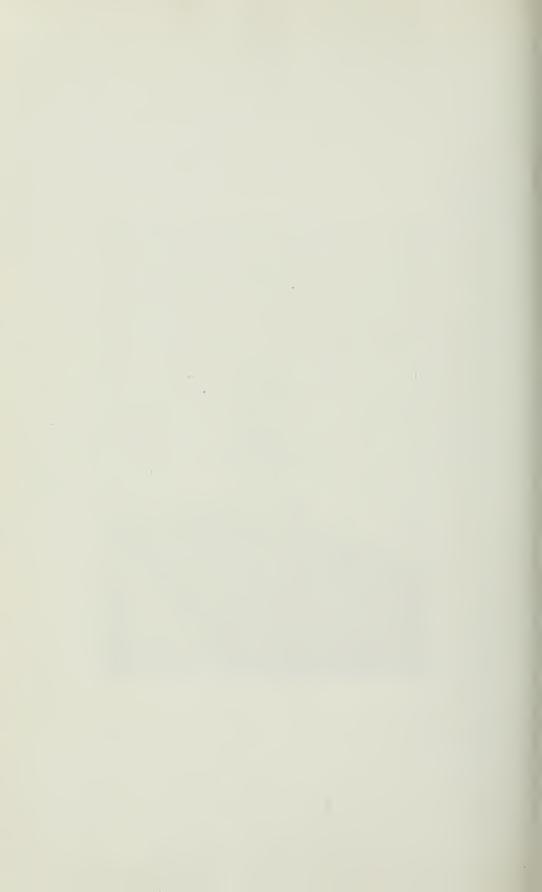


Entry Island, Magdalen Islands, Lighthouse.



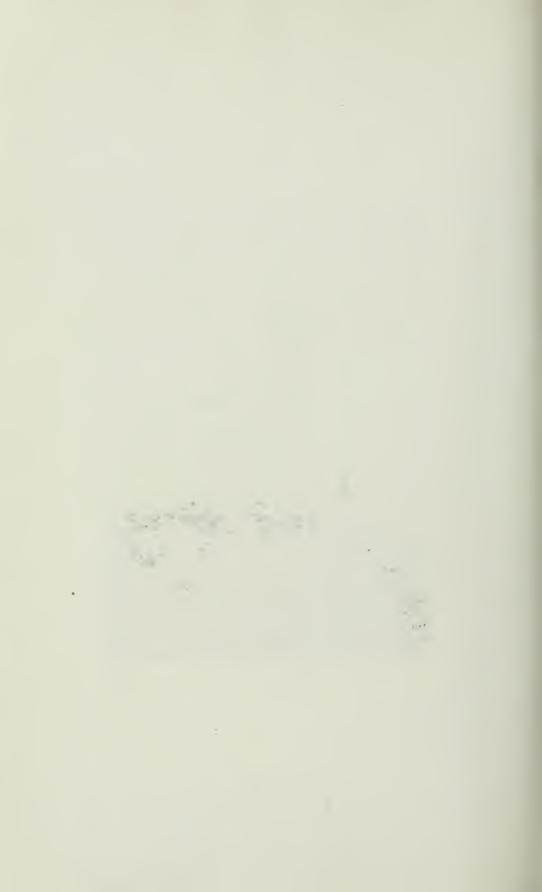


Cape Dogs, Que., Lighthouse.





Little Metis Station, Que., showing New Concrete Lighthouse Tower.



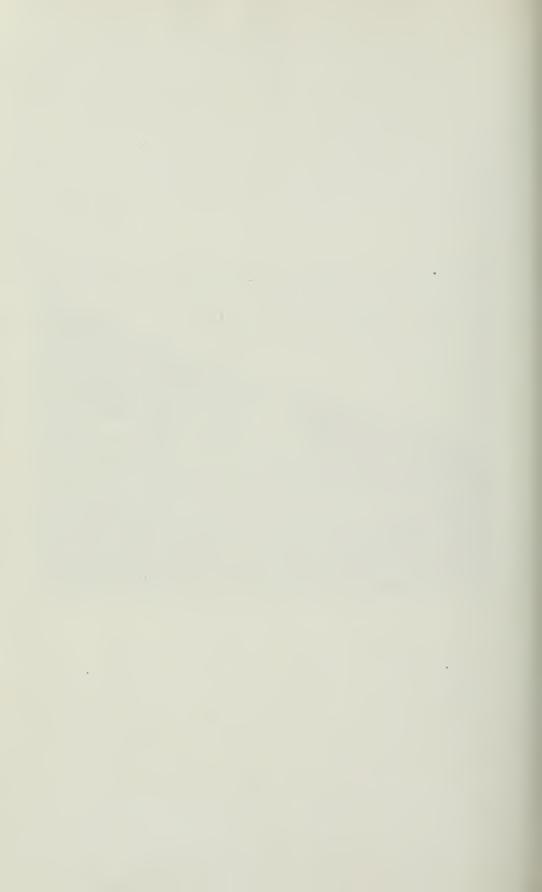


Ste. Anne de Beaupré, Quebec, Front Range Lighthouse.





St. Pancras Point Lighthouse, Quebec.





Government Shipyard, Sorel, machine shop and blacksmith shop.



Sawmill, Government Shipyard, Sorel.



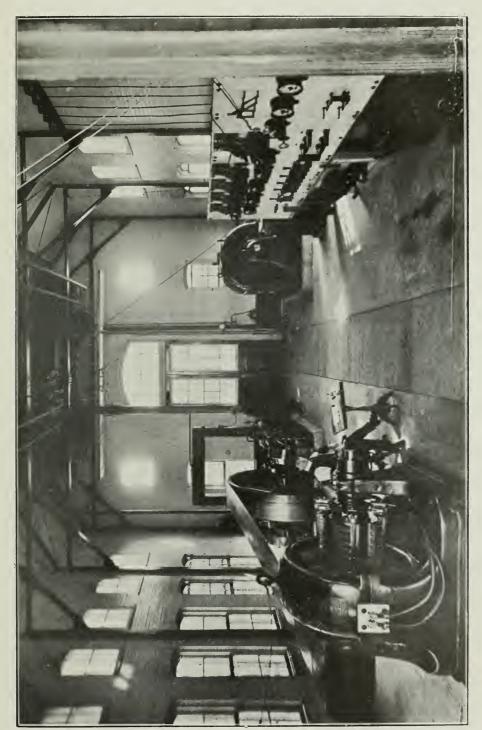


Interior of Sawnull, Sorel Government Shipyard.



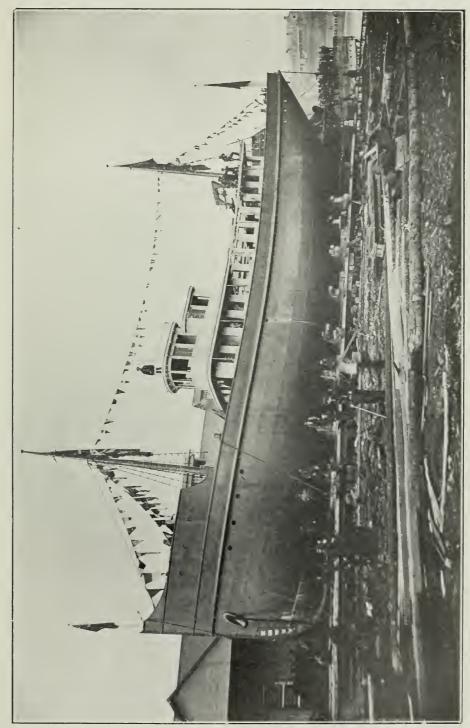
Power House, Government Shipyard Sorel.





Interior of Power House, Government Shipyard, Sorel.





The new C. G. Steamer "Lambton" ready for launching at the Government Shipyard, Sorel.





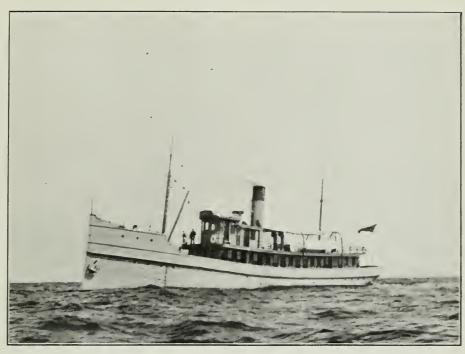
C. G. Steamer 'Montmagny" under construction at Sorel Government Shipyard.





Pin Platte on Lake St. Peter, St. Lawrence River.

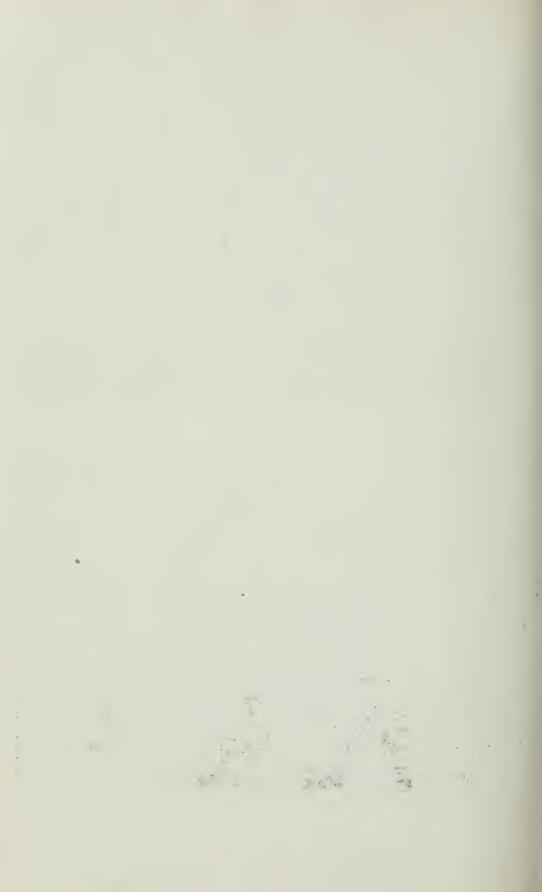


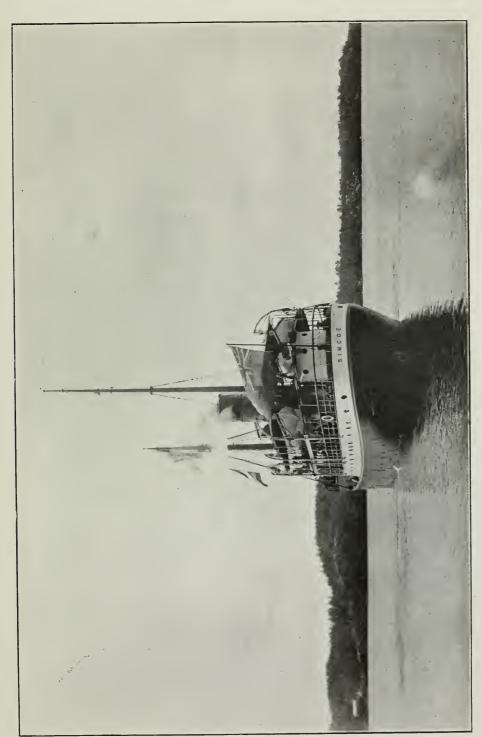


New Steamer "Lambton" for Lighthouse Construction on the Great Lakes.

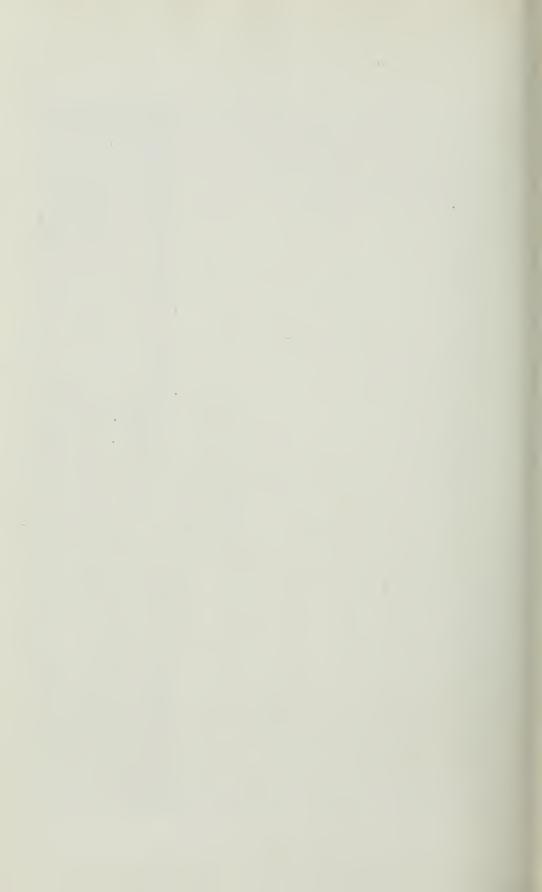


New Steamer "Lambton" for Lighthouse Construction Service, Great Lakes.





New Steamer "Sincoe" employed in lighthouse supply and buoy service on the Great Lakes.



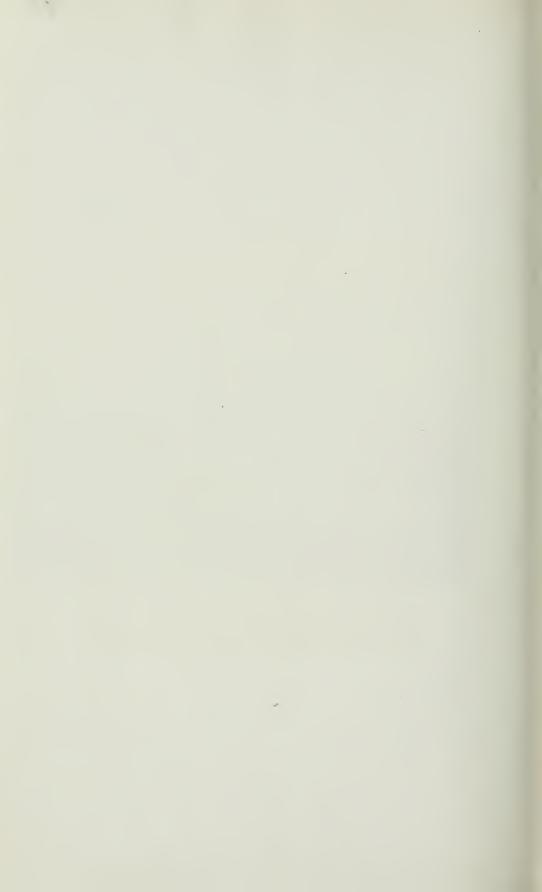


New Steamer "Simcoe" employed in Lighthouse Supp!y and Buoy Service on the Great Lakes.

Control of the second



Port Stanley, Ont., Concrete Lighted Beacon under construction.





Colchester Reef, Ont., Lighthouse.





Owen Sound, Ont., Back Range Lighthouse.



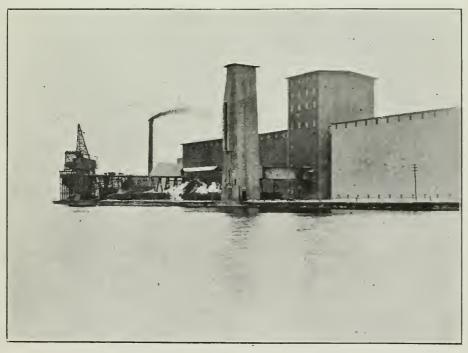


Point Edward, Ont., Front Range Lighthouse under construction.

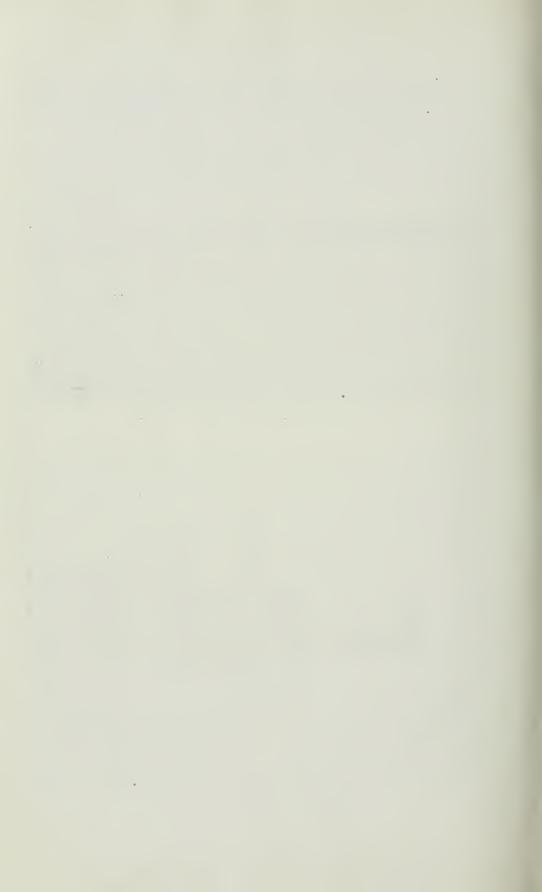


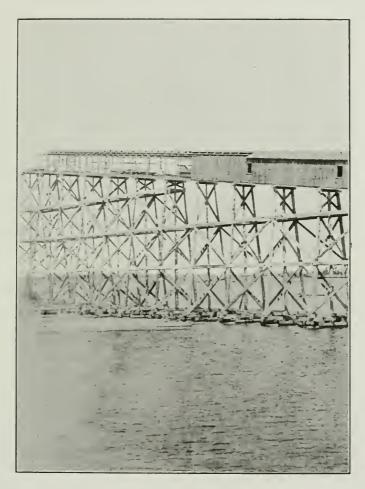


Stag Island Shoal Lighthouse, St. Clair River, Ont.



Grand Trunk Elevator, Depot Harbour, Ont.





Canadian Northern Railway, Iron Ore Trestle, Key Inlet, Georgian Bay.



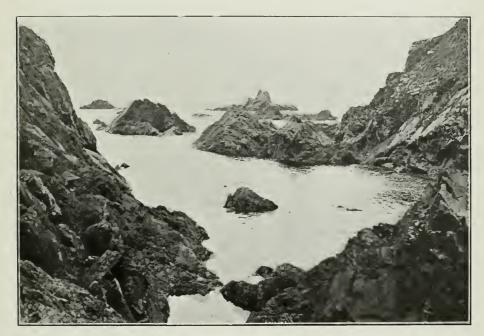


Entrance to Port Stanley, Ont.



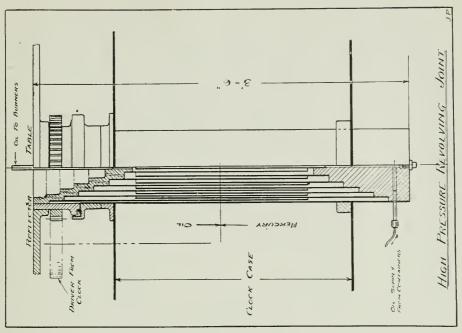
Port Stanley, Ont., site for Concrete Lighted Beacon.





Triangle Island, Cape Scott, B.C.





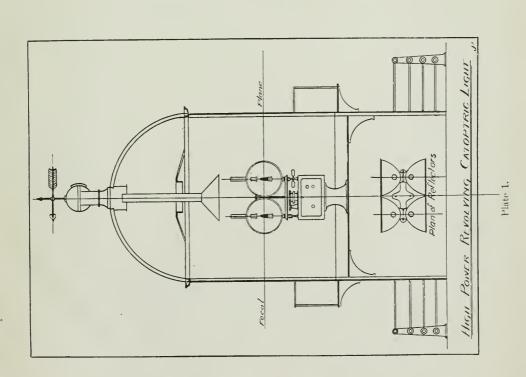
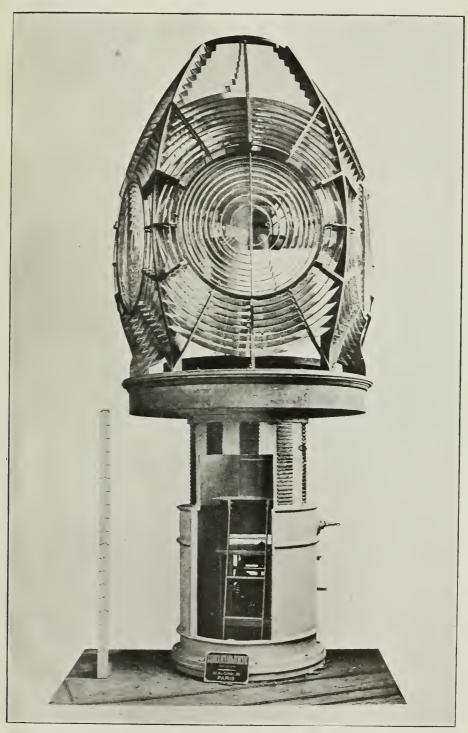
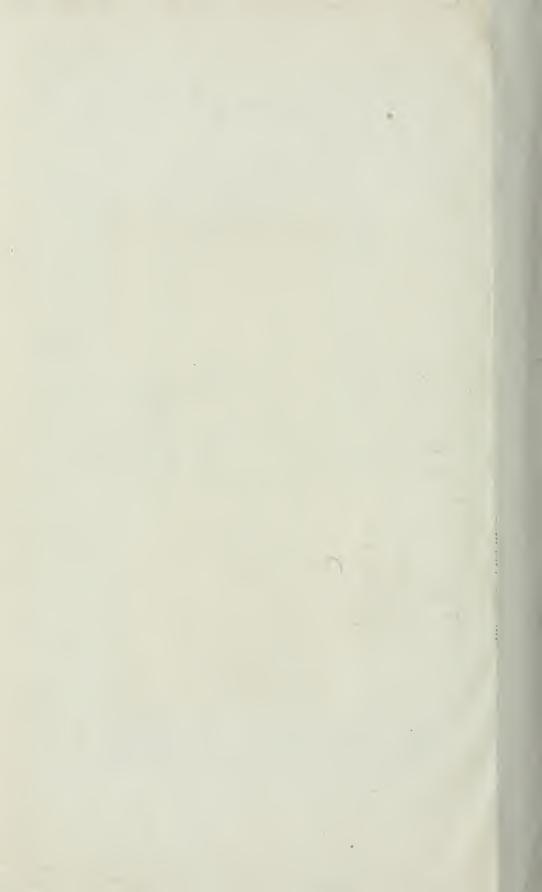


Plate 2.





First Order Lighting Apparatus, Cape Ray Lighthouse, Nfld., maintained by Dominion Government.



11/25/1/29

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