



# SESSIONAL PAPERS

VOLUME 8



FIRST SESSION OF THE THIRTEENTH PARLIAMENT

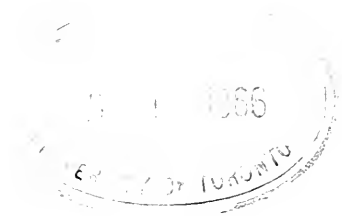
OF THE

DOMINION OF CANADA

SESSION 1918



VOLUME LIII.



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4. Supplementary Estimates of sums required for the service of the Dominion for the year ending on the 31st March, 1918, and, in accordance with the provisions of "The British North America Act, 1867." Presented by Hon. Mr. Maclean, May 18, 1918.  
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- 38a. Supplement to the Seventh Annual Report of the Department of the Naval Service (Fisheries Branch). Contributions to Canadian Biology, being studies from the Biological Stations of Canada, 1916-17... *Printed for distribution and sessional papers.*

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39. Fiftieth Annual Report of the Fisheries Branch of the Department of the Naval Service, 1916-1917. Presented by Hon. Mr. Ballantyne, March 19, 1918.  
*Printed for distribution and sessional papers.*
40. The Report of the Joint Librarians of Parliament. Presented by Hon. The Speaker, March 18, 1918... *Not printed.*
41. Minute of Council appointing the Honourable Martin Burrell, Secretary of State; the Honourable John Dowsley Reid, Minister of Railways and Canals; the Honourable Arthur L. Sifton, Minister of Customs, and the Honourable James A. Calder, Minister of Immigration and Colonization, to act with the Speaker of the House of Commons, as Commissioners for the purposes, and under the Provisions of the Eleventh Chapter of the Revised Statutes of Canada, 1906, intituled: "An Act respecting the House of Commons." Presented by Sir Robert Borden, March 18, 1918... *Not printed.*
42. Copies of Orders in Council, as follows:—  
P.C. 987, dated 10th April, 1917.—Defence of Canada Order, 1917. Regulations, penalties, etc.  
P.C. 1397, dated 21st May, 1917.—Regulations *re* persons employed on docks, etc. carrying matches, smoking, etc., prohibited.  
P.C. 1451, dated 25th May, 1917.—Further penalties under Defence of Canada  
P.C. 2277, dated 17th August, 1917.—*Re* Desertions from merchant vessels; penalties, etc.  
P.C. 2769, dated 4th October, 1917.—Ship's lights; regulations, *re*.  
P.C. 3306, dated 29th November, 1917.—Prohibition, sending code messages *re* merchant ships without authority.  
P.C. 3307, dated 29th November, 1917.—Seamen undergoing imprisonment for desertion may be liberated for service on vessels.  
P.C. 3319, dated 29th November, 1917.—Regulations *re* persons employed on docks.  
P.C. 3017, dated 3rd December, 1917.—Naval authorities may authorize embarkation of explosives in merchant ships.  
P.C. 3362, dated 24th December, 1917.—Transportation of explosives by railways.  
P.C. 86, dated 15th January, 1918.—Competent naval authority may prescribe order in which ships may be supplied with coal.  
P.C. 87, dated 17th January, 1918.—Regulation prohibiting taking of firearms, etc., from Canada by sea without permission of naval or military authority.  
P.C. 91, dated 15th January, 1918.—Regulations providing that all British ships, 1,600 tons or over, trading to Europe and the Mediterranean must have wireless apparatus, etc.  
P.C. 261, dated 1st February, 1918.—Regulation *re* carriage of explosives on passenger trains.  
P.C. 282, dated 26th February, 1918, respecting the placing at the disposal of The War Trade Board the output of any factory or workshop engaged in the production of arms, ammunition, food, machinery, etc.  
P.C. 524, dated 2nd of March, 1918, in substitution of Regulation Fifty-one, respecting penalties for refusing to obey any orders or rules issued under the provisions of the Defence of Canada Order, 1917.  
P.C. 558, dated 8th of March, 1918, amending P.C. 987, dated 10th April, 1917.—Regulation respecting the employment of look-outs on merchant vessels of 2,500 gross tonnage and upwards.  
P.C. 559, dated 8th March, 1918, respecting the exportation of goods from Canada to neutral countries. Presented by Sir Robert Borden, March 18, 1918... *Not printed.*

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**CONTENTS OF VOLUME 14—Continued.**
**42a.** Copies of Orders in Council, as follows:—

P.C. 17, dated 4th January, 1918.—Wearing military or naval uniforms by unauthorized persons.

P.C. 86, dated 15th January, 1918.—“Defence of Canada Order, 1917,” coaling of vessels.

P.C. 87, dated 17th January, 1918.—“Defence of Canada Order, 1917,” export of firearms.

P.C. 91, dated 15th January, 1918.—“Defence of Canada Order, 1917,” radio-telegraph equipment on vessels.

P.C. 261, dated 1st February, 1918.—Carrying of explosives on passenger trains.

P.C. 329, dated 8th February, 1918.—Rates of pay R.N.C.V.R.

P.C. 387, dated 20th February, 1918.—Allowance to officers and men travelling on duty.

P.C. 462, dated 2nd March, 1918.—Treatment of insane members of the naval service.

P.C. 524, dated 2nd March, 1918.—“Defence of Canada Order, 1917,” enforcement of provisions.

P.C. 2769, dated 4th October, 1917.—Amendment to “Defence of Canada Order, 1917,” *re* lights on vessels.

P.C. 2791, dated 9th October, 1917.—Retention of services of men in the R.N.C.V.R. after termination of the war.

P.C. 3017, dated 3rd December, 1917.—Amendment to “Defence of Canada Order, 1917,” *re* carriage of explosives in merchant ships.

P.C. 3064, dated 2nd November, 1917.—Rates of pay to officials officiating at courts martial and disciplinary courts for the Royal Canadian Navy.

P.C. 3072, dated 6th November, 1917.—Regulations governing the issue of war badges.

P.C. 3192, dated 13th November, 1917.—Rates of pay on discharge to men not eligible for three months' gratuity.

P.C. 3306, dated 29th November, 1917.—Amendment to “Defence of Canada Order, 1917,” *re* communicating information with regard to the movements of ships.

P.C. 3307, dated 29th November, 1917.—Amendment to “Defence of Canada Order, 1917,” *re* release of imprisoned seamen.

P.C. 3319, dated 29th November, 1917.—Amendment to “Defence of Canada Order, 1917,” *re* carrying of matches in the vicinity of inflammable substances.

P.C. 3362, dated 24th December, 1917.—Amendment to “Defence of Canada Order, 1917,” *re* transportation of explosives on passenger trains.

P.C. 3391, dated 24th December, 1917.—Retention of services of men in the Royal Canadian Navy after the termination of the war.

P.C. 3392, dated 22nd December, 1917.—Institution of rank of commander, R.N.C.V.R.

P.C. 3470, dated 26th December, 1917.—Institution of warrant ranks, Royal Canadian Navy.

P.C. 3474, dated 27th December, 1917.—Rates of pay to paymasters, R.N.C.V.R.

P.C. 3475, dated 5th January, 1918.—Separation allowance.

P.C. 558, dated 8th March, 1918.—Look-outs on merchant vessels.

P.C. 560, dated 8th March, 1918.—Admitting United States vessels to privileges in Canadian ports. Presented by Hon. Mr. Ballantyne, March 19, 1918. . . . .*Not printed.*

**42b.** Copy of Order in Council, P.C. 863, dated 12th April, 1918; amendments of “Defence of Canada Order, 1917.”—Equipment of ships for protection against the enemy. Presented by Hon. Mr. Ballantyne, April 19, 1918. . . . .*Not printed.*

**42c.** Copy of Order in Council P.C. 950, dated 19th of April, 1918.—Establishment of the rank of warrant writer in the R.N.C.V.R. Also,—Copy of Order in Council P.C. 70/942, dated 19th April, 1918.—Allowance to chief examining officers at Canadian naval ports. Presented by Hon. Mr. Ballantyne, April 24, 1918. . . . .*Not printed.*

**42d.** Copy of Order in Council, P.C. 974, dated 23rd April, 1918. “Defence of Canada Order, 1917.”—Entry in Canada of vessels carrying explosives in self defence. Also, Copy of Order in Council, P.C. 957, dated 19th April, 1918.—Institution of the rank of surgeon probationer, Royal Naval Canadian Volunteer Reserve. Presented by Hon. Mr. Ballantyne, May 1, 1918. . . . .*Not printed.*

**42e.** Order in Council No. P.C. 1102, dated 10th May, 1918.—Amendments of “Defence of Canada Order, 1917,” Section 23c, *re* fitting and supplying vessels registered in Canada with defensive armaments. Order in Council No. P.C. 1129, dated 11th May, 1918.—Amendments of “Defence of Canada Order of 1917,” Section 22A, *re* ships' lights. (*The Senate*) . . . . .*Not printed.*

**42f.** Copy of Order in Council No. P.C. 1208, dated 17th May, 1918, *re* allowances to officers appointed for navigating duties in H.M.C. ships. Presented by Hon. Mr. Ballantyne, May 23, 1918. . . . .*Not printed.*

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**CONTENTS OF VOLUME 14—Continued.**

- 43.** P.C. 632, dated 14th March, 1918, respecting the increase in freight and passenger rates on Canadian railways. P.C. 631, dated 14th March, 1918, respecting the collection of special taxes from the Canadian Pacific Railway Company. Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*
- 44.** P.C. 3116, dated 2nd November, 1917.—Regulations forbidding the use of grain for the distillation of potable liquors.  
P.C. 3473, dated 22nd December, 1917.—Regulations respecting the prohibition of the importation of intoxicating liquors except wine for use in Divine service; liquor for medicinal purposes; liquor for manufacturing purposes; and specifying the strength of an intoxicating liquor.  
P.C. 3484, dated 26th December, 1917, amending P.C. 3473, dated 22nd December, 1917, by striking out the word "alcohol" and substituting the words "proof spirits."  
P.C. 134, dated 19th January, 1918, amending P.C. 3473, dated 22nd December, 1917, respecting the importation of liquors after 24th December, 1917, if actually purchased and shipped before 31st January, 1918.  
P.C. 224, dated 26th January, 1918, amending P.C. 3473, dated 22nd December, 1917, providing for the issuing of a special license by the Minister of Customs for the importation of liquors under certain circumstances.  
P.C. 589, dated 11th March, 1918.—Regulations regarding the manufacture and sale of intoxicating liquors in Canada. Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*
- 45.** P.C. 3073, dated 29th October, 1917.—Establishment of a Department of Immigration and Colonization; provision of a salary for the Secretary of State for External Affairs. Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*
- 46.** P.C. 422, dated 21st February, 1918.—Establishment of a Department of Soldiers' Civil Re-Establishment.  
P.C. 433, dated 21st February, 1918.—Regulations *re* Military Hospitals Commission.  
P.C. 434, dated 21st February, 1918.—Invalided Soldiers' Commission.  
P.C. 442, dated 21st February, 1918.—Appointing Sir James Loughheed, K.C.M.G., Minister of Soldiers' Civil Re-Establishment.  
P.C. 443, dated 23rd February, 1918.—Accepting resignation of Mr. F. B. McCurdy, as Parliamentary Secretary of the Department of Militia and Defence.  
P.C. 444, dated 23rd February, 1918.—Appointing F. B. McCurdy, Esq., Parliamentary Secretary of the Department of Soldiers' Civil Re-Establishment.  
P.C. 445, dated 23rd February, 1918.—Accepting the resignation of Sir James Loughheed, K.C.M.G., as Chairman of the Invalided Soldiers' Commission; and appointing F. B. McCurdy, Esq., M.P., as Chairman of the said Commission.  
P.C. 446, dated 23rd February, 1918.—Placing the Invalided Soldiers' Commission under the direction and control of the Minister of Soldiers' Civil Re-Establishment. Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*
- 47.** P.C. 307, dated 6th February, 1918.—Purchases to be made by the War Purchasing Commission for the several departments of Government. Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*
- 48.** P.C. 272, dated 2nd February, 1918.—Appointment of a Canadian War Mission in the United States of America.  
P.C. 281, dated 2nd February, 1918.—Appointing Lloyd Harris, Chairman of the Canadian War Mission in the United States of America.  
P.C. 653, dated 16th March, 1918.—Appointing Messrs. Frank A. Rolph, A. H. Scott and Ross H. McMaster, members of the Canadian War Mission in the United States of America. Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*
- 48a.** Return to an Address to His Excellency the Governor General of the 20th March, 1918, for a copy of the Orders in Council creating the War Mission at Washington, appointments to the same, with instructions as to the extent of its powers and scope of its work. Presented by Mr. Clark (Bruce), March 26, 1918. . . . .*Not printed.*
- 49.** P.C. 112, dated 22nd January, 1918.—Appointment of T. Sherman Rogers, K.C., William B. Wallace, Judge of the County Court, both of Halifax, and Frederick Luther Fowke, of Oshawa, gentleman, as Commissioners under the name of the Halifax Relief Commission.  
P.C. 576, dated 9th March, 1918.—Regulations *re* payment of claims arising out of the Halifax disaster. First report of Halifax Relief Commission attached. Presented by Sir Robert Borden, March 18, 1918. . . . .*Printed for sessional papers only.*
- 50.** P.C. 3005, dated 23rd October, 1917.—Appointment of a War Committee of the Cabinet.  
P.C. 3006, dated 23rd October, 1917.—Appointment of a Committee of the Cabinet to be known as "The Reconstruction and Development Committee." Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*



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**CONTENTS OF VOLUME 14—Continued.**

- 51.** P.C. 358, dated 13th February, 1918.—Regulations *re* appointments to the Public Service.  
P.C. 491, dated 28th February, 1918.—Respecting appointments, promotions, etc., in the Civil Service other than in the several departments.  
P.C. 372, dated 18th February, 1918.—Appointment of a Committee of Council *re* preparation of a Bill respecting the Civil Service.  
P.C. 548, dated 15th March, 1918.—Approval of Interim Regulations made by the Civil Service Commission, under clause 3 of O.C.P.C. 358, dated 13th February, 1918.  
P.C. 637, dated 18th March, 1918.—Regulations *re* dismissal of public officials on the ground of offensive partisanship during the recent election. Presented by Sir Robert Borden, March 18, 1918. . . . .*Not printed.*
- 52.** P.C. 2833, dated 8th October, 1917.—Public Service Committee of National Service. Presented by Sir Robert Borden, March 18, 1918 . . . . .*Not printed.*
- 52a.** Registration Regulations made by the Canada Registration Board. Presented by Hon. Mr. McCurdy, April 23, 1918. . . . .*Not printed.*
- 52b.** Memorandum respecting the plans of the Canada Registration Board and the progress it is making in its work. Presented by Sir George Foster, May 23, 1918. . . . .*Not printed.*
- 53.** P.C. 1433, dated 24th May, 1917.—Regulations *re* departure out of Canada of male persons liable to or capable of military service.  
P.C. 1531, dated 4th June, 1917.—Statutory declaration—Schedule 'B' of O.C. May 24, 1917, may be made before certain persons.  
P.C. 1799, dated 30th June, 1917.—Regulations made by O.C. May 24, 1917, amended.  
P.C. 2245, dated 3rd September, 1917.—Military Service Council: Appointment Deputy Minister of Justice, O. M. Biggar, John H. Moss, L. Loranger, and L.-Col. H. A. C. Machin *as*.  
P.C. 2497, dated 8th September, 1917.—Central Appeal Judge: Appointment Mr. Justice Duff *as*.  
P.C. 2498, dated 11th September, 1917.—Members of local tribunals: Minister of Justice may appoint after September 25, 1917.  
P.C. 2554, dated 15th September, 1917.—Registrar for British Columbia—R. S. Lennie, K.C.  
P.C. 2555, dated 15th September, 1917.—Registrar for New Brunswick—W. A. Ewing, K.C.  
P.C. 2556, dated 15th September, 1917.—Registrar for Quebec—Eugene Godin, K.C.  
P.C. 2557, dated 15th September, 1917.—Registrar for Saskatchewan—A. L. Haining.  
P.C. 2558, dated 15th September, 1917.—Registrar for Manitoba—E. R. Chapman.  
P.C. 2559, dated 15th September, 1917.—Registrar for Toronto—Glynn Osler.  
P.C. 2563, dated 15th September, 1917.—Franking privilege extended to Registrars and Deputy Registrars.  
P.C. 2564, dated 15th September, 1917.—Regulations *re* departure out of Canada of male persons capable of military service, made on May 24 and June 30, 1917, amended.  
P.C. 2591, dated 17th September, 1917.—Registrar for Calgary—John M. Carson.  
P.C. 2598, dated 17th September, 1917.—Registrar for Prince Edward Island—W. W. Stanley.  
P.C. 2603, dated 18th September, 1917.—O. M. Biggar authorized to sign requisitions for printing and stationery for use of Military Service Council.  
P.C. 2618, dated 20th September, 1917.—Registrar for the Yukon—John Black.  
P.C. 2623, dated 21st September, 1917.—Deputy Registrars, Ontario—W. E. Wismer and Major H. P. Cook.  
P.C. 2624, dated 21st September, 1917.—Deputy Registrar for Quebec—A. Gobeil.  
P.C. 2635, dated 28th September, 1917.—Deputy Registrar for Quebec—F. A. Labelle.  
P.C. 2637, dated 28th September, 1917.—*Re* making alien residents of Allied nationality in Canada liable to military service.  
P.C. 2664, dated 24th September, 1917.—Deputy Registrar for Ontario—G. A. Toole.  
P.C. 2699, dated 3rd October, 1917.—Registrar for Nova Scotia—E. H. Nichois.  
P.C. 2725, dated 3rd October, 1917.—List of officials to sign Letter of Credit cheques.  
P.C. 2781, dated 4th October, 1917.—Approval of Proclamation calling out for military service of Class 1.  
P.C. 2833, dated 8th October, 1917.—Public Service Committee of National Service Board, to investigate claims of Civil Servants for exemption.  
P.C. 2936, dated 15th October, 1917.—Time extended for calling out Class 1 in the Yukon.  
P.C. 2958, dated 19th October, 1917.—Regulations under Military Service Act, 1917.  
P.C. 3007, dated 20th October, 1917.—Travelling expenses of members of Board of Selection.  
P.C. 3008, dated 20th October, 1917.—Living and travelling expenses of members of Military Service Council.

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**CONTENTS OF VOLUME 14—Continued.**

P.C. 3025, dated 20th October, 1917.—Regulations *re* reporting for service and claims for exemption for men residing outside of Canada.

P.C. 3033, dated 23rd October, 1917.—Convention Great Britain and United States calling out for military service under its own colours its citizens resident in the other country.

P.C. 3036, dated 23rd October, 1917.—*Re* exemption of members of the R.N.W.M. Police.

P.C. 3093, dated 2nd November, 1917.—Clerk of Central Appeal Judge—J. L. McDougall—at salary of \$250 a month.

P.C. 3095, dated 2nd November, 1917.—Expenses of Military Service Branch to be paid from War Appropriation.

P.C. 3112, dated 2nd November, 1917.—Expenses of Judges *re* making appointments to local tribunals.

P.C. 3118, dated 7th November, 1917.—Further regulations under Military Service Act, 1917.

P.C. 3168, dated 9th November, 1917.—Regulations *re* dealing with deserters and absentees without leave, etc.

P.C. 3169, dated 9th November, 1917.—Regulations *re* claims for exemptions by persons who have failed to comply with Proclamation under Military Service Act, 1917.

P.C. 3230, dated 19th November, 1917.—Regulations fixing penalties for non-compliance with the law.

P.C. 3231, dated 19th November, 1917.—*Re* applications for exemption in North-west Territories and other remote regions.

P.C. 3232, dated 19th November, 1917.—J. H. Moss authorized to sign requisitions for printing and stationery for use of Military Service Council.

P.C. 3253, dated 27th November, 1917.—Regulation *re* repatriation of citizens or subjects of Allied countries resident in Canada.

P.C. 3255, dated 27th November, 1917.—Minister of Justice authorized to designate a Judge to perform duties assigned to Chief Justice *re* appeal tribunals in case of a vacancy in said office.

P.C. 3298, dated 29th November, 1917.—Registrars and Deputy Registrars, remuneration of.

P.C. 3321, dated 30th November, 1917.—Regulations *re* appeal to Central Judge from decisions of tribunals.

P.C. 3344, dated 3rd December, 1917.—*Re* hearing of appeals as speedily as possible.

P.C. 3348, dated 3rd December, 1917.—*Re* discharge from military service of persons engaged in agriculture.

P.C. 3349, dated 3rd December, 1917.—Minister of Agriculture authorized to appoint representatives of Department of Agriculture to attend tribunals.

P.C. 3356, dated 5th December, 1917.—Remuneration of representatives of the Minister of Agriculture (\$5 per diem).

P.C. 3463, dated 24th December, 1917.—Regulations *re* departure out of Canada of male persons, made by O.C. May 24, 1917, amended.

P.C. 33, dated 7th January, 1918.—Regulations *re* establishment of additional tribunals to decide appeals.

P.C. 35, dated 7th January, 1918.—Regulations; remuneration and expenses of tribunals.

P.C. 70, dated 8th January, 1918.—Regulations respecting men changing residence.

P.C. 54, dated 8th January, 1918.—Enlargement of Dominion Police Force in connection with administration of the Military Service Act.

P.C. 111, dated 17th January, 1918.—Regulations *re* exemption of Indians and other disfranchised British subjects, from Military Service.

P.C. 115, dated 17th January, 1918.—Regulations prescribing obligations of exempted men under the Military Service Act.

P.C. 116, dated 17th January, 1918.—Appointment of Douglas Kerr as Commissioner of Police to enforce Military Service Act.

P.C. 178, dated 21st January, 1918.—Regulations *re* appeal claims for exemption under the Military Service Act, 1917.

P.C. 181, dated 26th January, 1918.—Regulations *re* furnishing of information by employers of employees liable for Military Service.

P.C. 182, dated 26th January, 1918.—Regulations *re* reporting for military duty in case of an appeal for exemption.

P.C. 195, dated 24th January, 1918.—Extension of time for appeals from decisions of local tribunals.

P.C. 196, dated 26th January, 1918.—Regulations *re* appeals from the grants of exemption by tribunals—production of foodstuffs.

P.C. 237, dated 30th January, 1918.—Liability to Military Service of United States citizens in Canada, and Canadian British subjects in the United States.

P.C. 271, dated 2nd February, 1918.—Regulations *re* hearing of appeals in the Province of Quebec.

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**CONTENTS OF VOLUME 14—Continued.**

P.C. 384, dated 18th February, 1918.—Appointment of an agricultural representative for each Military District to act as adviser to the Leave of Absence Boards.

P.C. 435, dated 23rd February, 1918.—Accepting resignation of Mr. Glyn Osler, K.C., as Register under the Military Service Act, at Toronto, and appointing Mr. C. Leslie Watson, Registrar for Ontario.

P.C. 450, dated 2nd March, 1918.—Constitution of a Directorship under the Military Service Act, 1917; and appointing Lt.-Col. H. A. C. Machin, to the said office.

P.C. 451, dated 23rd February, 1918.—Use of certain of the Judges of the Circuit Court of the District of Montreal for the determination of appeals under the Military Service Act, 1917

P.C. 452, dated 23rd February, 1918.—Accepting the resignation of Mr. E. R. Chapman, Registrar under the Military Service Act for Manitoba, and appointing Mr. George A. Toole to succeed him.

P.C. 572, dated 9th March, 1918.—Application of the provisions of the Canadian Military Service Act, 1917, to aliens of allied nationality resident in Canada. (Copy of the Military Service Act, 1917, attached.) . . . . . *Not printed.*

**53a. Copies of Orders in Council—**

P.C. 815, dated 4th April, 1918.—Regulations, under the War Measures Act, 1914, in respect to the utilization of the human energy of Canada for purposes essential to the prosecution of the present war.

And P.C. 834, dated 4th April, 1918.—Conferring certain powers on the General Officer or the Officer Commanding Military Districts, in case of riot, insurrection or civil disturbance, or obstructing the enforcement of the Military Service Act, 1917, etc. Presented by Sir Robert Borden, April 5, 1918. . . . . *Not printed.*

**54. Copies of Orders in Council, as follows—**

P.C. 3160, dated 9th November, 1917.—Regulations *re* appointment of a Director of Public Information.

P.C. 3161, dated 9th November, 1917.—Appointing Mark E. Nichols, Esq., Director of Public Information. Presented by Hon. Mr. Rowell, March 18, 1918. . . . . *Not printed.*

**55. Copy of the Minutes of the meetings of the Conference between the Dominion and Provincial Governments of Canada, held at Ottawa, during February, 1918, respecting the general war situation as concerned with financial, food, shipping, and military necessities. Presented by Hon. Mr. Calder, March 18, 1918. . . . . *Printed for sessional papers only.*****56. Copies of Orders in Council, as follows—**

P.C. 1460, dated 16th June, 1917.—Regulations for appointment of Food Controller.

P.C. 1684, dated 21st June, 1917.—Appointment of Hon. W. J. Hanna as Food Controller.

P.C. 1844, dated 3rd July, 1917.—Staff, office of Food Controller; appointment of Todd, Willison and French.

P.C. 2079, dated 1st August, 1917.—Franking privilege extended to Food Controller.

P.C. 2190, dated 9th August, 1917.—Regulations applicable to public eating places and use of wheat for alcohol prohibited; penalties imposed, etc.

P.C. 2210, dated 11th August, 1917.—Food Controller's Office; \$25,000 for salaries and expenses of.

P.C. 2292, dated 18th August, 1917.—Export of flour prohibited.

P.C. 2333, dated 23rd August, 1917.—Food Controller's Office; appointment of officers, clerks and others; authority to make such appointments, fix salaries, etc.

P.C. 2352, dated 24th August, 1917.—Canned vegetables; prohibition of use of while fresh vegetables are available.

P.C. 2730, dated 3rd October, 1917.—Franking privilege to secretaries of Provincial Committee of Food Controller's Office.

P.C. 2689, dated 8th October, 1917.—Food Control; Educational Bureau; appointments.

P.C. 2688, dated 11th October, 1917.—Regulations *re* wholesale producers and dealers. Must make returns, etc.

P.C. 2959, dated 19th October, 1917.—Cereal foods. Regulations *re* sale of.

P.C. 2959 (a), dated Extra Canada Gazette, 25th October, 1917.—Order of Food Controller extending time for commencement of Cereal Food Regulations.

P.C. 3044, dated 23rd October 1917.—Oleomargarine; Regulations *re* importation and sale of.

P.C. 3116, dated 2nd November, 1917.—Use of grain for distillation of potable liquors, prohibited.

P.C. 3141, dated 6th November, 1917.—\$70,000 for expenses office of Food Controller.

P.C. 3211, dated 15th November, 1917.—Export of foodstuffs; prohibition of.

P.C. 3214, dated 15th November, 1917.—Licensing of dealers in food, etc. Regulations *re*. Food Controller authorized to fix profits, etc.

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**CONTENTS OF VOLUME 14—Continued.**

P.C. 3223, dated 15th November, 1917.—Licensing of mills for the grinding of flour; regulations *re*.

P.C. 3215, dated 19th November, 1917.—Food Controller's Office; \$100,000 for salaries and other expenses in.

P.C. 3236, dated 19th November, 1917.—Oleomargarine: Regulations *re* handling of: Licenses for importation of to be issued from Office of Veterinary Director General.

P.C. 3236 (a), dated 2nd Extra Canada Gazette, 17th November, 1917.—Order of Food Controller *re* manufacture, importation and sale of oleomargarine.

P.C. 3239, dated 19th November, 1917.—Food Control Regulations framed by Food Controller *re* licenses for exportation of goods to allied countries, etc., approved.

P.C. 3203, dated 27th November, 1917.—Manufacture of malt; regulations *re*.

P.C. 3347, dated 3rd December, 1917.—Prohibition of export of certain foods to the United Kingdom, British possessions, etc., except under license from Minister of Customs.

P.C. 3430, dated 24th December, 1917.—Food Control Regulations *re* cars containing food being held for longer period than four days, etc.

P.C. 163, dated 19th January, 1918.—\$50,000 for expenses of Food Controller's office.

P.C. 180, dated 21st January, 1918.—Regulations *re* licensing flour mills made by Order in Council 3223, 15th November, 1917, to extend to all flour mills.

P.C. 200, dated 24th January, 1918.—Resignation, Hon. W. J. Hanna as Food Controller.

P.C. 53, dated 26th January, 1918.—Regulations *re* exportation of certain goods.

P.C. 212, dated 26th January, 1918.—Staff, office of Food Controller. Former Orders in Council *re* cancelled, and Food Controller authorized to appointment of certain members of.

P.C. 223, dated 4th February, 1918.—Appointment Mr. H. B. Thomson as Food Controller *vi e* Hon. W. J. Hanna.

P.C. 341, dated 11th February, 1918.—Canada Food Board.

P.C. 345, dated 11th February, 1918.—Appointment members of Canada Food Board: Messrs. Thomson, Dunning and McGregor.

P.C. 370, dated 12th February, 1918.—Regulations *re* Public Eating Places. O.C., 9th August, 1917, amended.

P.C. 420, dated 24th February, 1918.—Amending O.C. of February 11, 1918, creating The Canada Food Board—Powers not to include any of the powers or duties vested in the Board of Grain Supervisors for Canada.

P.C. 470, dated 28th February, 1918.—Prohibiting removal of flint or dent corn from the counties of Lambton, Essex, Kent and Elgin to any place outside of said district.

P.C. 533, dated 7th March, 1918.—Regulations *re* use of grain for feed purposes in stock yards, etc.

P.C. 567, dated 9th March, 1918.—Placing of sums of money to the credit of the Canada Food Board for the purchase of Ford tractors.

P.C. 580, dated 9th March, 1918.—Regulations *re* licensing of packing houses—Limitation on profit of sales.

P.C. 596, dated 12th March, 1918.—Regulations *re* power of The Canada Food Board to make orders regarding the kinds and amounts of foods that may be used, etc.

P.C. 597, dated 12th March, 1918.—Regulations forbidding the wilful waste of any food or food products: penalties imposed, etc. . . . .*Not printed.*

**56a.** Report of the Food Controller, Hon. W. J. Hanna, K.C., to the Prime Minister, dated 24th January, 1918. Presented by Sir Robert Borden, March 27, 1918. . . . .*Not printed.*

**56b.** Return to an Order of the House of the 20th March, 1918, for a return showing—1. When and upon whose recommendation the office of Food Controller in Canada was authorized and established. 2. To which Ministerial Department the Food Controller reports, and what member of the cabinet, if any, is responsible for the administration of the office of Food Controller. 3. The total amount incurred as salaries for Food Controller and his assistants and staff at Ottawa and throughout Canada from the establishment of the office up to and including end of February, 1918. 4. The total expense of Food Controller's Office at Ottawa and throughout Canada, including rents, furnishing, equipment, heat, light, salaries, travelling expenses, stationery, printing, advertising, telegrams, telephones, postage, and all other expenses of Food Controller's Office, Ottawa, and branch offices throughout Canada, since the establishment of the office, up to and including February, 1918. 5. The total cost of administration of Food Controller's Office at Ottawa and throughout Canada, including rents, furnishings, equipments, heat, light, salaries, traveling expenses, stationery, printing, advertising, telegrams, telephones, postage, etc., including all and every expense of Food Controller's Office at Ottawa and branch offices throughout Canada for each of following months, viz.: December, 1917, and February, 1918. 6. Whether there are any claims for salary or expenses from the Food Controller's Office outstanding or in dispute; if so, the amount involved. 7. How many employees there are on the Food Controller's staff at Ottawa and throughout Canada. 8. How many of the employees are returned soldiers who have been on active service since 1914. Presented April 18, 1918.—*Mr. Lapointe (St. James)* . . . . .*Not printed.*

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**CONTENTS OF VOLUME 14—Continued.**

- 56c.** Return to an Address to His Excellency the Governor General of the 20th March, 1918, for a copy of the Order in Council recently passed making provision for the staff, the number of persons to be employed and their salaries, in the Food Controller's Office. Also a list of the names of those at present employed, showing their respective salaries and duties, former occupations, where formerly employed and salary received in former occupation. Presented April 18, 1918.—*Mr. Devlin*. . . . . *Not printed.*
- 56d.** Return to an Address to His Excellency the Governor General, of the 27th March, 1918, for a copy of the Orders in Council creating the Canada Food Board, and all correspondence antecedent or posterior to the Order in Council with respect to the same, as well as all regulations not already brought down. Presented May 20, 1918.—*Sir Wilfrid Laurier*. . . . . *Not printed.*
- 56e.** Supplementary return to an Order of the House of the 20th March, 1918, for a return showing—1. When and upon whose recommendation the office of Food Controller in Canada was authorized and established. 2. To which Ministerial Department the Food Controller reports, and what member of the cabinet, if any, is responsible for the administration of the office of Food Controller. 3. The total amount incurred as salaries for Food Controller and his assistants and staff at Ottawa and throughout Canada from the establishment of the office up to and including end of February, 1918. 4. The total expense of Food Controller's Office at Ottawa and throughout Canada, including rents, furnishing, equipment, heat, light, salaries, travelling expenses, stationery, printing, advertising, telegrams, postages, and all other expenses of Food Controller's Office, Ottawa, and branch offices throughout Canada, since the establishment of the office, up to and including February, 1918. 5. The total cost of administration of Food Controller's Office at Ottawa and throughout Canada, including rents, furnishings, equipments, heat, light, salaries, travelling expenses, stationery, printing, advertising, telegrams, telephone, postage, etc., including all and every expense of Food Controller's Office at Ottawa and branch office throughout Canada for each of following months, viz.: December, 1917, and February, 1918. 6. Whether there are any claims for salary or expenses from the Food Controller's Office outstanding or in dispute; if so, the amount involved. 7. How many employees there are on the Food Controller's staff at Ottawa and throughout Canada. 8. How many of the employees are returned soldiers who have been on active service since 1914. Presented May 20, 1918.—*Mr. Lapointe (St. James)*. . . . . *Not printed.*
- 57.** Copies of Orders in Council, as follows:—  
P.C. 1579, dated 11th June, 1917.—Fuel Controller.—Report on coal situation and appointment of Chas. A. Magrath as.  
P.C. 1651, dated 15th June, 1917.—Fuel Controller vested with powers under Inquiries Act.  
P.C. 1862, dated 6th July, 1917.—Fuel Controller; \$10,000 allocated from War Appropriation.  
P.C. 1887, dated 12th July, 1917.—Fuel Controller.—Report on coal situation and appointment of Chas. A. Magrath as.  
P.C. 2060, dated 27th July, 1917.—Assistant Fuel Controller. Appointment of H. P. McCue as.  
P.C. 2289, dated 22nd August, 1917.—Fuel Control. Appointment of Donald S. Kerr to assist and C. W. Paterson as Deputy Fuel Controller.  
P.C. 2611, dated 19th September, 1917.—“David S. Kerr” instead of “Donald S. Kerr” (O.C. 22nd August, 1917—P.C. No. 2289, amended).  
P.C. 3068, dated 26th October, 1917.—Regulations *re* importation and sale of coal.  
P.C. 105/3341, dated 3rd December, 1917.—Salary of Deputy Fuel Controller, C. W. Peterson, fixed at \$500 per month  
P.C. 285, dated 4th February, 1918.—Duties of Fuel Controller; O.C. 12th July, 1917.—P.C. 1887, defining, amended  
P.C. 298, dated 5th February, 1918.—Fuel Regulation. Providing for heatless days in factories, theatres, etc.  
P.C. 325, dated 11th February, 1918.—Powers of Fuel Controller extended.  
Sir George Foster laid on the Table, by Command of His Excellency.—Copies of Orders in Council, as follows:—  
P.C. 359, dated 20th February, 1918.—Regulations providing for the conservation of fuel necessary to the national security.  
P.C. 564, dated 8th March, 1918.—Amending regulations *re* conservation of fuel as regards the closing of golf, country, yacht, canoe or hunt clubs and places of amusement on certain days. Presented by Sir George Foster, March 19, 1918. . . . . *Not printed.*
- 58.** Annual Report of the Editorial Committee on Government Publications, on its operations from the date of its appointment, 4th October, 1917, to 20th March, 1918. Presented by Sir George Foster, April 24, 1918. . . . . *Printed for distribution and sessional papers.*
- 58a.** P.C. 2729, dated 4th October, 1917.—Establishment of Editorial Committee *re* printing of public documents. Presented by Sir George Foster, March 19, 1918. . . . . *Printed for sessional papers only.*

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**CONTENTS OF VOLUME 14—Continued.**

59. P.C. 337, dated 8th February, 1918.—Constitution of a Sub-Committee of the War Committee of the Cabinet to be known as The War Trade Board. Presented by Sir George Foster, March 19, 1918. . . . .*Not printed.*
- 59*a.* Return to an Address to His Excellency the Governor General of the 20th March, 1918, for a copy of all Orders in Council creating the War Trade Board, appointments to the same, instructions, and reports from the Board to this date. Presented by Sir Wilfrid Laurier, April 4, 1918. . . . .*Not printed.*
60. Statement of Governor General's Warrants issued since the last Session of Parliament on account of 1917-18. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
61. Statement of receipts and expenditures of the National Battlefields Commission to 31st March, 1917. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
62. Statement showing distribution of the \$25,000,000 advanced by the Dominion Government to the Canadian Northern Railway and its constituent companies, as provided for in Chapter 24, Statutes of 1917. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
- 62*a.* Return showing:—1. What sums, if any, have been paid since the first day of August, 1917, to the Canadian Northern Railway or to any person, firm, corporation, bank or company in trust for and on behalf of the Canadian Northern. 2. Under what authority these sums have been paid. 3. If by virtue of Orders in Council, the date of each of said Orders in Council, and the amount authorized by each of said Orders, and so paid. Presented March 27, 1918.—*Mr. Verville.* . . . . .*Not printed.*
63. Statement of the Receipts and Expenditures of the Royal Society of Canada, for the year ended April 30, 1917. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
64. Interim Report of R. A. Pringle, K.C., Commissioner inquiring into the manufacture, sale, price and supply of news print in Canada. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
- 64*a.* Return to an Address to His Excellency the Governor General of the 8th April, 1918, for a copy of the Order in Council creating a paper commission, and also a copy of the subsequent Orders in Council in regard to the work of this Commission. Presented April 18, 1918.—*Mr. Devlin.* . . . . .*Not printed.*
- 64*b.* Return to an Order of the House of the 8th April, 1918, for a copy of all correspondence respecting Orders in Council creating a paper commission, and subsequent Orders in Council respecting the same, which have passed between newspaper publishers in Canada, more particularly those publishers in Toronto, and the Government. Presented April 25, 1918.—*Mr. Devlin.* . . . . .*Not printed.*
65. Report and Statement of Receipts and Expenditures of the Ottawa Improvement Commission to March 31, 1917. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
66. Statement of Superannuation and Retiring Allowances in the Civil Service during the year ending 31st December, 1917, showing name, rank, salary, service allowance and cause of retirement of each person superannuated or retired, also whether vacancy has been filled by promotion, or by appointment, and the salary of any new appointee. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
67. Report of Women's War Conference, called by the War Committee of the Cabinet, at Ottawa, February 28th to March 2nd, 1918. Presented by Hon. Mr. Rowell, March 20, 1918. . . . .*Not printed.*
68. Statement of Expenditure on account of "Miscellaneous Unforeseen Expenses," from the 1st April, 1917, to the 18th March, 1918, in accordance with the Appropriation Act of 1917. Presented by Hon. Mr. Maclean, March 20, 1918. . . . .*Not printed.*
69. Letter of the Honourable Albert Sévigny to the Right Honourable the Prime Minister, resigning his position as Minister of Inland Revenue, and the letter of the Prime Minister in acknowledgment thereof. Presented by Sir Robert Borden, March 26, 1918. . . . .*Not printed.*
70. Return to an Order of the House of the 21st March, 1918, for a Return showing:—1. Who were the officers of the Engineers Training Depot stationed at St. Johns, Quebec, barracks during the months of October and December, 1917. 2. Who were the officers of the Engineers Training Depot stationed at St. Johns, Quebec, barracks on the 17th December, 1917. 3. Where these officers enlisted. 4. Where these officers resided before their enlistment. 5. Where these officers were residing at the time of their enlistment. Presented March 27, 1918.—*Mr. Archambault.* . . . . .*Not printed.*

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**CONTENTS OF VOLUME 14—Continued.**

- 71.** Return of Orders in Council which have been published in the *Canada Gazette* and in the *British Columbia Gazette*, between 1st January 1917, and the 8th March, 1918, in accordance with provisions of subsection (d) of section 38 of the regulations for the survey, administration, disposal and management of Dominion lands within the 40-mile Railway Belt in the Province of British Columbia, as follows:—
- P.C. 3277, 5th January, 1917. License of occupation of a portion of the bed of the Fraser river to the Kettle Valley Railway Company.
- P.C. 159, 19th January, 1917. Limiting the right of homestead entry in the Railway Belt to persons who were British subjects or subjects of a country allied to Great Britain, or subject of a neutral country and who have continued to be so.
- P.C. 107, 12th February, 1917. Waiving completion of naturalization, before issue of patent for Dominion Lands in certain cases where entrant is on active service.
- P.C. 572, 5th March, 1917. Regulations *re* natural resources necessitated on account of war conditions.
- P.C. 736, 17th March, 1917. Providing for homesteaders being given credit for time spent at agricultural labour in Canada during the year 1918, towards the performance of residence duties.
- P.C. 982, 10th April, 1917. Authorizing the sale of certain lands in British Columbia to Canadian Pacific Railway Company for pipe-line purposes.
- P.C. 2076, 1st August, 1917. Authorizing certain changes in the Timber Regulations.
- P.C. 2562, 15th September 1917. Vesting the title to certain lands in the Railway Belt in His Majesty for the purposes of the Province of British Columbia.
- P.C. 3210, 15th November, 1917. Authorizing the cutting of timber on Dominion lands for ship-building purposes.
- P.C. 3243, 27th November, 1917. Confirming certain Orders in Council *re* administration of Dominion Lands in the Railway Belt in British Columbia.
- P.C. 3245, 27th November, 1917. Permitting a man on active service giving power of attorney with respect to his rights to Dominion lands in Railway Belt, British Columbia.
- P.C. 185, 24th January, 1918. Repealing Order in Council P.C. 159, January 19, 1917, and substituting certain regulations therefor.
- P.C. 23,425, 20th February, 1918. Authorizing the issue of a lease to J. H. Morrison, Kamloops, of certain lands in the Railway Belt, British Columbia, for mining purposes. Presented by Hon. Mr. Meighen, April 2, 1918. . . . .*Not printed.*
- 72.** Return of Orders in Council which have been published in the *Canada Gazette*, between the 1st January, 1917, and the 8th March, 1918, in accordance with the provisions of "The Forest Reserves and Park Act," Section 19, of Chapter 10, 1-2 George V, as follows:—
- P.C. 340, 7th February, 1917, amending Order in Council 19th December, 1916, *re* administration of "Project Meadows" in Forest Reserves in Railway Belt, British Columbia.
- P.C. 2595, 18th September, 1917, placing the control of certain lands in the Waterton Lakes Park under the Director of Forestry.
- P.C. 2594, 18th September, 1917, rescinding Order in Council 8th June *re* Rocky Mountains Park. Presented by Hon. Mr. Meighen, April 2, 1918. . . . .*Not printed.*
- 73.** Return of Orders in Council which have been published in the *Canada Gazette*, between 1st January, 1917, and the 8th March, 1918, in accordance with the provisions of Section 77 of the "Dominion Lands Act," Chapter 20, 7-8 Edward VII, as follows:—
- P.C. 13, 8th January, 1917. Rescinding Order in Council 4th March, 1910, *re* S.W.  $\frac{1}{4}$  of 4-9-14, W. 2nd Meridian, and making same available for homestead purposes.
- P.C. 60, 13th January, 1917. Transferring certain lands in Cowesses Indian Reserve No. 73, to the Province of Saskatchewan, for road purposes.
- P.C. 102, 15th January, 1917. Withdrawing from general disposition certain petroleum and natural gas rights in the vicinity of the City of Edmonton.
- P.C. 108, 17th January, 1917. Authorizing free grant of lot 5, township 70-23, W. 5th, to "La Corporation Episcopale Catholique Romaine d'Athabaska."
- P.C. 110, 17th January, 1917. Authorizing the sale of certain lands to Moses Lessard for irrigation purposes.
- P.C. 159, 19th January, 1917. Providing that a person applying for a homestead entry in the Railway Belt, British Columbia, must be a British subject and has since continued to be a British subject, or a subject of a British Allied or neutral country.
- P.C. 165, 20th January, 1917. Setting aside certain Dominion lands for Indian Reserve purposes.
- P.C. 166, 20th January, 1917. Setting aside certain Dominion lands for Indian Reserve purposes.
- P.C. 167, 20th January, 1917. Setting aside certain Dominion lands for Indian Reserve purposes.
- P.C. 210, 26th January, 1917. Dispensing with residence duties in connection with the entry of Frank Ruppert for the S.W.  $\frac{1}{4}$  of 16-33-14, W. 4th.
- P.C. 301, 2nd February, 1917. Dispensing with residence duties in connection with the entry of Wm. Thorburn for the S.W.  $\frac{1}{4}$  of 13-28-22, W. 2nd.

CONTENTS OF VOLUME 14—*Continued.*

P.C. 316, 3rd February, 1917. Authorizing grant to L. F. Cardinal of the W.  $\frac{1}{2}$  of 22-105-13, W. 5th, by virtue of his occupation thereof at date of extinguishment of Indian Title.

P.C. 327, 6th February, 1917. Authorizing issue of free patent to Jos. Hewitt for the S.E.  $\frac{1}{4}$  of 20-44-3, W. 2nd, in lieu of land occupied by him being included in a Forest Reserve.

P.C. 481, 20th February, 1917. Authorizing the issue of license of occupation to the Canadian Northern Western Railway of certain lands for a bridge site.

P.C. 493, 20th February, 1917. Dispensing with residence duties by Samuel McCall on the E.  $\frac{1}{2}$  of 21-31-1, W. 3rd.

P.C. 560, 28th February, 1917. Authorizing time spent at farm labour in Canada during 1917, to count as residence duties on entries for Dominion lands.

P.C. 555, 28th February, 1917. Making provisions of Orders in Council of 8th May, 1915 (P.C. 1042), 20th September, 1915 (P.C. 2150), 9th December, 1915 (P.C. 2888), and the 12th January, 1916 (P.C. 33), applicable to pre-emptions and purchased homesteads.

P.C. 561, 5th March, 1917. Authorizing change in regulations permitting granting of one day's priority of right to make entry for available Dominion lands.

P.C. 526, 5th March, 1917. Authorizing extension of terms of Order in Council 11th March, 1915, for period of four months up to 11th July, 1917.

P.C. 572, 5th March, 1917. Limiting disposal of any natural resources except to a British subject, subject of Allied country, or neutral country.

P.C. 610, 7th March, 1917. Rescinding Order in Council 30th January, 1914, in so far as it affects descriptions of lands granted to Indians, and certain lands described be granted instead thereof.

P.C. 686, 16th March, 1917. Granting right to Mr. Notman to purchase certain lands in Province of Manitoba.

P.C. 687, 16th March, 1917. Granting certain lands to Department of Militia and Defence.

P.C. 688, 16th March, 1917. Granting certain lands for church purposes to Synod of Diocese of Calgary.

P.C. 762, 20th March, 1917. Authorizing sale of certain lands to Council of the town of Maple Creek.

P.C. 848 29th March, 1917. Authorizing sale of lands to Western Canada Power Company for power development purposes.

P.C. 858, 29th March, 1917. Authorizing grant of land for cemetery purposes to Rural Municipality of Bright Sand, No. 529.

P.C. 918, 3rd April, 1917. Amending Order in Council of 14th December, 1916, with respect to application thereof to Canadian Expeditionary Forces.

P.C. 919, 3rd April, 1917. Granting certain lands for cemetery purposes to the village of Vanguard, Saskatchewan.

P.C. 926, 3rd April, 1917. Authorizing sale of N.W.  $\frac{1}{4}$  36-45-25, W. 3rd, to Allan V. Macie.

P.C. 927, 3rd April, 1917. Authorizing sale of certain lands to N. J. Bailey under certain conditions.

P.C. 1068, 18th April, 1917. Authorizing issue of lease of certain lands to Northern Fish Company, Limited, Selkirk, Manitoba.

P.C. 1066, 18th April, 1917. Authorizing issue of license of occupation of certain lands to the city of Winnipeg for water-power purposes.

P.C. 1067, 18th April, 1917. Dispensing with residence duties and authorizing issue of patent to James Wilson, in connection with the N.E.  $\frac{1}{4}$  of 35-19-11, W.P.M.

P.C. 1069, 18th April, 1917. Authorizing grant of certain lands for cemetery purposes to the village of Major, Saskatchewan.

P.C. 1071, 18th April, 1917. Authorizing grant of certain lands to rural municipality of Lakeview, No. 454 Alberta, for cemetery purposes.

P.C. 1072, 18th April, 1917. Authorizing issue of patent of certain lands to Mr. D. Ennill.

P.C. 1189, 30th April, 1917. Granting certain lands for the erection of a creamery plant to the Canora Creamery Association, Limited.

P.C. 1222, 3rd May, 1917. Setting apart certain lands for the Indian of the Peguis.

P.C. 1207, 4th May, 1917. Authorizing issue of patent to Allen E. McDonald.

P.C. 1249, 8th May, 1917. *Re* granting patent to any person not a British subject by birth or naturalization who is on active service overseas.

P.C. 1268, 8th May, 1917. Rescinding Order in Council P.C. 572, 5th March, 1917, and enacting new regulations therefor.

P.C. 1315, 11th May, 1917. Granting certain lands for church and cemetery purposes to the Church of God of Edmonton, Alberta.

P.C. 1378, 21st May, 1917. Setting apart certain lands for park purposes and granting the same to the rural municipality of Mariposa, No. 350, Saskatchewan.

P.C. 1377, 21st May, 1917. Relieving Mr. H. Wills of further residence duties on the north half of 22-25-10 W. 4th.

P.C. 1348, 21st May, 1917. Authorizing grant of certain lands to Winnipeg Electric Railway Company.

P.C. 1429, 25th May, 1917. Authorizing certain regulations for the disposal of quartz mining claims on Dominion lands.



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**CONTENTS OF VOLUME 14—Continued.**

- P.C. 1455, 29th May, 1917. Authorizing grant of certain lands to the town of The Pas for industrial purposes.
- P.C. 1471, 1st June, 1917. Setting apart certain lands in the Province of Manitoba for Indians.
- P.C. 1532, 4th June, 1917. Authorizing grant of certain lands for church purposes to the Board of Management of the Church and Manse Building Fund of the Presbyterian Church in Canada for Manitoba and the Northwest.
- P.C. 1533, 4th June, 1917. Vesting certain lands in His Majesty in the right of the Province of Alberta.
- P.C. 1536, 5th June, 1917. Authorizing Rev. W. B. Cumming, Saskatoon, to make entry by proxy on behalf of James Grossart.
- P.C. 1580, 11th June, 1917. Withdrawing certain lands which had been reserved for the Hudson's Bay Railway.
- P.C. 1613, 13th June, 1917. Authorizing grant of certain lands to the town of Gimli, for cemetery purposes.
- P.C. 1691, 21st June, 1917. Authorizing sale of certain lands to John Hedberg, Jasper, Alberta.
- P.C. 1675, 21st June, 1917. Authorizing license of occupation to Canadian Northern Railway Company of certain lands on the Red Deer River for bridge construction purposes.
- P.C. 1761, 26th June, 1917. Authorizing sale of certain lands to the Canadian Pacific Railway Company.
- P.C. 1716, 26th June, 1917. Restoring the homestead entry of L. H. Roberts who died while on active service overseas.
- P.C. 1717, 26th June, 1917. Authorizing sale of certain lands to William Rincheshen.
- P.C. 1718, 26th June, 1917. Authorizing grant of certain lands for cemetery purposes to the rural municipality of Bright Sand, No. 529, Saskatchewan.
- P.C. 1817, 30th June, 1917. Authorizing exchange of certain lands to Indians in lieu of lands surrendered.
- P.C. 1820, 30th June, 1917. Authorizing grant of lands for church and cemetery purposes to the Bethel Evangelical Scandinavian Lutheran Congregation.
- P.C. 1821, 30th June, 1917. Authorizing grant of land for cemetery purposes to the Ruthenian Greek Catholic Parish of St. Michael's in Communion with Rome, St. Martin, Manitoba.
- P.C. 1866, 6th July, 1917. Dispensing with residence duties in connection with the entry of W. L. Taylor for the N.W.  $\frac{1}{4}$  13-25-1, W.P.M.
- P.C. 1877, 9th July, 1917. Authorizing person on active service overseas to appoint attorney to make application for patent.
- P.C. 1937, 12th July, 1917. Authorizing grant of certain lands for cemetery purposes to St. George Cemetery Company, Egremont, Alberta.
- P.C. 2039, 26th July, 1917. Authorizing grant of certain lands for park purposes to the town of Drumheller, Alberta.
- P.C. 2036, 27th July, 1917. Authorizing grant of land for cemetery purposes to rural municipality of Bear Lake, No. 740.
- P.C. 2037, 27th July, 1917. Authorizing grant of land for church purposes to Synod of the Diocese of Qu'Appelle.
- P.C. 2038, 27th July, 1917. Authorizing sale of certain lands to Diocese of Ruperts Land.
- P.C. 2066, 27th July, 1917. Authorizing the cancellation of the survey of certain lands along the old Dawson Road.
- P.C. 2075, 30th July, 1917. Amending Order in Council dated 29th May, 1917, with reference to the name of the Board of Trade of the town of The Pas, Manitoba.
- P.C. 2076, 1st August, 1917. Authorizing regulations *re* timber.
- P.C. 2090, 1st August, 1917. Amending forest reserve regulations.
- P.C. 2108, 6th August, 1917. Authorizing certain changes in Dominion lands regulations for the protection of water-power resources.
- P.C. 2109, 6th August, 1917. Authorizing license of occupation to Canadian Northern Pacific Railway Company of certain lands in the bed of the South Thompson River.
- P.C. 2171, 8th August, 1917. Authorizing the disposition of certain lands for town-site purposes.
- P.C. 2239, 15th August, 1917. Confirming the late C. R. Coutts in his entry for the S.E. 6-83-17 W. 6.
- P.C. 2241, 18th August, 1917. Authorizing sale by auction of certain school lands.
- P.C. 2258, 18th August, 1917. Authorizing the lease of certain lands to the Salts and Potash Company of Canada.
- P.C. 2259, 18th August, 1917. Granting certain lands for cemetery purposes to La Corporation Episcopale Catholique Romaine de Regina.
- P.C. 2226, 18th August, 1917. Transferring certain lands from Indian Affairs to Interior Department to be used for church purposes.
- P.C. 2287, 18th August, 1917. Confirming the late Joe White, who died on active service overseas, in his entry for the N.E. 11-89-9 W. 4.
- P.C. 2419, 1st September, 1917. Dispensing with residence duties in connection with the entry of J. L. Crawford for the N.E. 21-2-15 W. 3rd.

CONTENTS OF VOLUME 14—*Continued.*

- P.C. 2436, 1st September, 1917. Transferring certain lands to the Province of Manitoba for drainage purposes.
- P.C. 2420, 1st September, 1917. Granting certain lands to Col. Malloy.
- P.C. 2460, 11th September, 1917. Granting certain lands for church purposes.
- P.C. 2488, 11th September, 1917. Granting certain lands for summer home and shooting purposes.
- P.C. 2489, 11th September, 1917. Granting certain lands for church purposes.
- P.C. 2490, 11th September, 1917. Granting certain lands for cemetery purposes.
- P.C. 2535, 11th September, 1917. Granting a lease of certain lands for cement purposes.
- P.C. 2509, 11th September, 1917. Relieving entrant on active service from necessity of erecting a house on his homestead.
- P.C. 2561, 15th September, 1917. Dispensing with residence duties in case of entry for the S.E. 33-10-15 W. 4.
- P.C. 2593, 17th September, 1917. Granting certain lands to R. B. Clarke in lieu of other lands surrendered to the Crown by him.
- P.C. 2641, 28th September, 1917. Granting certain lands to the Grand Trunk Pacific Development Company, Limited.
- P.C. 2721, 3rd October, 1917. *Re* purchase of certain reclaimed lands in Kleskun Lake.
- P.C. 2728, 3rd October, 1917. Granting certain lands for church purposes.
- P.C. 2857, 12th October, 1917. *Re* certain lands granted for creamery plant purposes.
- P.C. 2856, 12th October, 1917. Granting certain lands for cemetery purposes.
- P.C. 3027, 3rd November, 1917. *Re* status of applicants for homestead entries as to nationality.
- P.C. 3163, 9th November, 1917. Granting certain lands for church and cemetery purposes.
- P.C. 3179, 13th November, 1917. Granting certain lands to A. Thoma, Calais, Alta.
- P.C. 3201, 14th November, 1917. Setting apart certain lands for the Sioux Band of Indians.
- P.C. 3242, 19th November, 1917. Granting certain lands for church purposes.
- P.C. 3210, 15th November, 1917. Granting permission to cut certain timber for ship building purposes.
- P.C. 3244, 29th November, 1917. Authorizing the granting of grazing permits in the Big Stick Forest Reserve.
- P.C. 3499, 4th January, 1918. Transferring certain lands to the Indian Affairs Department.
- P.C. 3512, 4th January, 1918. Granting certain lands for use for Customs purposes.
- P.C. No. 41-72, 10th January, 1918. Granting certain lands for right of way purposes.
- P.C. 65, 12th January, 1918. Granting certain lands to Alex. Cardinal, Jr., Fort Vermilion.
- P.C. 67, 12th January, 1918. Granting certain lands to Chas. Enn, Calais, Alberta.
- P.C. 66, 12th January, 1918. Granting certain lands to Chas. Standing Ribbon, Calais, Alberta.
- P.C. 157, 22nd January, 1918. Change in description of certain lands granted personal representatives of the late T. W. Chalmers.
- P.C. 34-238, 30th January, 1918. Granting certain lands for cemetery purposes.
- P.C. 317, 8th February, 1918. Granting certain lands to the province of Saskatchewan for roadway purposes.
- P.C. 332, 11th February, 1918. Authorizing sale of certain lands reclaimed by drainage.
- P.C. 67-352, 11th February, 1918. Granting certain lands to A. McKillop.
- P.C. 69-352, 11th February, 1918. Exchanging certain lands with Hudson Bay Company in order to grant homestead entry for land relinquished by the company.
- P.C. 357, 13th February, 1918. Granting certain lands to the City of Regina for park purposes.
- P.C. 400, 18th February, 1918. Setting apart certain lands as school lands.
- P.C. 401, 20th February, 1918. Enacting regulations affecting men on active service.
- P.C. 23-425, 20th February, 1918. Leasing certain lands for mining purposes.
- P.C. 430, 21st February, 1918. Granting certain lands to the Grand Trunk Pacific Branch lines for terminal purposes.
- P.C. 459, 7th March, 1918. Enacting regulations *re* homesteaders employed as farm labourers.
- P.C. 538, 7th March, 1918. Enacting certain regulations affecting men on active service who hold homestead entries.
- P.C. 37-563, 8th March, 1918. Enacting regulations governing the leasing of unpatented lands held under homestead entry. Presented by Hon. Mr. Meighen, April 2, 1918. . . . .*Not printed.*

74. Return called for by section 88, of chapter 62, Revised Statutes of Canada, requiring that the Minister of the Interior shall lay before Parliament, each year, a return of liquor brought from any place out of Canada into the Territories by special permission in writing of the Commissioner of the Northwest Territories, for the year ending 31st December, 1917. Presented by Hon. Mr. Meighen, April 2, 1918. . . . .*Not printed.*

CONTENTS OF VOLUME 14—*Continued.*

75. Return showing all lands sold by the Canadian Pacific Railway Company during the year ending 30th September, 1917, together with the names of the purchasers, in accordance with the Statutes of Canada, 1886, chapter 9, section 8. Presented by Hon. Mr. Meighen, April 2, 1918. . . . .*Not printed.*
76. Return to an Order of the House of March 25, 1918, for a return showing the total money value of the hard coal, soft coal, oil and gasoline imported into Canada during the years ending March 31, 1914, 1915, 1916 and 1917, and for each month since March, 1917. Presented by Hon. Mr. Sifton, April 2, 1918. . . . .*Not printed.*
77. Detailed statement of remissions of customs duties and the refund thereof, under section 22, Consolidated Revenue and Audit Act, through the Department of Customs, for the fiscal year ended 31st March, 1917. Presented by Hon. Mr. Sifton, April 3, 1918. . . . .*Not printed.*
78. Memorandum of Conferences between representatives of Labour and the War Committee, January, 1918. Presented by Hon. Mr. Rowell, April 3, 1918. . . . .*Printed for sessional papers only.*
79. A detailed statement of all bonds or securities registered in the Department of the Secretary of State of Canada, since last return (31st January, 1917) submitted to the Parliament of Canada under section 32 of chapter 19, of the Revised Statutes of Canada, 1906. Presented by Hon. Mr. Sifton, April 3, 1918. . . . .*Not printed.*
80. Return to an Order of the House, of the 25th March, 1918, for a copy of all letters, telegrams, petitions and other papers and documents relating to the appointment of a preventive officer at Mulgrave, N.S., to fill the position made vacant by the death of the late David Murray. Presented April 8, 1918.—*Mr. Sinclair.* . . . .*Not printed.*
81. Return to an Order of the House of the 25th March, 1918, for a return showing:—1. The total amount of war contracts fulfilled in the Province of Quebec, from August, 1914, to January, 1918. 2. How many war munitions establishments are in activity in the Province of Quebec 3. How many shells are manufactured weekly in said province. 4. How many hands are engaged in such establishments in said province. Presented April 8, 1918.—*Mr. Prevost.* . . . . .*Not printed.*
82. Return showing:—1. What sum of money has been spent for repairs to the wharf at Graham, since 1911. 2. Who has superintended the works, and the names of the parties who have been employed thereat. 3. What amount has been paid to each of them, and at what rate per diem. 4. The names of the parties supplying materials, and what amount has been paid to each of them. Presented April 8, 1918.—*Mr. Boyer.* . . . . .*Not printed.*
83. Return showing:—1. From what person or persons, firm or firms, the stone used in the rebuilding of the new Parliament building was purchased. 2. From what stone quarry or quarries the said stone was taken. 3. Where the said quarry or quarries are situated. 4. Whether public tenders were called for the supplying of said stone. 5. If so, from whom, and at what prices offers were received, and if said offers were f.o.b. at place of shipment or f.o.b. Ottawa. 6. If said stone was supplied from different quarries what quantities were supplied from each quarry respectively. Presented April 8, 1918.—*Mr. Copp.* . . . . .*Not printed.*
84. Memorandum No. 3, respecting work of the Department of Militia and Defence—European War—from February 1, 1916, to December 31, 1916. Presented by Hon. Mr. Mewburn, April 10, 1918. . . . .*Not printed.*
- 84a. Memorandum No. 4 respecting work of the Department of Militia and Defence, from January 1, 1917, to December 31, 1917. Presented by Hon. Mr. Mewburn, April 23, 1918. . . . .*Not printed.*
85. Return showing:—1. How many buildings have been rented by the Government in the city of Ottawa since February 1, 1915. 2. The owners of the said buildings. 3. Where said buildings are situated. 4. What rent per annum is paid for each building or part of building. 5. For what time or term said buildings are rented. Presented April 10, 1918.—*Mr. Papineau.* . . . . .*Not printed.*
86. Return to an Address to His Excellency the Governor General of the 21st March, 1918, for a copy of all Orders in Council appointing members of the National Service Board, and all reports made individually or collectively by the members of the Board. Presented April 10, 1918.—*Sir W. Laurier.* . . . . .*Not printed.*
87. Return to an Order of the House of the 3rd April, 1918, for a return showing:—1. Who are the commissioned officers employed at Quebec by the Military authorities in connection with Recruiting Branch, Army Service Corps, The Royal Canadian Engineers, The Foyal Canadian Garrison Artillery and the Royal Canadian Artillery. 2. How long they have been connected with each branch. 3. What service each of them is

CONTENTS OF VOLUME 14—*Continued.*

- performing. 4. What salary each one of them is receiving. 5. Who among them have performed service overseas, and how long they have been actually at the front. 6. How long they were in the trenches. 7. To which battalion they belonged when overseas. Presented April 11, 1918.—*Mr. Power* . . . . . *Not printed.*
88. Return to an Order of the House of the 4th April, 1918, for a return showing:—1. What properties, if any, have been purchased by the Militia Department or the Military Hospital Commission in Quebec City, since the first of January, 1917. 2. From whom these purchases were made, and on whose recommendation. 3. The purchase price. Presented April 11, 1918.—*Mr. Power* . . . . . *Not printed.*
89. Return to an Order of the House of the 4th April, 1918, for a return showing:—1. How many persons of all ranks are employed by the Military Hospitals Commission in British Columbia, and their names, rank and salaries. 2. Why they were appointed, and where they are stationed. 3. How many of these men have seen service at the front. 4. Who the senior official is of the Military Hospitals Commission in British Columbia. 5. What the total monthly cost of carrying on the work of the Commission in British Columbia is, and how many men are being looked after at present. 6. How many buildings are operated by the Military Hospitals Commission in British Columbia, and where they are situated. 7. How many officials from headquarters in Ottawa found it necessary to visit the Pacific Coast during the past year, and for what purpose. 8. If the Military Hospital's Commission has a regularly appointed publicity agent. If so, what his name is, and what his duties are. 9. If he has seen overseas service, and what his salary is. 10. The total cost of the publicity department during 1917. Presented April 11, 1918.—*Mr. Stevens* . . . . . *Not printed.*
90. Return to an Order of the House of the 26th March, 1918, for a return showing the names of the staff of the Hospital Commission, the number of persons employed, their names, duties, salaries, former occupation and amounts paid to each for travelling expenses. Presented April 11, 1918.—*Mr. Devlin* . . . . . *Not printed.*
91. Return to an Order of the House of the 3rd April, 1918, for a return showing:—1. How many Victoria Crosses have been awarded to members of the Canadian Expeditionary Force to date. 2. The name, address, battalion, and rank of each recipient. 3. The official respective record in respect of which each decoration was given in each case. Presented April 11, 1918.—*Mr. Middlebro* . . . . . *Printed for sessional papers only.*
92. Return to an Order of the House of the 8th April, 1918, for a copy of a certain memorandum sent to the Minister of Public Works by the senior member for Ottawa relating to the abolition of patronage, and of all papers, letters and other documents which passed between him and the Minister of Public Works in relation thereto since the 17th of December, 1917. Presented April 2, 1918.—*Mr. McMaster* . . . . . *Not printed.*
93. Summary Report of the Clerk of the Crown in Chancery of the General Election Returns, 1917. Presented by the Speaker, April 15, 1918 . . . . . *Not printed.*
94. Return to Order of the House of the 11th April, 1918, for a return showing:—1. What steps, if any, have been taken by the Government to investigate war trade conditions in the United States. 2. Apart from members of the Cabinet if any parties have been sent by the Canadian Government on missions respecting war trade conditions in the United States. If so, what the names are of those who have been sent. 3. If any such parties have been sent, what the total expense is to the Government of such missions. Presented April 15, 1918.—*Mr. Devlin* . . . . . *Not printed.*
95. Return to an Address to His Excellency the Governor General, of the 26th March, 1918, for a copy of all Orders in Council, reports and correspondence with respect to the admission free of duty of farm tractors and other agricultural implements. Presented April 15, 1918.—*Sir W. Laurier* . . . . . *Not printed.*
96. Copies of Orders in Council issued in connection with the Military Voters' Act, 1917, and the War-time Elections Act, as follows:—  
P.C. 3010, 7th November, 1917.—Instructions for the guidance of electors under the Military Voters' Act, 1917.  
P.C. 3158, 9th November, 1917.—Scrutineers; appointment of six and providing payment for services and expenses, etc.  
P.C. 3159, 9th November, 1917.—Presiding officers; appointment of certain and providing payment for services as, etc.  
P.C. 3276, 24th November, 1917.—Special returning officers and clerks; appointment of and providing payment for services as, etc.  
P.C. 3277, 27th November, 1917.—Regulation providing polls for returned military electors who are Indians.  
P.C. 3322, 29th November, 1917.—Provision for taking votes of military electors belonging to units or drafts under orders to leave Canada before polling day.  
P.C. 3404, 17th December, 1917.—Presiding officers; Engineer Captain W. M. Frowd, appointed in place of Captain F. C. C. Pascoe, at Halifax, N.S.  
P.C. 6405, 17th December, 1917.—*Re* taking votes of units under orders to leave Canada, O.C. 29th November, 1917, amended.  
P.C. 7, 8th January, 1918.—Special returning officers and clerks; appointment of further number of.

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- P.C. 8, 4th January, 1918.—Scrutineers, travelling and living expenses of defined.
- P.C. 9, 4th January, 1918.—Special returning officers and clerks; remuneration of.
- P.C. 10, 4th January, 1918.—Scrutineers; appointment Major Thomas Gibson, of London, Eng., in place of Brigadier-General J. F. L. Embury.
- P.C. 11, 4th January, 1918.—Further regulations for carrying the Military Voters' Act, 1917, into effect.
- P.C. 12, 8th January, 1918.—Payment for services of Boards of Appeal in Ontario and revising officers in Nova Scotia *re* revision of voters' lists.
- P.C. 13, 4th January, 1918.—Election in Halifax; Ward 6 constituted one single polling division.
- P.C. 63, 8th January, 1918.—Special returning officers and clerks; remuneration of. O.C. 4th January, 1918 (P.C. No. 9) amended.
- P.C. 84, 12th January, 1918.—Special returning officers; appointment Capt. Harold Baker, C.E.F., London, Eng., in place of Lt.-Col. Nelson Spencer.
- P.C. 85, 12th January, 1918.—Clerk of special returning officer; appointment Archibald Dickson, of Harrow, Eng. in place of Capt. Rippon, R.A.M.C.
- P.C. 98, 15th January, 1918.—Clerk of special returning officers; appointment E. L. Ginna in place of Ainslie W. Greene.
- P.C. 162, 19th January, 1918.—Resignation of R. A. Pringle as special returning officer and appointment of John W. P. Ritchie in his stead, and appointment of special returning officers and clerks.
- P.C. 323, 8th February, 1918.—Length of sessions to constitute a day's work.
- P.C. 396, 18th February, 1918.—Lieut. N. G. Charlton, presently in France, appointed to replace Major Powell as special returning officer.
- P.C. 397, 18th February, 1918.—Edgar E. R. Chevrier appointed to replace J. A. Pinard as special returning officer.
- P.C. 602, 12th March, 1918.—Proclamation of returns from overseas issued on receipt of telegraphic information. Presented by Hon. Mr. Doherty, April 15, 1918.

*Not printed*

97. Return to an Order of the House of the 3rd April, 1918, for a copy of all judgments rendered up to date under the operation of the Military Service Act, 1917, by the Central Appeal Judge. Presented April 15, 1918.—*Mr. Trahan* . . . . .*Not printed.*
98. Return to an Order of the House of the 20th March, 1918, for a return showing the names of all persons employed in Ottawa in the Military Service Council, their salaries and former occupations. Presented April 15, 1918.—*Mr. Devlin* . . . . .*Not printed.*
99. Report of the Royal Commission appointed to inquire into and report upon the Pilotage System and its administration at the port of Halifax, N.S. Presented by Hon. Mr. Ballantyne, April 15, 1918. . . . .*Not printed.*
100. Return to an Order of the Senate, dated 21st March, 1918, showing:—The details of certain totals, being the estimated cost of streets, sewers, etc., given on figures 29-30, placed between pages 96-97 of Rural Planning and Development, written by Thomas Adams, being a report published by the Commission of Conservation dated 1917. The said totals being \$35,584, \$26,736, \$20,748 and \$23,533.—*The Senate* . . . . .*Not printed.*
101. Return to an Order of the Senate, dated 22nd March, 1918, showing:—1. The different aviation camps established by the Canadian Government and their location, with the date of their establishment. 2. The number of aviators who have gone through those camps since their establishment, and of those who have obtained their certificates. 3. The number of aviators now qualifying in each of these camps. 4. The number of accidents which happened in each of these camps, distinguishing: (a) mortal accidents; (b) serious accidents; (c) slight accidents, with their respective dates. 5. The number of machines out of commission, as a total loss or seriously damaged.—*The Senate*.  
*Not printed.*
102. Return to an Order of the House of the 10th April, 1918, for a copy of all correspondence concerning the resignation of W. F. O'Connor, K.C., as Cost of Living Commissioner. Presented April 16, 1918.—*Mr. Lemieux* . . . . .*Not printed.*
103. Copy of Order in Council, P.C. 758, dated 26th March, 1918, relating to the making of a contract with the Dominion Steel Corporation, Limited, for the manufacture of steel plates required in the construction of ships and boilers. Presented by Hon. Mr. Ballantyne, April 18, 1918. . . . .*Not printed.*
104. Copy of Order in Council, P.C. 915, dated 16th April, 1918, prohibiting the press from publishing any adverse statement, report or opinion concerning the action of the allied nations in the prosecution of the war; and also prohibiting any person from publicly expressing any adverse statement, report or opinion concerning the same. Presented by Hon. Mr. Doherty, April 18, 1918.
105. Report of the Military Service Council on the administration of the Military Service Act, 1917 Presented by Hon. Mr. Doherty, April 18, 1918.

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 CONTENTS OF VOLUME 14—*Continued.*

106. Return to an Order of the House of the 15th April, 1918, for a return showing:—1. The sums of money expended on repairs of a wharf at Ile Perrot Sud, since 1911. 2. The names of those who have been employed on said works, and the amount of money which has been paid to each of them. 3. The names of the parties who have supplied the materials, and the amount of money which has been paid to each of them. Presented April 18, 1918.—*Mr. Boyer* . . . . .*Not printed.*
107. Return to an Order of the House of the 15th April, 1918, for a return showing:—1. The sums of money expended on repairs at Hudson's Wharf, since 1911. 2. The names of those who have been employed on said works, and the amount of money which has been paid to each of them. 3. The names of the parties who have supplied the materials, and the amount of money which has been paid to each of them. Presented April 18, 1918.—*Mr. Boyer* . . . . .*Not printed.*
108. Return to an Order of the House of the 15th April, 1918, for a return showing:—1. The sums of money expended on repairs of wharf at Ile Perrot Nord, since 1911. 2. The names of those who have been employed on said works, and the amount of money which has been paid to each of them. 3. The names of the parties who have supplied the materials, and the amount of money which has been paid to each of them. Presented April 18, 1918.—*Mr. Boyer* . . . . .*Not printed.*
109. Return to an Order of the House of the 15th April, 1918, for a return showing:—1. The sums of money expended on repairs at St. Zotique Wharf, since 1911. 2. The names of those who have been employed on said works, and the amount of money which has been paid to each of them. 3. The names of the parties who have supplied the materials, and the amount of money which has been paid to each of them. Presented April 18, 1918.—*Mr. Boyer* . . . . .*Not printed.*
110. Return to an Order of the House of the 10th April, 1918, for a copy of all correspondence and other papers concerning the merger of the Bank of British North America with the Bank of Montreal. Presented April 18, 1918.—*Mr. Devlin* . . . . .*Not printed.*
111. Return to an Order of the House of the 11th April, 1918, for a return showing:—1. Referring to *Canada Gazette* statement of March 30th giving particulars as to circulation and specie, against what approved securities were Dominion notes issued to the value of \$92,820,000. 2. To what banks these notes were issued, and what the respective security was in each case. Presented April 18, 1918.—*Mr. Trahan* . . . . .*Not printed.*
112. Return to an Order of the Senate, dated April 16th, 1918, to the Clerk of the Senate for the following information:—1. The number of pages of the Senate Debates of last session, giving the number of unrevised and the number of revised. 2. Is the French translation made from the unrevised edition or from the revised? 3. Is the French translation of the Debates of last session completed? If so, when was the last copy delivered to the Printing Bureau? If not yet completed, how many pages remained untranslated on the 15th of March last? 4. How many translators are employed on the regular staff for this work? 5. What is the name and the salary of each? 6. Have they or any of them been employed at any other work for the Senate during or since last session? If so, what work? 7. Has any other person or persons been employed to assist the regular staff in the work of translating the Debates of last session? If so, state the name of each such person, the length of time he has been so employed, and the amount of his remuneration therefor. 8. Is each translator expected to translate a definite minimum number of pages of the Debates each working day? If so, how many printed pages are supposed to constitute a fair day's work for each man? 9. Did the regular staff of translators translate into English the speeches delivered in French during the last session? If so, how many pages? If not, who did this work, and what extra remuneration, if any, was paid for it?—*The Senate* . . . . .*Not printed.*
113. Statement issued by the War Cabinet at the request of the Board of Admiralty, showing for the United Kingdom and for the World, for the period August, 1914, to December, 1917:—1. Mercantile losses by enemy action and marine risk. 2. Mercantile Shipbuilding Output. 3. Enemy vessels captured and brought into service; together with diagrams, showing mercantile losses and shipbuilding output for the United Kingdom and for the world, for the same period. Presented by Sir Robert Borden, April 18, 1918.
114. Return to an Order of the House of the 21st March, 1918, for a copy of all telegrams, letters, petitions and all other correspondence and documents, concerning the service of the steamer *Amelia* between Pictou and Magdalen Islands. Presented April 19, 1918.—*Mr. Lemieux* . . . . .*Not printed.*
115. Return to an Order of the Senate to the Clerk dated April 18, 1918, for a statement showing:—1. The names of all persons employed in connection with the work of preparing the Minutes of Proceedings, the Order Paper and the Journals of this House (*a*) in English and (*b*) in French, and the salary or other remuneration paid to each. 2. The number of each of these documents printed (*a*) in English and (*b*) in French, and the cost of printing and binding the same for the fiscal year ending the 31st of March, 1918.—*The Senate* . . . . .*Not printed.*

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**CONTENTS OF VOLUME 14—Continued.**

- 116.** Statement showing how many members of the outside service have been transferred to the inside service since October 1, 1917, and how many persons have been appointed under section 21 of the present Civil Service Act since that time. Presented by Hon. Mr. Maclean, April 22, 1918. . . . .*Not printed.*
- 117.** Return to an Address to His Excellency the Governor General of the 5th April, 1918, for a copy of Orders in Council in reference to the appointment of Colonel Langton as Paymaster General in the Militia Department. Presented April 22, 1918.—*Mr. Copp.* . . . . .*Not printed.*
- 118.** Return to an Order of the House of the 18th April, 1918, for a return showing:—1. What blue books have been printed during the years 1916 and 1917. 2. Which of said books have been printed in both languages. 3. Which of said books have been printed in the English language only. 4. Which of said books have been printed in the French language only. Presented April 22, 1918.—*Mr. Demers.* . . . . .*Not printed.*
- 119.** Copy of Order in Council P.C. 807, dated the 3rd of April, 1918, with respect to the reservation of Dominion Lands for disposition under the Soldiers' Settlement Act (Chapter 21, 7-8 George V). Presented by Hon. Mr. Meighen, April 23, 1918. . . . .*Not printed.*
- 120.** Statement of amounts paid to newspapers, etc., on account of Victory Loan Advertising. Presented by Sir Robert Borden, April 24, 1918. . . . .*Not printed.*
- 121.** Copy of the Report submitted by the Officer in charge of the Canadian War Records Office, London England, to the Right Honourable Sir Robert L. Borden, G.C.M.G., M.P., Prime Minister of Canada, on the work of the Canadian War Records Office since the date of its foundation to the 11th January, 1917. Presented by Sir Robert Borden, April 24, 1918. . . . .*Not printed.*
- 121a.** Copy of the Second Annual Report of the Canadian War Records Office for the year 1917. Report submitted by the officer in charge to the Hon. Sir Edward Kemp, K.C.M.G., M.P., Overseas Minister of Militia and Defence. Presented by Sir Robert Borden, May 17, 1918. . . . .*Not printed.*
- 122.** Return to an Order of the House of the 5th April, 1918, for a return showing:—1. How many persons belonging to class one were liable to be called under the Military Service Act, 1917, in each of the provinces and the Yukon Territory, respectively. 2. How many in each province have reported themselves for service. 3. How many in each province have asked to be exempted from military service. 4. How many in each province have been exempted by local tribunals. 5. How many decisions rendered in each province by local tribunals have been appealed from by: (a) recruits; (b) representatives or military authorities. 6. In how many appeal cases have decisions been rendered in each province, how many appeals have been allowed, and how many rejected in each province. 7. How many cases are still pending before the Central Appeal Judge. 8. Whether it is the intention of the military authorities or public representatives to appeal in some other cases, either before the appeal tribunal or before the Central Appeal Judge. 9. If so, how many in each province. Presented April 24, 1918.—*Mr. Trahan.* . . . . .*Not printed.*
- 123.** Return to an Order of the House of the 5th April, 1918, for a copy of all correspondence, certificates, recommendations and other documents in reference to the granting of a total disability pension to Colonel R. H. Labatt.—Presented April 24, 1918.—*Mr. Copp.* . . . . .*Not printed.*
- 124.** Return to an Order of the House of the 24th April, 1918, for a return showing:—1. Upon whose recommendation the returning officer for the county of Joliette, in the last Federal election, was appointed. 2. Whether enumerators were appointed in accordance with paragraph one, section forty-two, of the Dominion Elections Act, as amended by the War-time Elections Act of 1917. 3. If so, the names of the enumerators so appointed, when the list of such enumerators was sent, and to what person or persons said list was sent. Presented April 25, 1918.—*Mr. Denis.* . . . . .*Not printed.*
- 125.** Copy of Order in Council, P.C. 812, dated 5th April, 1918.—Regulations governing the Soldier Settlement Loan under the authority of the Soldier Settlement Act (Chapter 21, 7-8 George V). Presented by Hon. Mr. Meighen, April 26, 1918. . . . .*Not printed.*
- 126.** Return to an Address to His Excellency the Governor General of the 25th March, 1918, for a copy of all letters and telegrams exchanged between the Dominion Government and the various provincial executives concerning the Order in Council of 22nd December, 1917, respecting the sale of securities by provincial, colonial or foreign governments, municipalities and other bodies. Presented April 29, 1918.—*Mr. Lemieux.* . . . . .*Not printed.*

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 CONTENTS OF VOLUME 14—*Continued.*

- 127.** Return to an Order of the House of the 25th March, 1918, for a return showing:—1. If any money has been paid to the Dundalk *Herald*, the Flesherston *Advance*, the Markdale *Standard*, the Durham *Chronicle*, the Grey *Review*, or the Hanover *Post* for advertising or for any other reason since 1st October, 1917. If so, how many was paid in the case of each of the papers mentioned. Presented April 29, 1918.—*Mr. Cahill.*  
*Not printed.*
- 128.** Return to an Order of the House of the 15th April, 1918, for a return showing:—1. The officers employed at Quebec on the staff of the Military District No. 5. 2. How long they have been connected with this branch. 3. What service each of them is performing. 4. What salary and allowance each of them is receiving. 5. Names of those amongst them who have performed service overseas. 6. How long they have been actually at the front. 7. How long they were in the trenches. 8. To which battalion they belonged while overseas. Presented April 29, 1918.—*Mr. Power.* . . . *Not printed.*
- 129.** Report of the Commissioners appointed to investigate the businesses of William Davies Co., Ltd., and Matthews-Blackwell, Ltd., dated 1st November, 1917. Presented by Hon. Mr. Crothers, May 1, 1918.
- 130.** Return to an Order of the House of the 24th April, 1918, for a return showing the details of certain totals being the estimated cost of street sewers, etc., given on figures 29 and 30 placed between pages 96-97 of Rural Planning and Development written by Thomas Adams, being a report published by the Commission of Conservation dated 1917. The said totals being \$35,584, \$26,736, \$29,748 and \$23,533. Presented May 1, 1918.—*Mr. Lemieux.* . . . *Not printed.*
- 131.** Statement of expenditure of the Dominion Publicity Committee in account with the Dominion Government, and in connection with the Victory Loan, 1917. Presented by Hon. Mr. Maclean, May 1, 1918.
- 131a.** Report of Mr. A. E. Ames, Chairman of the Dominion Executive Committee of Canada, in connection with the Victory Loan, 1917. Presented by Hon. Mr. Maclean, May 1, 1918. . . . *Not printed.*
- 131b.** Statement showing details of remuneration paid in connection with Victory Loan. Presented by Hon. Maclean, May 11, 1918. . . . *Not printed.*
- 132.** Return to an Order of the House of the 3rd April, 1918, for a return showing:—1. How many local tribunals were established throughout Canada under the Military Service Act. 2. What remuneration per diem was allowed each member of such tribunal. 3. What was remuneration per day for Secretary of tribunal and also for constables or caretaker of the tribunal sessional chamber. 4. What has been the total expenditure to date on account of tribunals under the Military Service Act. 5. Whether there are any outstanding claims unpaid. Presented May 1, 1918.—*Mr. White (Victoria).*  
*Not printed.*
- 133.** Report of the Ninth Annual Meeting of the Commission of Conservation, Canada, November 27-28, 1917.—(*The Senate*) . . . *Not printed.*
- 134.** Return showing:—1. Whether the building of the hospital for invalid soldiers at Ste. Anne de Bellevue is under Government control. 2. If not, through whose agency. Whether it is being built by contract or under the supervision of any public body. 3. What sum has been paid by the Government for the land where this hospital is being erected. 4. What the cost of construction will be. 5. How many invalid soldiers it will accommodate. 6. How far this hospital is from Macdonald College. 7. Whether the Government has considered the very grave inconvenience which may result from the erecting of such an institution in the vicinity of a college where hundreds of young ladies are being educated. Presented May 1, 1918.—*Mr. Boyer.* . . . *Not printed.*
- 135.** Return to an Order of the Senate, dated April 23, 1918, giving the following information:—The names, dates of appointments, salaries or wages of all clerks and employees of the Department of Public Printing and Stationery, under the following heads:—(a) King's Printer's staff, including advertising. (b) Printing Branch. 1. Clerks. 2. Proofreaders. 3. Typesetting rooms: Mono, Lino, Job and Parliamentary. 4. Press rooms: Platen and Cylinder. 5. Binding: Book, Pamphlet. 6. Stereotyping. 7. Map engraving. 8. Any other Departments. (c) Outside Printing Branch. (d) Accountants. (e) Stationery. (f) Distribution. (g) Mechanical staff. (h) *Canada Gazette*. (i) Caretaker. (j) Any other Departments.—(*The Senate*) . . . *Not printed.*
- 136.** Return showing:—1. Whether tenders have been recently submitted to the Department of Militia and Defence or to the War Purchasing Commission for a supply of Smoked Wiltshire Bacon, at Toronto, Kingston and London. 2. If so, who the tenderers are, and what their prices are, in each case. 3. To whom the contract has been awarded in each case, and at what price. Presented May 2, 1918.—*Mr. Murphy.* . . . *Not printed.*



CONTENTS OF VOLUME 14—*Continued.*

- 137.** Order in Council, P.C. 26/942, dated the 19th April, 1918, with regard to remissions made under section 88 of The Indian Act, chapter 81, R.S.C. 1906, of the interest on arrears of purchase price of Park Lot No. 19, in the village of Southampton, in the County of Bruce, Ontario, amounting to \$18.—(*The Senate*)... .*Not printed.*
- 138.** Order in Council, P.P. 871, dated 23rd April, 1917, being regulations for the protection of migratory game birds, migratory insectivorous and migratory non-game birds, which inhabit Canada during the whole or any part of the year, under the authority of The Migratory Bird Act, 7-8 George V, 1917.—(*The Senate*)... .*Not printed.*
- 139.** Return to an Order of the House of the 6th May, 1918, for a return showing:—What the gross earnings of the National Transcontinental railway were for the year ending 31st March, 1918; how much was earned between Moncton and Quebec, between Quebec and Cochrane Junction, between Cochrane Junction and Winnipeg, and between Lake Superior Junction and Fort William, and the amount paid by that railway to the Canadian Pacific for terminal charges at Quebec. Presented May 13, 1918.—*Mr. Lacigueur*... .*Not printed.*
- 140.** Return to an Order of the House of the 24th April, 1918, for a copy of all correspondence, letters, telegram and other papers exchanged between the Food Controller and the Winnipeg Civic Authorities concerning cold storage conditions at Winnipeg. Presented May 13, 1918.—*Mr. Lemieux*... .*Not printed.*
- 141.** Interim Report No. 2, Georgian Bay Canal Commission,—Wheat Prices, and a Comparative Study of United States and Canadian Markets, by W. Sanford Evans. Presented by Hon. Mr. Carvell, May 13, 1918... .*Printed for distribution and Sessional Papers.*
- 142.** Interim Report No. 3, Georgian Bay Canal Commission—Transatlantic Passenger and Freight Traffic and Steamship Subsidies, by W. Sanford Evans. Presented by Hon. Mr. Carvell, May 13, 1918... .*Printed for distribution and Sessional Papers.*
- 143.** Return to an Order of the House, of the 24th April, 1918, for a copy of all correspondence and petitions passed between the Prime Minister and Civil Service Federation, concerning certain appointments made in the Post Office and Customs Departments since the 17th of December, 1917. Presented May 13, 1918.—*Mr. Lemieux*... .*Not printed.*
- 144.** Return showing:—1. Whether the Government is aware that in the past sixteen months in the Cities of Winnipeg, Hamilton, Toronto, Ottawa and Montreal, the following quantities of foodstuffs, are reported to have been ordered to be destroyed as unfit for human consumption;—(a) Meats: Winnipeg, 7,262 lbs.; Hamilton, 4,874 lbs.; Toronto, quantities not given in lbs., only sides, quarters, legs, etc.; Ottawa, 7,787 lbs.; Montreal, 105,898 lbs. (b) Poultry: Winnipeg, 11,364 lbs.; Hamilton, 8 fowl; Montreal, 2,344 lbs. (c) Fish: Winnipeg, 9,066 lbs.; Toronto, 74,587 lbs., weight not given, only number of packages for remainder; Montreal, 137,903 lbs. (d) Vegetables: Winnipeg, 265,565 lbs.; Toronto, 5,855 lbs. cabbage, the rest weight not given, only crates, baskets, etc., also recently 48,010 lbs., or 24 tons of food unfit for human consumption; Montreal, 13,940 lbs. (e) Eggs: Winnipeg, 3,013 lbs.; Hamilton, 40 doz.; Toronto, 1,050 doz., 6 tubs, 1 pail, and 8 gallons yolk. (f) Butter: Winnipeg, 3,374 lbs.; Hamilton, 22 lbs. (g) Fruit (fresh and dried): Winnipeg, fresh, 46,375 lbs., dried, 37,207 lbs.; Hamilton, fresh, 12 baskets; Montreal, fresh, 3,362 lbs. 2. If so, what action the Government proposes taking to prevent a continuance of such waste. Presented May 13, 1918.—*Mr. Foster (York)*.
- 145.** Return showing:—1. Whether the Government is aware that 236,490 pounds of food were destroyed in the city of Toronto between April 4 and April 29, 1918, according to a report of one of the Departments of the Toronto City Corporation. 2. Whether the Food Controller has taken any action to stop such wholesale waste of food. 3. If so, what he has done in this particular case. Presented May 15, 1918.—*Mr. Proulx*... .*Not printed.*
- 146.** Return to an Order of the House of the 22nd April, 1918, for a return showing:—1. The names of all persons employed in connections with the work of preparing the Votes and Proceedings, the Order Paper and the Journals of the House (a) in English, and (b) in French, and the salary and other remuneration paid to each. 2. The number of each of these documents printed, (a) in English, and (b) in French, and the cost of printing and binding the same for the fiscal year ending the 31st of March, 1918. Presented May 15, 1918.—*Mr. Currie*... .*Not printed.*
- 147.** Return to an Order of the House of the 22nd April, 1918, for a return showing:—1. The names of all persons employed in connection with the work of reporting and translating in the House. 2. How long each has been so employed. 3. The rate of remuneration paid to each during the past year, with the total amount paid to each class of persons. 4. Number of copies of the Debates of the House printed during the past year, (a) in English, and (b) in French, specifying the number of the unrevised and of the revised editions, respectively. 5. The cost of printing and binding the same for each year since 1900, inclusive. 6. The amounts paid in addition to the above, in each year since 1900, inclusive, for (a) reporting, (b) translating, (c) typewriting, and (d) printing proceedings before Parliamentary Committees. Presented May 15, 1918. *Mr. Currie*... .*Not printed.*

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 CONTENTS OF VOLUME 14—*Continued.*

148. Return to an Order of the House of the 24th April, 1918, for a return showing:—1. What control the Canadian Government has over the operations of the Imperial Royal Flying Corps in Canada, and what Department of the Government would exercise this control. 2. Whether the Canadian Government has any officers or representatives on the Canadian Branch of the Imperial Flying Corps. If so, what their names are, and what positions they occupy. 3. Whether the Canadian Government intends to take over all the offices, plant, and equipment, of the Imperial Royal Flying Corps in Canada at an early date. If not, why not. How many accidents and deaths have occurred in Canada, United States and Overseas among our flying men. 5. The nature of the investigations into these accidents, and where the records are kept. 6. Whether the Government of Canada at the close of the war intends to establish and maintain a Canadian Flying Corps. If so, what preparations are under way, with this end in view. 7. How many Canadians and how many Americans, have joined the Imperial Royal Flying Corps in Canada. 8. How many mechanics are employed by the Imperial Royal Flying Corps in Canada. 9. What amount of money has been expended in Canada by the Imperial Royal Flying Corps. 10. How many Canadian Officers who have seen air service overseas are in the employ of the Imperial Royal Flying Corps in Canada. Presented May 16, 1918.—*Mr. Armstrong (Lambton).*
- 148a. Return to an Order of the House of the 24th April, 1918, for a return showing:—1. What status the Canadian recruits of the Royal Flying Corps have in the military affairs of Canada. 2. In the case of permanent injury or death of Canadians in the Royal Flying Corps in the discharge of their duties, what provision has been made to pension their dependents. 3. How many men came to Canada from England to establish training camps for the Royal Flying Corps; if any of these men have returned to England. If so, how many have been replaced by Canadians. 4. What comparative results were obtained in training cadets at the training camps around Toronto and the camps located in Texas. 5. Whether the Royal Flying Corps went to Texas and remained there at the expense of, and on the request of the United States Government. 6. Whether the authorities of the Royal Flying Corps were asked to give consideration to a location in British Columbia. If so, what the nature of the request was. 7. If it is not a fact that the weather conditions in Texas proved very unfavourable for flying corps training purposes. 8. What investigations of a technical character were made of the air conditions in Texas before selecting that place as a training ground for our airmen. 9. What investigations were made as to the atmospherical and climatical conditions in British Columbia regarding the locating of an air squadron training camp in that province. 10. Whether the Imperial Munitions Board took an option to lease a large area of land at Delta, near Vancouver, B.C., to establish winter training camps for the Canadian training squadrons of the Royal Flying Corps, and whether tenders were asked for materials, hangers, buildings, etc. If so, why these negotiations were dropped. 11. How many deaths in the Royal Flying Corps training camps in Texas resulted from atmospherical conditions, which are unfavourable to the successful training of aviators. 12. Whether any requests have been made to the Canadian Government for assistance to the Royal Flying Corps either through appropriation or gifts of money for training machines. If so, the nature of these requests. 13. Where the records are kept of the causes of injury or illness of Canadian cadets and mechanics of the Royal Flying Corps. 14. Whether English-born drill sergeants are exclusively employed in the training of Canadian cadets in the Royal Flying Corps in Canada. 15. What efforts have been made by the Canadian Government or individuals or organizations to develop and assist the Flying Corps in Canada, and whether the Government has extended any assistance to these individuals or organizations. 16. Whether any part of the grant of \$100 provided by Order in Council for each aviator trained in Canada to defray a part of the expense incurred in training has been paid, or whether any request for payment has been made. Presented May 16, 1918.—*Mr. Armstrong (Lambton)* . . . . .*Not printed.*
149. Second Report of the War Purchasing Commission, covering period from 1st January, 1917, to 31st March, 1918. Presented by Sir Robert Borden, May 16, 1918. . . . .*Not printed.*
150. Return to an Order of the Senate dated 9th May, 1918, for a return giving a statement of imports of petroleum oils and spirits (gallons, value and duty) during each of the following fiscal years ending 31st March: 1909-10-11-12-13-14-15-16-17, and for each month of the unexpired year ending 31st March, 1918.—(*The Senate*) . . . . .*Not printed.*
151. Report of the Administrative Chairman of the Honourary Advisory Council for Scientific and Industrial Research 1917-18. Presented by Sir George Foster, May 17, 1918. . . . .*Not printed.*
152. Return to an Address to His Excellency the Governor General, of the 13th May, 1918, for a copy of the Order in Council appointing Mr. Main Johnson and passed under the War Measures Act as mentioned by Hon. Mr. Rowell on page 1350 of *Unrevised Hansard*. Presented May 20, 1918.—*Mr. Archambault* . . . . .*Not printed.*
153. First Report of the Munition Resources Commission, November, 1915, to February, 1918, inclusive. Presented by Hon. Mr. Burrell, 20th May, 1918. . . . .*Not printed.*

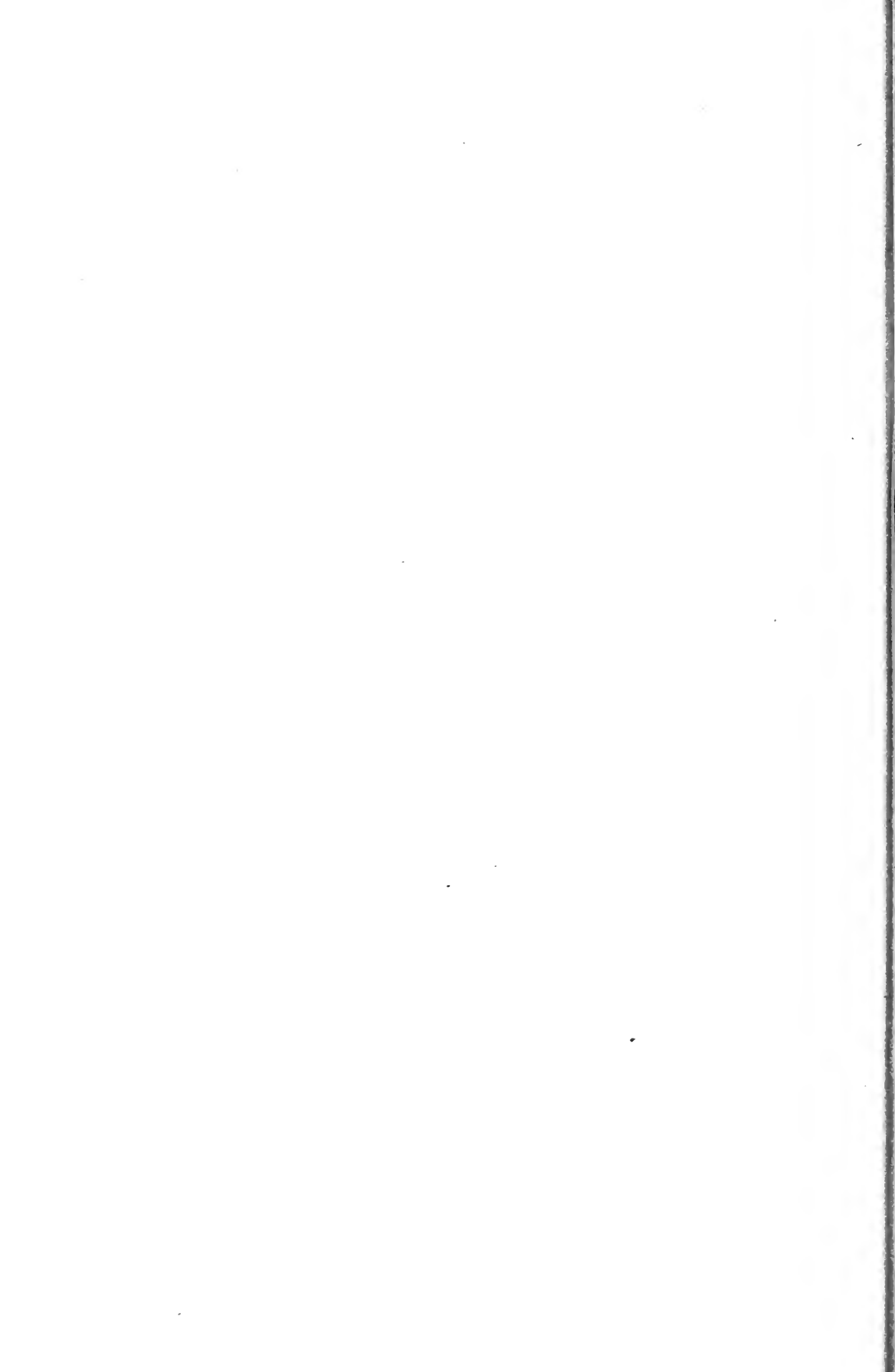
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**CONTENTS OF VOLUME 14—*Concluded.***

- 154.** Return to an Order of the House of the 22nd April, 1918, for a return showing:—What amounts have been paid by the Government for printing or advertising to the *Globe*, Toronto, and the *Devoir*, Montreal, during each of the fiscal years ending 31st March, 1915, 1916, 1917 and 1918. Presented May 20, 1918.—*Mr. McMaster*... ..*Not printed.*
- 155.** Return to an Order of the House of the 25th March, 1918, for a copy of all petitions, letters or communications of any kind either asking for or opposing the importation of coolie labour, from first of September last to date. Presented May 20, 1918.—*Sir Wilfrid Laurier*... ..*Not printed.*
- 156.** Return to an Order of the House of the 25th March, 1918, for a copy of all memoranda and petitions by Slav subjects of Austria, naturalized in Canada, setting forth grievances and suggesting remedies. Presented May 20, 1918.—*Sir Wilfrid Laurier*... ..*Not printed.*
- 157.** Return to an Order of the Senate, dated 12th April, 1918, for a return giving:—1. The name, rank, and qualifications of each of the persons, upon whose advice and recommendation, lobster hatcheries, heretofore operated in Canada by the Department of Naval Affairs, are to remain closed. 2. Copies of the reports and recommendations (or if the same are published, the references thereto in official publications), which fully disclose all the facts, reasons, and grounds, upon which the Department makes its decision to abandon the policy of operating lobster hatcheries.—(*The Senate*)... ..*Not printed.*
- 158.** Order in Council P.C. 668, dated 25th March, 1918, *re* procedure for conferring titles of honour upon subjects of His Majesty ordinarily resident in Canada. Presented by Sir Robert Borden, May 21, 1918... ..*Not printed.*
- 159.** Return to an Order of the House of the 2nd May, 1918, for a return showing:—1. The amount paid the Toronto *Globe* and the Toronto *Star* respectively, from 1st January, 1917, to 1st April, 1918, for all service between the said dates. 2. Whether any contract of any kind was made with either of the said newspapers between the dates mentioned for advertising, publicity, or news editorial and feature service. 3. If so, by whom said contract or contracts were made, and what the particulars are thereof. Presented May 22, 1918.—*Mr. Murphy*... ..*Not printed.*
- 160.** Return to an Order of the House of the 8th April, 1918, for a return showing:—1. What quantity of bran, shorts, or mill feed have been exported to the United States (*a*) by license; (*b*) without license, between 1st August, 1917, and 28th February, 1918. 2. To what firms in Canada licenses to export this feed have been granted, and for what quantity in each case. Presented May 22, 1918.—*Mr. Kay*... ..*Not printed.*
- 161.** Return to an Order of the House of the 15th May, 1918, for a return showing:—1. The total amount paid to the Journal Publishing Company of Ottawa, Limited, during the fiscal years 1912-13-14-15-16-17 inclusive, for (*a*) rentals; (*b*) printing. 2. Whether the official cheques of the Government for said rentals and printing jobs were issued directly in favour of the above company, or to P. D. Ross, Esq. Presented May 23, 1918.—*Mr. Brouillard*... ..*Not printed.*
- 162.** Return to an Order of the House of the 16th May, 1918, for a return showing:—1. The total number of the families of soldiers deceased since the beginning of the war, who receive pensions from the Government. 2. Of this number, how many reside in Great Britain, how many reside in Canada, and how many reside elsewhere. Presented May 23, 1918.—*Mr. Seguin*... ..*Not printed.*
- 163.** Report dealing with the purchase and sale of Fordson tractors by the Canada Food Board. Presented by Hon. Mr. Crerar, May 23, 1918... ..*Not printed.*







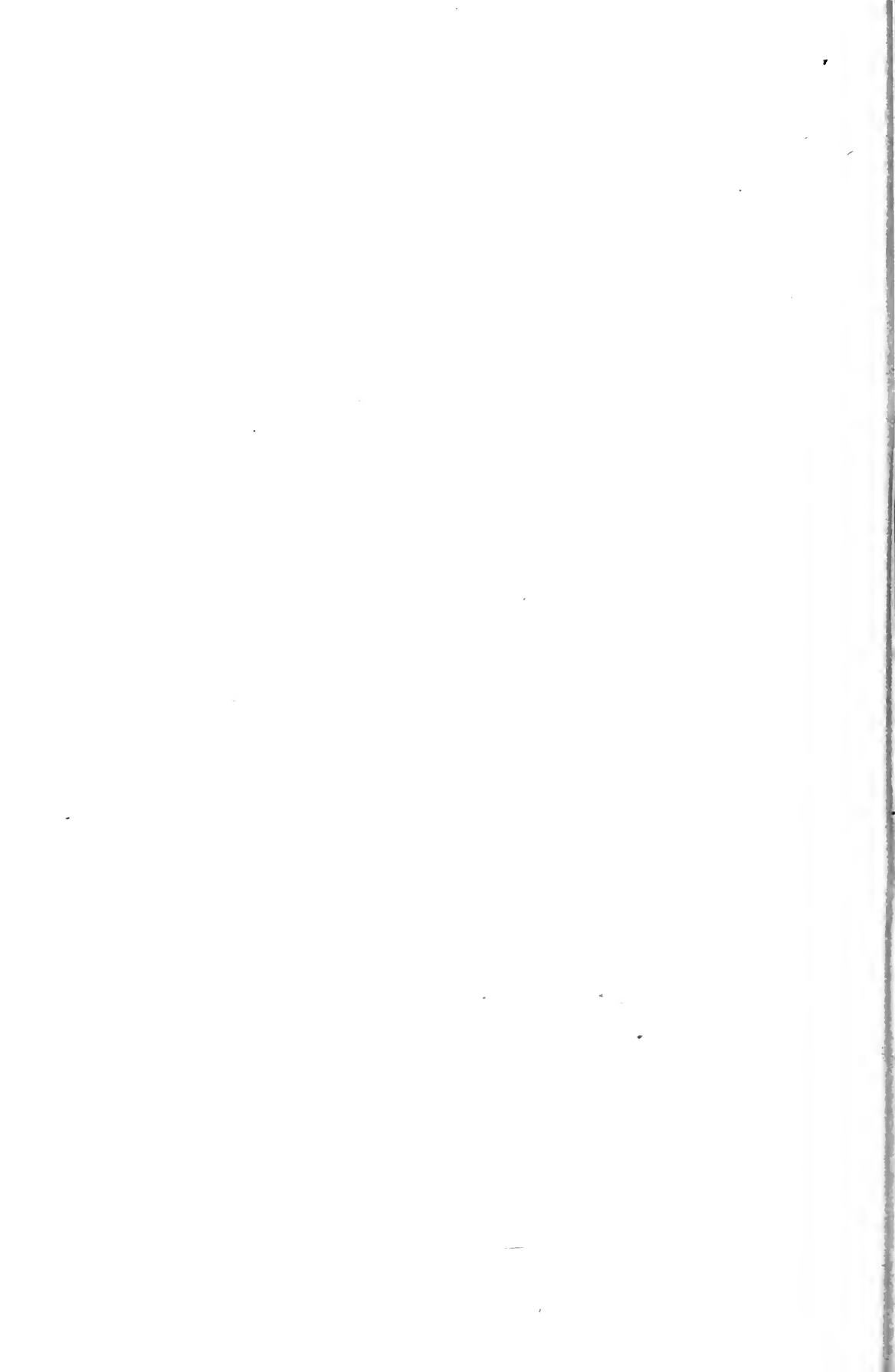
CANADA  
REPORT  
OF THE  
MINISTER OF PUBLIC WORKS  
ON THE  
WORKS UNDER HIS CONTROL  
FOR THE  
FISCAL YEAR ENDED MARCH 31  
1917

*Submitted in accordance with the Provisions of Chapter 39, Section 34,  
of the Revised Statutes of Canada.*

PRINTED BY ORDER OF PARLIAMENT.



OTTAWA  
J. DE LABROQUERIE TACHÉ  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1918





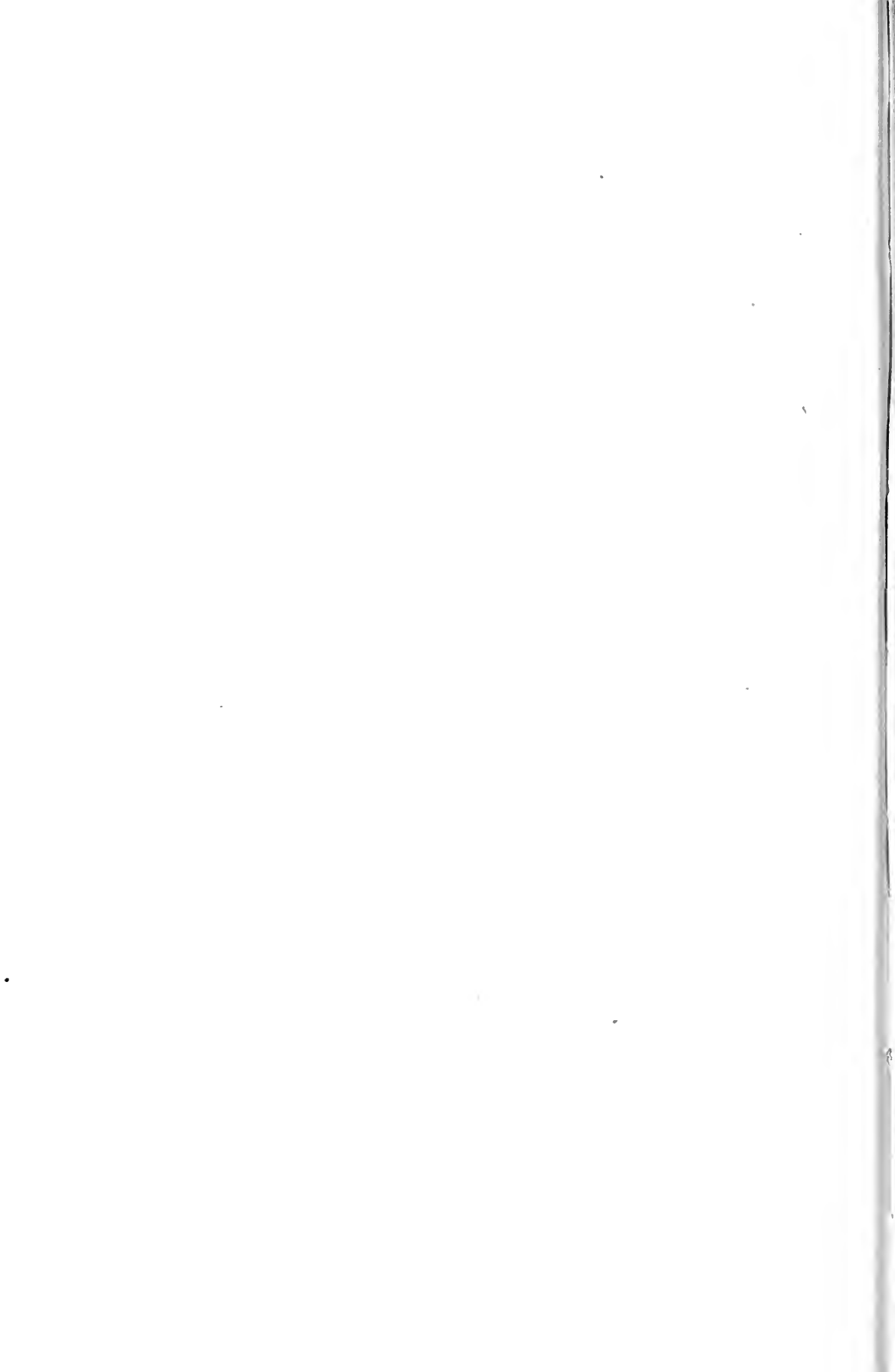
*To His Excellency the Duke of Devonshire, K.G., P.C., G.C.M.G., G.C.V.O., etc., etc.,  
Governor General and Commander in Chief of the Dominion of Canada.*

I have the honour to lay before Your Excellency the Report of the Department of Public Works of Canada, for the fiscal year ended March 31, 1917.

I have the honour to be, sir,  
Your Excellency's most obedient servant,

F. B. CARVELL,  
*Minister of Public Works.*

OTTAWA, December 3, 1917.



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DEPUTY MINISTER.

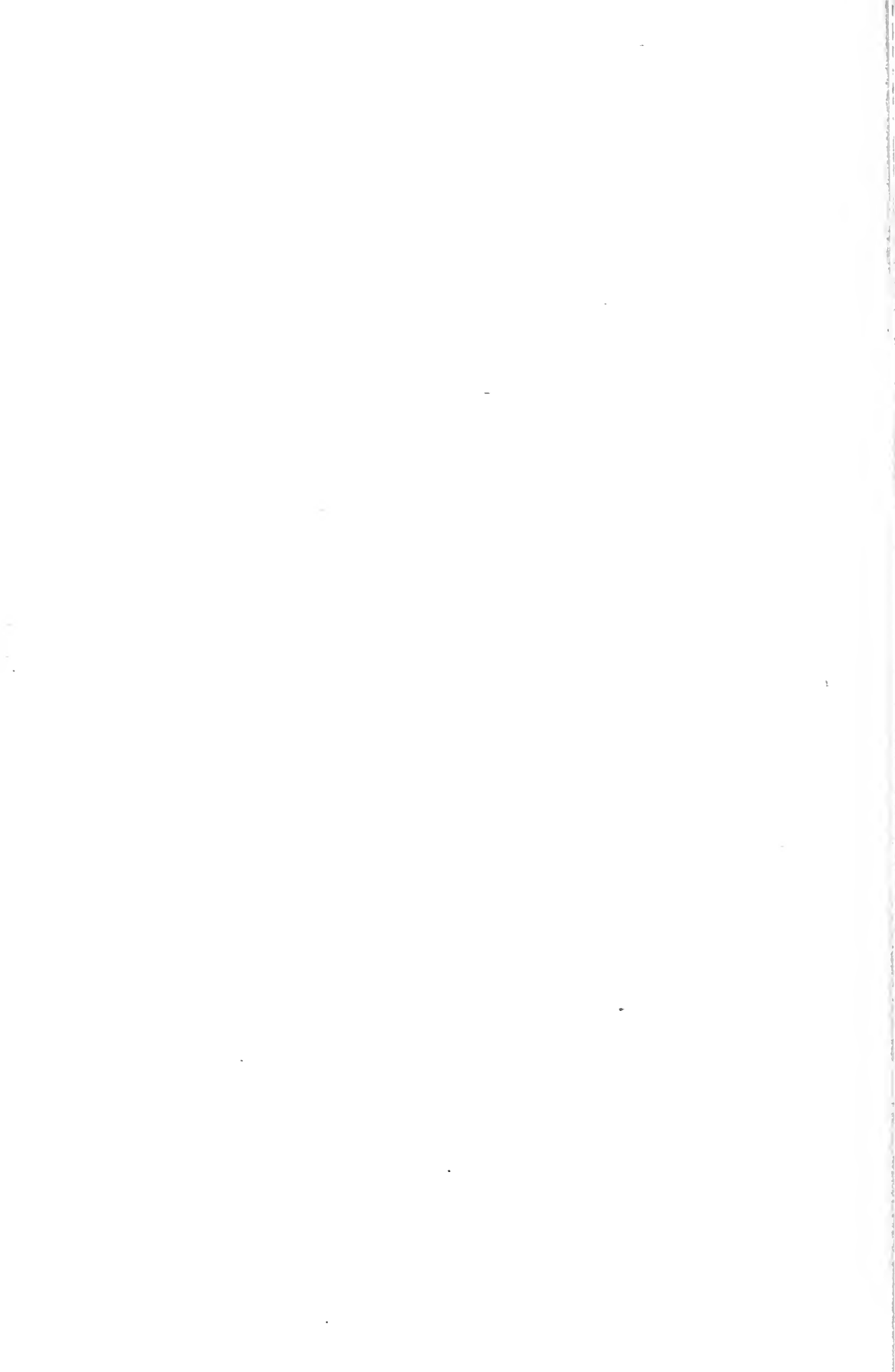
CHIEF ARCHITECT.

CHIEF ENGINEER.

GENERAL SUPERINTENDENT OF TELEGRAPHS.

COLLECTOR OF REVENUE.

LAW CLERK.





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**REPORT**

OF THE

**DEPUTY MINISTER OF PUBLIC WORKS**

FOR THE

**FISCAL YEAR ENDED MARCH 31, 1917**

DEPARTMENT OF PUBLIC WORKS, CANADA,

OTTAWA, November 15, 1917.

Honourable F. B. CARVELL,

Minister of Public Works,

Ottawa, Ont.

SIR,—I have the honour to submit herewith the annual report of the Department of Public Works, for the fiscal year ended March 31, 1917.

EXPENDITURE.

The total expenditure made by or through the department during the fiscal year 1916-17, on its various works of construction, maintenance and operation, amounted to the sum of \$16,161,596.20, which may be classified under the following heads:—

Harbour and river works. . . . .	\$6,548,568 18
Dredging, plant, etc. . . . .	2,410,413 24
Slides and booms. . . . .	111,876 40
Roads and bridges. . . . .	38,265 51
Public buildings. . . . .	5,717,450 28
Telegraphs. . . . .	775,339 66
Miscellaneous. . . . .	559,682 93
	\$16,161,596 20

The aggregate outlay is \$3,377,701.84 less than that of the preceding year 1915-16, and \$13,121,720.62 less than the expenditure two years ago. The department has consistently adhered to the policy of retrenchment laid down at the outbreak of the war, and has undertaken only necessary works of maintenance and repair outside of the completion of the contracts which were under way at that date. The same careful policy will be pursued during next year and every indication points to a further substantial reduction in the expenditure.

The appropriations granted by Parliament to the department in the year war was declared amounted to \$47,154,196.60. The Parliamentary grant was reduced in 1915-16 to \$34,599,183.99; in 1916-17, to \$30,828,281.99, and in 1917-18, to \$20,822,663.75, or considerably less than one-half the sum voted only three years before.

## REVENUE.

The revenue for the year amounted to the sum of \$493,260.01, and is made up as follows:—

Slides and booms.. . . . .	\$ 97,142 16
Graving docks.. . . . .	64,918 38
Rents.. . . . .	94,729 03
Telegraphs.. . . . .	191,453 35
Casual revenue.. . . . .	45,017 09
	\$493,260 01

It will be noted that there is a decrease of \$15,646.31 from last year's figures. The principal falling-off occurs in slides and booms and casual revenue; these two items showing a decrease of over \$31,000. The income from rents shows some increase, while that from telegraphs surpasses last year by over \$10,000. In the slides and booms returns, the principal loss took place in the Ottawa district, which is naturally the largest. The revenue this year from that district was only \$16,050.97, the smallest on record for over half a century. Owing to the scarcity of water in the spring of 1916, and the scarcity of labour, the drives on some of the larger rivers, from which the greater part of the revenue is derived, did not come out at all, or only a small portion came into the main Ottawa. Approximately 2,000,000 less logs were handled in the Ottawa district; the exact figures being 4,928,993 for 1915-16, as against 2,961,460 for 1916-17.

## HARBOUR AND RIVER WORKS.

The total expenditure in this branch of the Department of Public Works was \$6,548,568.18, of which \$4,152,583.80 was charged to capital, and \$2,395,984.38 to income. This is one million dollars less than last year's expenditure, and over four million dollars less than the outlay under this head two years ago.

Following is the list of works which have been completed during the year:—

*Nova Scotia*.—Breakwater at Meat Cove.

*New Brunswick*.—Wharves at Bayswater and Kennebecasis Island.

*Quebec*.—Landing crib at Hospital Bay, and wharves at Ile Perrot South and Ste. Anne des Monts.

*Ontario*.—Reconstruction of wharf at Bruce Mines; revetment wall at Burlington; regulating dam at Big Chaudière on the French river, and a breakwater at Goderich.



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*British Columbia.*—Wharves at Little River and Powell River, and small landing floats at Bishops Bay, Brighton Beach, Cracroft, Hope Point, Jedidiah Island. Kitimat, Lloyd Point, Smiths Landing (Cortez island), Stapleby, Surge Narrows and Welcome Harbour.

The following works were under contract but unfinished at the end of the fiscal year:—

*Nova Scotia.*—River improvements and lock at East River.

*Quebec.*—Enlargement of wharf at Rimouski; dry dock at Lauzon; River St. Charles improvements and protection wall at Laprairie.

*Ontario.*—Harbour improvements at Kingston; quay wall at Fort William; extension to breakwater at Port Stanley and harbour improvements at Toronto.

*British Columbia.*—Wharves at Victoria, and second section of Steveston Jetty at the mouth of the Fraser river.

## DREDGING.

The expenditure under this head amounted to \$2,410,413.24, a decrease of \$1,465,300.07 from that of the preceding year.

The operation and maintenance of the departmental dredging plant cost \$1,179,366.68, which is considerably less than last year, owing to sixteen units not being placed in commission. No new dredging plant has been constructed, nor acquired, and repairs to the existing plant have been kept down to the comparatively low figure of \$125,312.42; care being taken, however, to see that the condition of the plant is properly maintained.

The outlay on contract dredging totalled the sum of \$1,105,734.14; operations being confined practically to the larger harbours.

The False Creek channel and basin at Vancouver, B.C., have been completed. This work was commenced in 1913, and consisted of a channel 13,500 feet in length, 350 feet in width, and 20 feet deep at low water from English Bay to Main Street bridge. The total quantity of material removed was 4,310,196 cubic yards.

At Fort William, Ont., the dredging of the terminal basin, at the mouth of the Mission river, was completed this year. This improvement was commenced in the year 1909, and the final estimate shows the removal of 7,136,670 cubic yards. This dredging is of importance, affording access to the Grand Trunk Pacific terminal elevator and sheds. Dredging in the Kaministiquia river has also been in progress.

At Port Arthur, Ont., the dredging under contract consisted of the widening of the harbour, dredging in King's channel, in the Government elevator slip and in the entrance channel and slip of the Saskatchewan Co-operative and Grain Growers' elevators.

At Port Maitland, Ont., contract dredging was performed in connection with the harbour development under way at the mouth of the Grand river. Some 628,703 cubic yards were removed in constructing a channel entrance from lake Erie to the car ferry terminus.

Contract dredging was also carried on in the St. Croix river, under a joint arrangement with the United States Government: in Bathurst, N.B., harbour, where an important pulp and paper industry has been developed, and in St. John, N.B., harbour, where considerable work was done in dredging the basin inside the break-water in Courtenay bay.

During recent years this department has been keeping in very close touch with both the Marine Department and the Department of the Naval Service, in reporting finished dredging projects so that the necessary information may be conveyed to mariners and others interested in navigation, by means of notices to mariners and charts published by those departments. After each dredging project is completed, a special report, with plan, is prepared and forwarded for the above purposes. During the year, seventy-four of these special reports were made.

Dredging operations were also carried on at the following places, where an expenditure of \$10,000 or over was made:—

*Nova Scotia*.—Digby, Liverpool, Lunenburg, Pictou, and Yarmouth.

*Prince Edward Island*.—Charlottetown.

*New Brunswick*.—Bathurst, Buctouche, St. Croix river and St. John harbour.

*Quebec*.—Longueuil, River Lièvre, St. Alphonse de Bagotville, Ste. Anne de Bellevue, Saguenay river, and Verdun.

*Ontario*.—Fort William, Hamilton, Hawkesbury, Penetanguishene, Port Arthur, Port Burwell, Port Maitland, River Thames, and Telegraph and Nigger islands.

*Manitoba*.—Red river and Selkirk.

*British Columbia*.—Columbia river, Fraser river (South fork at North arm and Sandheads), Nanaimo, New Westminster, Skeena river, Squamish, Vancouver (False creek and First narrows), and Victoria.

#### PUBLIC BUILDINGS.

The sum expended in the construction, maintenance and repair of public buildings throughout the Dominion was \$5,717,450.28, a decrease of over one million dollars from last year. Of this amount, \$3,098,711.87 was expended in the construction and improvement of public buildings, and \$2,618,738.41 in repairs and maintenance.

The following buildings were completed during the year:—

*Quebec*.—Joliette public building, additions and alterations; Lennoxville Experimental Farm, cattle barn; Montreal Postal Station "A," extension; Shawville, public building.

*Ontario*.—Ottawa Experimental Farm, flax building and brooder house; Ottawa Customs building, Sussex street; Ottawa Mines building, addition.

*Saskatchewan*.—Sutherland Forest Nursery Station, boarding house.

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*British Columbia*.—Saanich, observatory and residences for observer and engineer.

The following buildings were still under contract:—

*Quebec*.—Three Rivers, public building.

*Ontario*.—Kingston, riding school; Ottawa, Parliament buildings.

*Alberta*.—Calgary, drill hall.

## RECONSTRUCTION OF PARLIAMENT BUILDINGS, OTTAWA.

Of the above, the most important work the department has had in hand is the reconstruction of the Parliament buildings, which were practically destroyed by fire on Thursday, February 3, 1916.

The work of salvaging, scaffolding, shoring and clearing away debris was immediately commenced and continued during the months of March, April, and May, under the direction and supervision of the Dominion consulting architect.

On the 26th of May, Mr. John A. Pearson and Mr. J. O. Marchand, who had been appointed the architects of the new building by the Joint Parliamentary Committee, took charge of the work. On this date the work of demolition and removing all condemned and dangerous walls was well under way and completed by September 1.

Excavation immediately followed the tearing down, and on July 24 the concrete foundations were commenced. These foundations on the northeast portion of the building were completed up to the grade level by September 1, and on that date His Royal Highness the Duke of Connaught relaid the corner stone.

## CEREMONY OF RELAYING CORNER STONE.

The joint committee decided to take advantage of the very unique coincidence that the then Governor General, the Duke of Connaught, happened to be a brother of His Late Majesty, King Edward Seventh, who laid the corner stone of the original building, when Prince of Wales, on September 1, 1860; and it was decided to arrange a ceremony to consist of the relaying of the original corner stone in a new location, as the corner stone of the new building. His Royal Highness graciously consented to officiate at such a ceremony. Preparations were made in keeping with the importance of the occasion. A pavilion for the Royal party and those having the private entrée, suitably decorated and furnished, was erected in front of the new location of the corner stone, and a covered stand for the invited guests was erected at the right of the Royal pavilion. A third stand seated with chairs was also provided to which admission was had by card. The three stands were arranged around a platform, triangular in shape, through which ran a track from the site of the old corner stone to the new location. A tripod derrick with hoisting apparatus was erected at each end of the track, and the operation of relaying the corner stone consisted in raising it by derrick from its former bed and placing it on the truck, or bogey, upon which it was transported along the track to the new location, where it was raised by the other derrick and, after the mortar had been spread, lowered gradually into place.

The old stone was engraved:—

“ This corner stone of the building intended to receive the Legislature of Canada was laid by Albert Edward, Prince of Wales, on the first day of September, 1860.”

Underneath the old lettering have been chiselled these words:—

“ Relaid by his brother, the Duke of Connaught, on the first day of September, 1916.”

Addresses were delivered by the Right Honourable Sir Robert Borden, G.C.M.G., Prime Minister. Honourable Robert Rogers, P.C., Minister of Public Works, and by His Royal Highness the Governor General, after he had laid the stone.

Everything passed off with exceptional smoothness. All the mechanical arrangements worked perfectly, and there was an immense gathering of highly interested spectators. The weather was not good, it having rained the night before and in the morning, but, fortunately, the rain held off during the ceremony.

During the following months the works proceeded apace, and on December 11, when the masonry work was closed down for the winter, the walls of the Senate wing were built up to a height of two storeys and all the remaining walls to approximately a height of four feet above grade.

The erection of the structural steel continued during the winter months.

On April 2, 1917, work on the buildings was recommenced, since when it has proceeded without interruption, until at the time of writing the greater part of the building is under roof.

The following contracts have been awarded:—

The general contract for the reconstruction of this building with P. Lyall & Sons Construction Company, Limited, was signed on September 29, 1916. The basis of this contract is eight (8%) per cent on the cost of the work up to \$4,000,000, and seven (7%) per cent on the cost in excess of that amount up to but not to exceed \$5,000,000.

On March 30, 1916, a contract was entered into with the Dominion Bridge Company, Limited, of Lachine, P.Q., for the supplying of 1,893,600 pounds of structural steel, f.o.b. site, at \$3.04 per hundred pounds.

On January 29, 1917, a further contract was executed with the Dominion Bridge Company, Limited, for the supplying, fabricating and erecting of approximately 1,800 tons of structural steel at \$5.30 per hundred pounds (\$106 per ton).

In connection with the structural steel work, Alexander Fleck, Limited, was given an order for 100 cast-iron column bases, or 150,256 pounds, at \$2.50 per hundred pounds, as a result of tenders opened September 28, 1916.

Robert W. Hunt & Company, Limited, were authorized to make mill and shop inspection of the material of the Dominion Bridge Company's contracts at fifty-five (55c.) cents per ton, on April 10, 1916.

P. Lyall & Sons Construction Company, Limited, as general contractors for this work, have, with the approval of the Joint Parliamentary Committee, entered into the following contracts:—

On July 18, 1916, with G. P. Sherwood & Company, Montreal, Que., for 150,000 cubic feet (more or less) of Buff Ohio stone, at \$1.21 per cubic foot, f.o.b. cars, Ottawa.

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On August 5, 1916, with George Farmer for the carting of Wallace stone from the Grand Trunk terminals to the stone shop at Sussex street, at forty-five (45c.) cents per ton.

On August 5, 1916, with George Farmer for the carting of Ohio stone from the Canadian Pacific terminals to the stone shop on Sussex street at thirty (30c.) cents per ton.

On August 11, 1916, with the Wallace sandstone quarries for 31,550 cubic feet of Wallace sandstone at seventy-five (75c.) cents per cubic foot, f.o.b. cars, Ottawa.

On August 11, 1916, with the Burlington Steel Company, Hamilton, Ont., for 147.5 tons (more or less) of reinforcing steel to be delivered at the site at the following rates for 100 pounds:  $\frac{5}{8}$ -inch round, \$3.48;  $\frac{1}{2}$ -inch square twisted, \$3.08;  $\frac{3}{4}$ -inch and  $\frac{7}{8}$ -inch square twisted, \$2.93.

On September 6, 1916, with Alfred Rogers, Limited, Toronto, Ont., for 5,000 barrels (more or less) of Portland cement at \$1.85 per barrel of 350 pounds, f.o.b. cars, Ottawa.

On September 6, 1916, with the National Brick Company of Laprairie, Limited, for 5,000,000 (more or less) common brick at \$10.50 per thousand, delivered at site.

On September 6, 1916, with the Canada Cement Company, Montreal, for 5,000 barrels of Portland cement at \$1.85 per barrel of 350 pounds, f.o.b. cars, Ottawa.

On September 14, 1916, with George Farmer, for the cartage of Portland cement from the Grand Trunk and Canadian Pacific terminals to the site, at six and one-half (6½c.) cents per barrel.

On September 6, 1916, with Howard Rock, for 3,550 tons of  $\frac{3}{4}$ -inch clean crushed stone, delivered on the site, at \$1.60 per ton. This contract was abandoned.

On September 6, 1916, with Howard Rock for 1,000 tons of Nepean sandstone (more or less), delivered on the site, at \$3.70 per ton.

On September 6, 1916, with Foran & Thibault, for 4,000 tons (more or less) of Nepean sandstone, delivered on the site, at \$3.70 per ton.

On March 12, 1917, with Campbell, McKee & Williams, of Bells Corners, for 1,000 tons (more or less) of Nepean sandstone, delivered on the site, at \$3.70 per ton.

On March 7, 1917, with the Nepean Sandstone Quarries, Limited, for 1,000 tons (more or less) of Nepean sandstone, delivered on the site, at \$3.70 per ton.

The procedure in calling for tenders and the awarding of contracts is as follows:—

When the progress of the building requires certain work or materials to a value of or exceeding \$5,000, the joint committee is notified to that effect. The committee approving, tenders are publicly called for through the newspapers, such advertisements appearing simultaneously on certain dates for a stated period. The advertisement is drawn up in such a manner as to give a uniform basis for tendering and comparison of prices, and is submitted to the Department of Public Works for approval before being issued.

The resulting tenders are received by the architects and opened by the board, signed and adjudged by them and referred to the joint committee, together with the recommendation of the board.

With the authorization of the committee, a contract is drawn up by the general contractors, to the approval of the architects and the department, and entered into with the successful tenderer, the latter having previously deposited a security of 10 per cent of the amount involved, 5 per cent with his quotation and 5 per cent on its acceptance.

## TELEGRAPHS.

During the fiscal year under review, there have been added 224½ miles of new lines to the Government telegraphs, made up principally of:—

7¾ miles in Nova Scotia,
17¼ miles in New Brunswick,
153 miles in British Columbia, and
30 miles in the Yukon.

There is now a total mileage of 12,016¾. The number of offices has increased to 1,058, and the messages sent numbered 411,934, as against 371,833 in the preceding fiscal year.

The number of telephone, telegraph and conjoint offices on the system are:—

Telephone . . . . .	617
Telegraph . . . . .	389
Conjoint . . . . .	52
	<hr/>
Total . . . . .	1,058

## NATIONAL GALLERY.

It will be remembered that the National Gallery was indirectly one of the chief sufferers from the fire which destroyed Canada's Parliament buildings, inasmuch as it was deprived of its quarters in the Victoria Memorial Museum, when that building was taken over to serve as the Houses of Parliament.

Being without a gallery, the directors have been concentrating their efforts on the development of the policy of loan exhibitions, which had just been instituted and had met with a gratifying measure of success. A selection of pictures and objects of art is made and loaned to any art society or body capable of publicly exhibiting them, and in this way it is hoped to keep the Canadian public in touch with the work Canadian artists are doing, and thereby increase its interest and appreciation of art in general.

Exhibition of works of art were made during the fiscal year 1916-17, at Halifax, N.S., Montreal, Que., Ottawa, Ont., Toronto, Ont., Winnipeg, Man., Moosejaw, Sask., Regina, Sask., Saskatoon, Sask., and Edmonton, Alta. All these exhibitions proved an unqualified success, and without doubt will result in stimulating public interest to the point of establishing art classes in many places throughout the country.

## TRIBUTE TO MEN OVERSEAS.

In conveying my thanks to the departmental staff for the efficient manner in which they have performed their duties during the year, I desire to pay a special tribute to those members who so nobly responded to the call of duty and are now

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overseas, championing the cause of world liberty; 251 in all enlisted, 33 from the inside service and 218 from the outside service. Every branch has its representatives:—

<i>Branch.</i>	<i>Number.</i>
<i>Inside Service.</i>	
Minister.. . . . .	1
Deputy Minister.. . . . .	5
Secretary.. . . . .	4
Accountant.. . . . .	4
Chief Engineer.. . . . .	4
Assistant Chief Engineer.. . . . .	2
Chief Architect.. . . . .	11
Telegraphs.. . . . .	2
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>
Total.. . . . .	33

<i>Outside Service.</i>	
Chief Engineer.. . . . .	103
Assistant Chief Engineer.. . . . .	48
Chief Architect.. . . . .	43
Telegraphs Branch.. . . . .	24
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>
Total.. . . . .	218

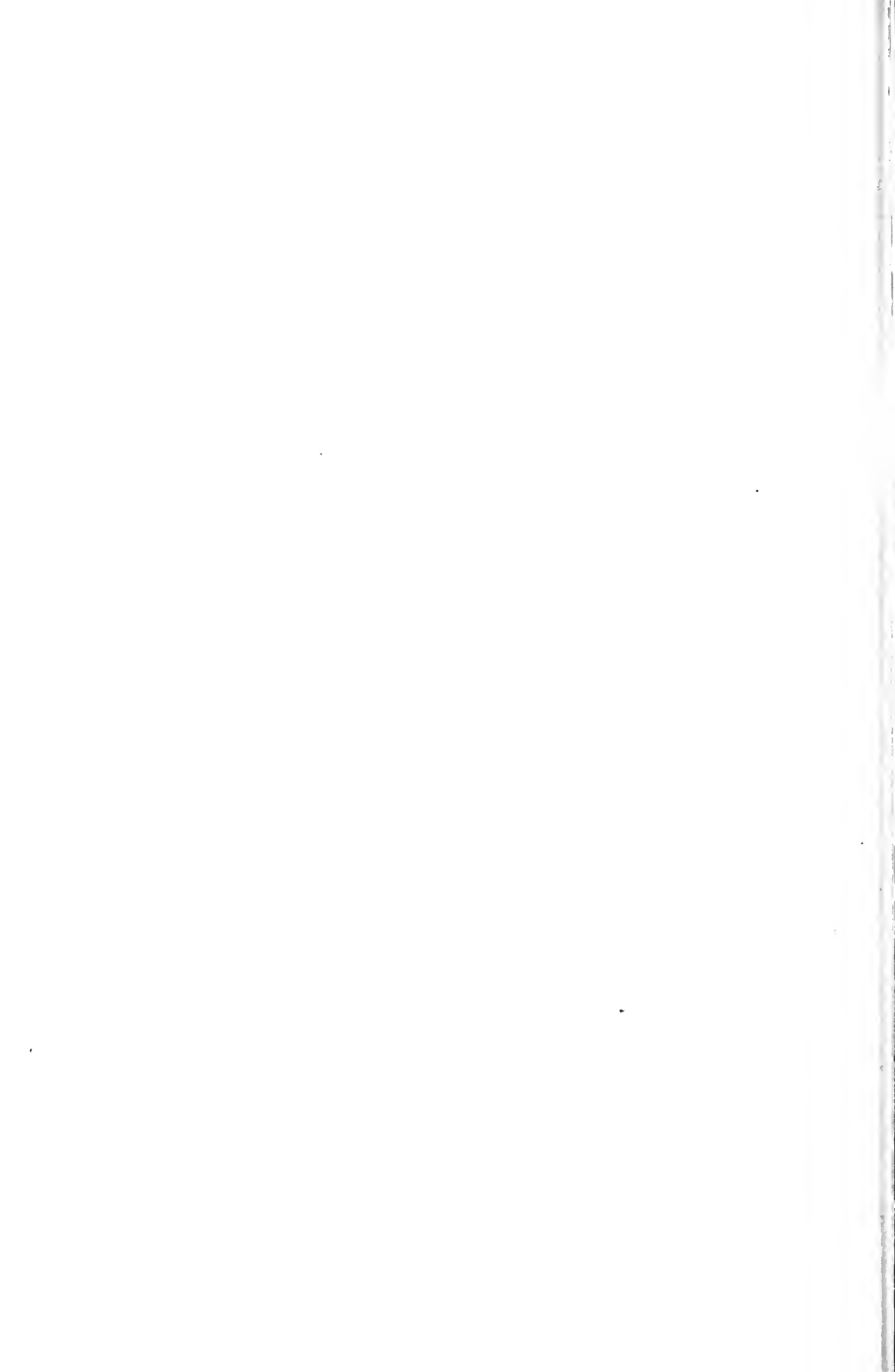
Honours granted to Public Works men overseas, so far as the department is informed, are: One C.M.G., four D.S.O., one Croix de Guerre, five Military Cross (one with bar).

Many of these gallant fellows have been wounded, two are prisoners of war, and not less than eighteen have laid down their most precious possession, life itself, in the glorious struggle. The names of these splendid patriots will stand forever not only in the records of the department, but in the honour roll of the Empire which they served so well

I have the honour to be, sir,

Your obedient servant,

J. B. HUNTER,  
*Deputy Minister.*





## PUBLIC BUILDINGS

By E. L. HORWOOD, CHIEF ARCHITECT.

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### NOVA SCOTIA.

Repairs and improvements were executed at the following places: Amherst, Annapolis, Antigonish, Arichat, Baddeck, Bear River, Bridgewater, Canso, Dartmouth, Digby, Glace Bay, Guysboro, Halifax, Inverness, Kentville, Lawlor's island (quarantine), Liverpool, Lunenburg, New Glasgow, North Sydney, Parrsboro, Pictou, Springhill, Sydney, Sydney Mines, Truro, Westville, Windsor, Wolfville, Yarmouth.

### PRINCE EDWARD ISLAND.

Charlottetown, Georgetown, Montague, Souris, Summerside, Tignish.

### NEW BRUNSWICK.

Bathurst, Campbellton, Chatham, Dalhousie, Fairville, Fredericton, Grand Falls, Hampton, Hartland, Hillsborough, Marysville, Milltown, Moncton, Newcastle, Richibucto, St. John (custom house, new post office, old post office, savings bank, quarantine station), St. John West (post office and immigration building), St. Stephen, Sussex, Tracadie, Woodstock.

### QUEBEC.

Grosse Isle (quarantine buildings): Annex to disinfecting building, commenced 1914, was completed during fiscal year 1916-17. Repairs and improvements were made to various other buildings on the island.

Joliette: The addition to this building, described in the annual report of 1915, has been completed.

Lennoxville (Experimental station): A contract was entered into September 14, 1916, for the erection of a dairy cattle barn, 97 feet 6 inches by 38 feet 6 inches.

Montreal: A contract was entered into January 11, 1917, for the erection of a shed and covered passageway in rear of postal station "A," and repairs and improvements were made to the main building; also to new customs and examining warehouse, old examining warehouse, old custom house, inland revenue building, immigration detention hospital, central post office, postal stations B, C, D, F, H, L, S, O.

Three Rivers (public building): The original contractors having failed to complete their work, a new contract was awarded on February 22, 1917, to Joseph Bourque.

Repairs and improvements were executed at the following places: Actonvale, Arthabaska, Berthierville, Buckingham, Coaticook, Cookshire, Drummondville, East Angus, Fraserville, Granby, Hochelaga, Hull, Iberville, Joliette, Janquières, Laprairie, L'Assomption, Lake Mégantic, Longueuil, Matane, Montmagny, Murray Bay, Nicolet, Pierreville, Quebec (examining warehouse, custom house, post office, St. Roch post office immigration hospital, St. Sauveur post office, immigration building, Louise embankment), Richmond, Roberval, Shawville, Ste. Agathe des Monts, St. Gabriel de

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Brandon, St. Henri, St. Hyacinthe, St. Lambert, St. Jérôme, St. Johns, Ste. Thérèse, Sherbrooke, Sorel, Valleyfield, Victoriaville.

Shawville: This building, described in the report for 1915, has been completed and occupied.

## ONTARIO.

Kingston: A contract was entered into July 24, 1916, for the erection of a riding school at the Royal Military College, the building to be 197 feet by 66 feet, constructed of brick with cut-stone trimmings on concrete foundations to finished grade, and from grade to base these foundations are faced externally with coursed rock-faced stone, and the outside walls above base are faced externally with red brick and internally with pressed brick.

Repairs and improvements were executed at: Custom house, inland revenue building, and post-office.

Ottawa: The new customs house was taken possession of by the Department of Customs on May 1, 1916, and minor works to complete the building were executed, and furnishings were supplied.

Experimental Farm: The new brooder house was erected within the poultry grounds, measuring 57 feet by 16 feet, and one story high; the construction being balloon frame, set on concrete walls with the outside walls, clapboard, and inner walls and ceiling "V" sheeting.

The contract was entered into on October 19, 1916, for the erection of a flax building, measuring 79 feet 8 inches by 28 feet 9 inches, of balloon construction, set on concrete walls, and one story and a half high.

Repairs and improvements were also executed to various other buildings at the farm.

Mines Branch: An addition to the Mines Branch, Sussex street, was commenced in August. The building is 18 feet by 43 feet, on a cement foundation. The main walls are picked-faced limestone, with limestone lentils, jambs, and sills. The stonework is backed with brick, furred metal laths, and plaster. The floors are concrete, and the roof is steel and concrete.

Royal Mint: Work on an addition to the refinery was completed August 10, 1916. The building is 33 feet by 108 feet, with cement foundation on rock, and the main walls are of buff silicate brick and lined with white brick. The floors are concrete and the roof steel and concrete.

A new transformer room was built on a cement foundation, the main walls being of Stanstead granite and Nepean sandstone to match the other buildings.

Ottawa Buildings Generally: Repairs and improvements were made at the following buildings: Government House, Victoria Museum, East Block, West Block, Library of Parliament, Langevin Block, City Post Office, Printing Bureau, Supreme Court building, Wellington Street properties, Fuel Testing Station (Mines Branch), Archives building.

Rented Buildings: Union Bank building, Robinson building, No. 136 Emmet street, No. 113 Rideau street, Bryson building, Booth building, Birks building, Canada Life building, Hope building, Merchants Bank building, building (corner Queen and Metcalfe), Egan block, Harris & Campbell building, Imperial building, La Banque Nationale, No. 98 Wellington street, No. 140 Argyle avenue, O. O. A. C. building, Plaza building, Central Station, Journal building, McNeil building, Masonic Temple, Trafalgar building, Rea building, Woods building, Major building, Canadian building, Stephen building, No. 66 Queen street.

Repairs and improvements were executed at the following places: Acton, Alexandria, Amherstburg, Arnprior, Athens, Aylmer, Barrie, Belleville, Bowmanville, Brampton, Brantford, Brockville, Burford, Cayuga, Chatham, Clinton, Collingwood,

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Cornwall, Cardinal, Deseronto, Dundas, Elmira, Elora, Essex, Fort William, Fergus, Gananoque, Glencoe, Goderich, Grimsby, Guelph, Hamilton, Hanover, Hawkesbury, Kemptville, Kenora, Kincardine, Kitchener, Lakefield, Leamington, Lindsay, London, Markham, Mildmay, Milton, Mitchell, Mount Forest, Napanee, North Bay, Oshawa, Palmerston, Paris, Peterborough, Picton, Port Arthur, Port Colborne, Port Hope, Port Perry, Preston, Renfrew, Sault Ste. Marie, St. Catharines, Sarnia, Seaforth, Shelburne, Smiths Falls, Simcoe, Steelton, Stratford, Strathroy, Sudbury, Tilbury, Tillsonburg, Trenton, Toronto (customs-house, examining warehouse, general post office, postal garage, expropriated buildings adjoining general post office, inland revenue and Receiver General's offices, postal stations "A," "C," "D," "E," "F," "G," "K," express buildings, Front street east (rented), Uxbridge, Walkerton, Walkerville, Waterloo, Windsor, Wingham, Woodstock.

## MANITOBA.

Repairs and improvements were executed at the following places: Brandon, experimental farm, Kirchoffer block (rented), Carman, Dauphin, Emerson, Morden, Selkirk, St. Boniface, Souris, Stonewall, Virden, Winnipeg, (post office, custom-house, examining warehouse, immigration halls, postal station "B.")

## SASKATCHEWAN.

Sutherland Forest nursery station: On June 24, 1916, a contract was entered into for the construction of a new boarding house, the building being lumber framed, two storeys high, and measuring 32 feet by 28 feet with full concrete basement and a lean-to of one story at the rear, 20 feet by 12 feet.

Repairs and improvements were executed at the following places: Battleford, Estevan, Gravelbourg, Humboldt, Melfort, Moose Jaw, North Battleford, Prince Albert, Regina, Saskatoon, Weyburn, Yorkton.

## ALBERTA.

Calgary drill hall: A contract was entered into on September 29, 1916, for the erection of this building, the size over all being 275 feet by 170 feet, and consists of two storeys and basement, with corner pavilion and centre pavilion three storeys high, and constructed of brick, faced externally with red pressed brick with cut sandstone trimmings. The basement walls are faced externally with stone from ground to plinth.

Repairs and improvements were executed at the following places: Bassano, Edmonton, Edson, Entwistle, Lethbridge, Strathcona, Wetaskiwin.

## BRITISH COLUMBIA.

Saanich (Little) Mountain observatory: The contracts for the observatory building and for the dome, have been completed, and the telescope and the apparatus for its operation have been installed. Residences for the observer and engineer were completed during the year, as well as a garage and a pump-house building.

Repairs and improvements were executed at the following places: Atlin, Cumberland, Cranbrook, Darch Island Leper Station, Duncan, Kamloops, Nanaimo, Nelson, New Westminster, North Vancouver, Prince Rupert, Rossland, Trail, Union Bay, Vancouver (public building, old post office building, new examining warehouse, postal station "C," immigration detention building), Vernon, Victoria (public building, old post office building, immigration detention hospital, old custom house building, observatory building). William Head quarantine station.

## HARBOUR WORKS

By E. D. LAFLEUR, CHIEF ENGINEER.

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### NOVA SCOTIA.

#### BARACHOIS.

Barachois, Victoria county, is a small settlement at the mouth of the Barachois river on the northern side of St. Ann's bay, about 3 miles to the eastward of the entrance into St. Ann's harbour.

During the year ended March, 1917, 140 feet of the training pier were reconstructed, built in the same manner as it was originally but the piles were driven deeper than before, and the channel face was protected with close-sheathing driven 8 feet into the bottom, and by a stone talus.

#### BLACK ROCK.

Black Rock, Colchester county, is a small settlement situated at the mouth of the Shubenacadie river, 10 miles from Truro.

During the fiscal year 1916-17, a native-timber crib was constructed, 42 feet long by 8 feet wide and 6 feet high, and ballasting this along the shore adjoining the shore end of the approach, and back of this crib earth and stone filling was placed to bring the road approach up to the required grade.

Work was done in the month of July, 1916.

#### CALDWELL'S COVE.

Caldwell's Cove, Digby county, is a small fishing and farming settlement on the shore of the Bay of Fundy. In 1916-17, a piece of crib-work was built 80 feet long, 10 feet wide and 8 feet high, projecting in a westerly direction from south or shoreward end of the breakwater.

#### DIGBY.

##### *Dredging.*

In 1916-17, the P.W.D. Dredge No. 1 removed 54,150 cubic yards, scow measurement, towed  $2\frac{1}{2}$  miles, from Digby harbour, as follows:—

In the main channel, 36,075 cubic yards, scow measurement; in the Racquet, 18,075 cubic yards, scow measurement; 54,150 cubic yards, scow measurement.

The work was performed between 20th June and 4th August, 1916, and to a depth in the channel of 18 feet at L.W.O.S.T.

The object of the dredging was the cleaning up of the channel for a length of 2,200 feet and a width of 200 feet from the end of the government pier due north toward Digby Gut, to give a depth at L.W.O.S.T. of 18 feet to accommodate the passage to and fro of the Canadian Pacific Railway Company's steamers plying between Digby and St. John.

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The object of the dredging in the Racquet was to facilitate the arrival and departure of schooners and other craft at the fishing wharves, and is comprised within a length of 700 feet and a width of 120 feet, also one cut 800 feet long and 10 feet wide.

The dredged area in the channel will require re-dredging in about eight years. The area between the main pier and the spur requires re-dredging about every three years. The dredging in the Racquet requires re-dredging about every three years.

## EAST RIVER, PICTOU.

The mouth of the East river is the most important of the three branches of Pictou harbour. It is navigable for small vessels to the head of tide water at New Glasgow, ten miles inward from the entrance to the harbour.

During the past season dredge No. 5 was employed from June 28 to October 30, and excavated 360,000 cubic yards measured *in situ*, or 435,103 yards by the weekly dredging reports, of alluvial mud, clay, sand, and stones. The cutting in the second reach from station 134 to station 142 was completed on July 13, and involved the removal of 35,800 yards *in situ*. On July 17 the first reach of channel (the diversion) was begun, and 324,200 yards were dredged from station 80 to station 120 before operations were suspended for the season.

There are 311,400 cubic yards to be excavated to sub-grade from the first reach to the channel and to remove the sedimentation and to widen and deepen the second reach to sub-grade will require 369,600 yards extra, making a total of 681,000 yards yet remaining to be dredged.

*Lock.*

On the 14th June, 1916, a contract was signed by Messrs. Roger, Miller & Sons, Limited, for the necessary lock gates and operating machinery. The price tendered was \$124,876.15.

During the fiscal year 1916-17, work was done unwatering, common and rock excavation, channelling rock surface, concrete and timber approach piers, riprap and broken stone finishing on berm. For the lock gates contract, Messrs. Roger, Miller & Sons earned \$74,920.

## EEL BROOK.

(The work done here is described in the departmental report for 1913.)

Eel Brook, Yarmouth county, is situated on the east side of the many islanded bay, forming the mouth or estuary of the Tusket river, twelve miles east of Yarmouth.

In 1916-17 two concrete walls, one on either side of the brook, were built. On the north side, a length of 163 feet was built, and on the south side, 125 feet. The wall has a uniform height of 4 to 4½ feet and an average thickness of 2 feet. The channel between the walls, which was deepened and straightened by hand digging, is 10 feet wide. The concrete wall is backed with stone and the whole work is a great improvement and convenience.

## LIVERPOOL.

Liverpool, Queens county, is a town of 2,300 or 2,400 people, situated at the mouth of the Mersey river.

During the past fiscal year, dredging operations by dredge No. 7 was conducted, and some 47,700 cubic yards, scow measurement, were removed. The work was commenced on June 30, and suspended November 1, 1916. From the bridge towards the mouth of the harbour, for a distance of 1,110 feet, the nature of the material to be removed consists of mud and sawdust; for a further distance of 1,034 the material

consists of mud and sawdust mixed with fine white hard sand, and the last 1,085 feet consists of practically fine hard white sand entirely. This dredging has been done to a depth of 15 feet at L.W.O.S.T.

The total length of the dredging performed was 2,570 feet, with a width of 100 feet.

For the first two months after the dredge had ceased work, this cut remained practically free and open, but what is commonly termed "The Bar" had again filled in, and it was very difficult to float shipping over it.

#### LUNENBURG.

##### *Dredging.*

Lunenburg, Lunenburg county, is situated on the Atlantic coast, 49 miles west of Halifax.

During the fiscal year 1916-17, dredge *No. 6* and Lobnitz rockbreaker *No. 3* worked from April 1 to November 25; dredge *No. 6* removing 58,145 cubic yards, and Lobnitz rockbreaker *No. 3* reporting having broken 18,763.03 cubic yards. Dredging was done near the wharves over an area of 72,000 square feet, and the rockbreaker covered an area of 60,200 square feet. On Isnor's shoal, the dredge worked over an area of 60,000 square feet and the rockbreaker also covered this area. On Brick shoal, the dredge worked over an area of 74,000 square feet and the rockbreaker did work over an area of 7,500 square feet. The total area, therefore, covered by dredge *No. 6* this season was 206,000 square feet, and by the Lobnitz rockbreaker *No. 3*, 127,700 square feet.

The total areas over which dredging has been performed at Lunenburg to date are as follows:—

In front of wharves . . . . .	2.62 acres.
Isnor's shoal . . . . .	4.23 "
Brick shoal . . . . .	5.71 "
	12.56 "

And 13,280 cubic yards removed in and around the docks not included in the above.

There is still a considerable quantity of material which has been broken by rockbreaker *No. 3*, and which will have to be removed as soon as a favourable opportunity presents itself and it is possible to secure a dredge to do the work.

#### MEAT COVE.

Meat cove, Victoria county, is a small cove on the northern coast of Cape Breton island. In order to afford the fishermen better facilities, during the year 1914-15, timber required for the construction of a small breakwater for the protection of the landing beach was purchased, and during the fiscal year 1916-17 the balance of the materials was procured and the work was completed. The breakwater is 100 feet long and 16 feet wide, and consists of a solid round-timber cribwork, fully ballasted and covered and protected by fenders.

#### MOSHER'S BAY.

Mosher's bay, Lunenburg county, is situated on the east side of the entrance to La Have river.

During the years 1914-15-16, the construction of a breakwater was commenced, and during the year 1916-17, construction was continued and the breakwater now has a total length of 310 feet and it is expected to complete it next year. The work done this season consisted of constructing 245 feet in length, 195 feet being 20 feet wide

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with an average height of 15 feet, and 50 feet at the outer end being 25 feet wide with an average height of 22 feet. This 50-foot portion has been destroyed by storms during the winter, down to low water, and will have to be rebuilt next season.

Work was commenced June 12 and suspended November 30.

## NORTHWEST COVE.

(The breakwater, which was constructed in the year 1873, will be found fully described in the annual report for the year 1913).

Northwest cove, Tancook island, Lunenburg county, is a large cove on the northern end of Big Tancook island.

It is the intention of the department to reconstruct this breakwater in solid native-timber cribwork; and during the year 1916-17, the shore-end portion was reconstructed; the work done has a length of 183 feet, a width of 26 feet and an average depth of 12 feet, and was performed by day labour. Repairs were made to the outer end of the old pilework breakwater, in order to make it safe until it can be reconstructed in cribwork; the top of the work was repaired where necessary and a number of new piles were placed; also fifteen new fenders and a number of braces between the piles to stiffen the work.

Work was commenced June 1 and suspended December 4.

## OAKLANDS.

Oaklands is situated in La Have harbour, directly opposite the town of La Have, a distance of about a quarter of a mile by water and three miles by road.

During the fiscal year 1916-17, dredging of a channel down from the wharf towards the main channel of the river to make the wharf easier of access for larger boats. The length of the excavation was 175 feet, the width about 125 feet. The depth of water now varies from about 6 to 10 feet at L.W.O.S.T. and the average cutting necessary to effect this improvement was 6.72 feet. The work was carried on by dredge *No. 15* from June 22 to August 23, 7,068 cubic yards scow measurement of mud and sawdust being removed, equivalent to 5,437 cubic yards place measurement, showing an expansion factor of 30 per cent.

## WEST ARICHAT.

(This work is fully described in the annual report for 1915.)

West Arichat, Richmond county, is a small but safe harbour on the west coast of Isle Madame.

During the fiscal year ended March 31, 1917, a new span was built over the opening in the breakwater, and in raising it and the approaches there to a height of 2 feet above the original level, to permit the passage of boats underneath.

## WINDSOR.

Windsor, Hants county, is an incorporated town on the Dominion Atlantic railway, at the head of Minas basin, on the Avon river, 46 miles west from Halifax.

During the year 1916-17, a boat landing at the public wharf was built for the use of ferry passengers from Newport. A platform projects out from the floor of the wharf 5 feet, and the landing is hinged at the top of this platform and at the bottom to a scow 5 by 10 by 3 feet.

Work was performed during the months of August and September.

## YARMOUTH.

In 1916-17, the Public Works Department Dredge *No. 1* removed 57,065 cubic yards, scow measurement, towed  $4\frac{1}{2}$  miles from the main channel. The work consisted in deepening the turning basin opposite the Evangeline wharf, and making a cut about 180 feet wide from the south end of the Evangeline wharf to the south end of the T wharf. The work was performed between October 4 and November 20, 1916, and to a depth of 21 feet at L.W.O.S.T.

The work had been done as far as the south end of T wharf, when orders were given to cease operations.

The dredging is comprised within a length of 1,780 feet and a width of 180 feet to 370 feet. The depth of cut varies from 3 to 6 feet. Dredging was done to a depth of 21 feet at L.W.O.S.T.

The dredged area will fill up by deposit of silt at a slow rate and should not require re-dredging for about ten years.

## PRINCE EDWARD ISLAND.

## ASYLUM WHARF.

*Dredging.*

The channel was cleaned out and deepened to carry 8 feet at low water spring tides, by Department of Public Works dredge *No. 10*, July 7 to August 16, 1916, 12,475 cubic yards, scow measurement, of silt, soft mud, and clay being removed. The inner 200 feet gradually widens out to 140 feet immediately in front of the wharf, to form a turning basin for vessels; in addition, a loading berth was formed on the west side of the wharf, 65 feet long by 50 feet in width, grading from 8 feet at low water up to  $4\frac{1}{2}$  feet at its inner end.

## BRIDGETOWN (GRAND RIVER).

The village of Bridgetown is situated at the head of navigation on the Grand or Boughton river, King's county. The improvements proposed in depth and width of channel on upper portion of the river as also work done in connection therewith during season of 1915 are fully described in annual report for that year. It was intended that the work commenced, in 1915, should be carried through to completion early the next season but the only work undertaken was the removal of 2,900 cubic yards, scow measurement, to accommodate berthing plant for winter season.

Dredging was done in making a cut in front of the wharf 135 feet long, having a width of 90 feet, to an average depth of 9 feet at low water spring tides; the material removed being principally soft mud.

The dredge was engaged from November 9 to 15, 1916.

## CHARLOTTETOWN.

Charlottetown, the capital of the province of Prince Edward Island, with a population of 12,000, is situated on the north bank of the East or Hillsborough river, near its junction with the North and West rivers.

Dredging was done from May 30 to July 5, removing 7,500 cubic yards, scow measurement, of soft mud and clay, forming a cut 620 feet long, the outer 345 feet having width of 60 feet and minimum depth of 12 feet at low water spring tides and inner 275 feet a width of 50 feet and grading from 11 up to 8 feet at low water spring tides.



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From September 15 to October 7, at Connolly's wharf 6,250 cubic yards, scow measurement, of soft mud and clay, together with some old timbers, were removed. The dock between the wharfs, 340 feet in length, 95 feet in width at outer end and 45 feet in width at inner end, carries a minimum of 12 feet over its outer portion, the inner end grading up to 9 feet at low water spring tides. At outer western side of the west wharf, a berth 100 feet long and 55 feet wide was also provided, grading from 14 up to 11 feet at low water spring tides.

On October 28, dredge *No. 10* commenced improvements at the inner end of the dock on the east side of Pownal wharf, 3,175 cubic yards of mud, clay and sand being removed in forming a berth 100 feet in length, 60 feet width, and carrying a minimum of 9 feet at low water spring tides. The remains of an old wreck, broken up during present season by the Marine Department, were also removed, being completed November 10.

## GEORGETOWN.

Georgetown harbour is situated on the southwest side of Cardigan bay on the eastern coast of Prince Edward Island.

The D.P.W. dredge *No. 9* commenced dredging December 21, 1915, but ice conditions prevented completion that season. This, however, was effected by the above dredge, August 8 to 12, 1916, when 1,600 cubic yards, scow measurement, of sand, brick, clay, and shelly rock being removed. The berth when completed had a length of 370 feet, 75 feet in width, carrying 20 feet of water at low water spring tides over the entire length.

## GRAND RIVER NORTH.

This work is fully described in annual report for 1914.

Grand River North, Prince county, is situated on the north side of Grand or Ellis river, near its entry into Richmond bay, and about 7 miles northeast from Wellington station, on line of the Prince Edward Island railway.

During the past season work was done on the reconstruction of top portion of approach immediately inward of pier head, and rebuilding guide pier which had become damaged by ice lifting a number of the bearing piles. Work was commenced August 14, and consisted in raising portion of approach 230 feet in length immediately inward of outer block an average of 2 feet with 12- by 12-inch timber, on which a new guard was placed and the sides of work further strengthened by fender piles driven at about 8 feet centres; roadway approach being graded up with broken stone and gravel over its entire length. The guide pier to accommodate the ferry boat, having a length of 40 feet and width of 10 feet, was then entirely reconstructed on pole-work foundation with square timber superstructure, fully ballasted, the inner face being close-piled, while on the end and outer face, piles were driven and secured at 4 feet centres. The whole work was satisfactorily completed November 21.

## KIER'S SHORE

Is situated on the eastern side of Richmond bay, which is also known as Malpeque harbour. The wharf has a length of 1,033 feet. For improvement of channel approach to the wharf, the enlargement and extension of an old dredged cut was undertaken, with some cleaning-up of shipping berths in the immediate vicinity of the wharf. Commencing August 24, 1915, 16,175 cubic yards, scow measurement, were removed by December 6 of that year; operations were resumed July 21, past season, and carried through to a successful completion on September 28; the quantity of material removed during that time was 13,275 cubic yards, scow measurement, consisting principally of brick, clay, mud, and a small quantity of sand.

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The work done covering the two seasons consisted of clearing out to 9 feet at low water spring tides of former dredged approach to the wharf, 1,350 feet in length and 100 feet in width and extending same 1,600 feet or out to the 9-foot contour in the bay, the latter cut having an average width of 140 feet. Some cleaning up was also done in berth on south side of wharf, which now has a length of 475 feet and average width of 75 feet, grading from 10 feet at its outer end up to 5½ feet at low water spring tides.

#### MCAULAY'S SHORE.

McAulay's Shore pier is situated on the north bank of the Pinette river, near its discharge into Northumberland straits, and about 5½ miles east of Point Prim.

To provide shipping berths on both sides of the wharf and improve that across the outer end, D.P.W. dredge *No. 10*, August 18 to September 12, 1916, removed 6,800 cubic yards of mud, hard sand and old rock ballast.

The berths formed at sides each have a length of 100 feet, with width of 60 feet, carrying a minimum of 9 feet at low water spring tides, assumed to be 13 feet below top of guard at outer end.

#### MCCONNELL'S WHARF.

McConnell's wharf, the property of the Government of Prince Edward Island, is situated on the north side of the East or Hillsborough river, about 8½ miles above Charlottetown.

Departmental dredge *No. 10* worked October 11 to 24, 1916, removing 3,725 cubic yards, scow measurement, of very soft mud and silt. The size of approach to wharf was 100 feet by 90 feet; a shipping berth on the east side of the wharf has a length of 70 feet and width of 60 feet. At completion, the area covered carried from 8 to 10 feet at low water spring tides.

#### PANMURE ISLAND.

Panmure island is situated on the east coast of Prince Edward island, on the south of the entrance to Georgetown harbour.

On December 2 to 15, 1915, dredge *No. 9* removed 4,900 yards. The completion of work by above dredge was effected August 18 to September 22, 1916. A cut was made 630 feet long, having approach 60 feet wide and a turning basin at end of wharf 150 feet wide; 11,240 cubic yards of material being removed. The minimum depth provided was 8 feet at low water spring tides.

#### RUSTICO.

Rustico harbour is situated on the north coast of Prince Edward Island, about midway between North point and East point, and 9 miles northerly by road from Hunter river, the nearest station on line of the Prince Edward Island railway.

Owing to the shoal depth of water carried over the greater portion of Gauthier's creek, only the smallest class of fishing boats can reach the village; a channel 2,400 feet in length, having a width of 60 feet, to carry 8 feet at low water spring tides were commenced by departmental dredge *No. 11*, October 6, and was carried on until October 27 when suspended; during this short period, 2,950 cubic yards, scow measurement, of material, consisting of soft mud and sand, were removed in making a commencement at the lower end of cut, the distance advanced being about 200 feet to the required width and depth. It is proposed that the above dredge continue operations at the place on opening of the navigation season of 1917.

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## ST. MARY'S BAY.

St. Mary's Bay wharf, the property of the Dominion Government, is situated on the southern side of St. Mary's bay, about 5 miles directly south of Georgetown.

Lately, the accumulation of siltage on the inner portion of cut made in 1892 necessitated its cleaning up. D.P.W. dredge *No. 9* commenced work on September 23, completing on October 4, 1916. The inner 500 feet of the cut, 70 feet wide, again carries a minimum of 8 feet at low water spring tides, while the shipping berths on each side of the wharf carry the same draught; that on the west side having length of 120 feet, and that on the east 100 feet, both 50 feet in width. The material removed consisted of 4,300 cubic yards, scow measurement, of soft mud and clay.

## STURGEON.

Sturgeon wharf, King's county, is on the southern side of Sturgeon bay, about four miles in a southerly direction from Georgetown. Some improvement was made by increasing the depth of water surrounding the wharf, by D.P.W. dredge *No. 9*, which worked from October 4 to 12, removing in that time 6,600 cubic yards, scow measurement, of soft mud.

The work done consisted in cleaning over the channel approach to wharf a distance of about 400 feet to a depth of 8 feet at low water spring tides. The outer 200 feet of this channel is 100 feet wide, and the inner 200 feet gradually widens out to 160 feet immediately in front of the wharf to form a turning basin. Berths were also dredged on both sides of the outer portion of the wharf. Each berth is 80 feet long and 50 feet wide, and carries an average depth of 8 feet at low water spring tides.

## NEW BRUNSWICK.

## BATHURST.

Dredging operations at Bathurst since 1913 are described in the annual report for 1916.

Bathurst, the shire town of Gloucester county, is situated on the south shore of Chaleur bay.

In 1916, dredging began about 1,900 feet above the Forks where, in a length of 3,400 feet, the channel on ranges 6 and 7, previously 60 to 100 feet wide, was widened to from 150 to 200 feet, with an extreme width of 350 at the turn. On range 8, from 6,700 to 7,600 feet above the Forks, the channel was widened 40 feet, i.e. to about 100 wide. Above this range, considerable work was done during the season on the turning basin and berth at the new pulp-mill wharf, the total area of which is now about  $7\frac{1}{2}$  acres, the extreme length being about 1,000 feet, and width 500. At the Gloucester Lumber and Trading Company's wharf, the channel was widened in to the wharf, and the berth was gone over, the total length of the dredging here being about 800 feet and width about 100 to 150 feet.

The depth given in the channel was 17 feet at low water ordinary spring tides; in the basin, about 20 feet; in the berth at the pulp-mill wharf, 15 feet; and in the berth at the Gloucester Lumber and Trading Company's wharf, 20 feet.

The total barge measurement quantities were 308,976.9 cubic yards. Material, sand and clay.

The government dredge P.W.D. *No. 3* worked August 4 to October 31, removing a total of 65,917 cubic yards barge measurement, of which 43,613 cubic yards were dredged on the Outer bar, and 22,304 on the Ripple and Ballast bars inside.

On the Outer bar, the channel was widened 50 to 75 feet, i.e., to about 150 in a length of about 1,500 feet, about 3,500 to 5,000 feet outside the entrance. The depth given was 15 to 17 feet. Material, clay, sand, and gravel.

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On the Ripple bar the dredge worked over a length of about 800 feet, where rapid shoaling occurs each season. The depths here are still less than at the close of the season of 1913 varying from about 18 to 11 feet.

On the Ballast bar, the dredge worked over a length of about 1,000 feet, giving depths of about 17 feet where there was previously 13 feet on the section of the channel not previously dredged.

On account of short shoal sections remaining on the Ballast, Ripple, and Outer bars, the limiting depth is still about 13 feet at low water ordinary spring tides.

## BLACK RIVER.

The Black river, Kent county, is a small stream entering Buctouche harbour about one mile north of Buctouche. Between July 1 and October 12, 1916, dredging was in progress in making a cut 1,050 feet long, 30 wide, and with 4 feet at low water ordinary spring tides across a shoal to give a passage for the fishing boats at all times of tide, and to improve the smelt fishing, etc., on the river.

The quantities removed were 6,054.66 cubic yards, barge measurement; material, sand and shell mud.

The contract price was 36 cents per cubic yard, barge measurement.

## BUCTOUCHE.

In the  $5\frac{1}{2}$  miles between the town of Buctouche and the harbour entrance on the Northumberland strait, three shoals occur, the most serious of which is at the entrance, where a wide ledge of rock and a sandbar limited the depth to about 10 feet at low water ordinary spring tides.

Dredge P.W.D. No. 13 was in operation between June 24 and September 19, 1916, when the central section about 1,300 feet long of the first cut on the Middle shoal was completed and the whole was widened to about 120 feet. The total length of the cut is 4,180 feet and least depth 13 feet at low water. Material, clay, mud, and sand.

On the turn between the range of the Indian Point lights and outer range, two small shoals were gone over in a total length of about 800 feet, of which about 200 feet was on the first range and the remainder on the inner 1,000 feet of the outer range, ending about 650 feet inside the beginning of the rock cut. A depth of 13 feet at low water was given. Material, mud, sand, and shell rock.

There remains, to complete the 13-foot channel to the town of Buctouche, the outer section about 2,700 feet long of the outer bar, where the material is fine sand and the least depth 10.2 feet at low water, and the inner shoal about one mile below the town which as shown by our last survey is 2,500 feet long with a least depth of 10.3 feet at low water. Material, soft mud.

The quantities removed during the fiscal year amounted to 10,680 cubic yards at the outer points, and 47,516 cubic yards at the Middle shoal, barge measurement.

## CHURCH RIVER.

Church river, Northumberland county, enters Miramichi bay, about 24 miles northeast of Chatham.

A highway bridge crosses the river near its mouth above and below which are shoals nearly dry at low water. Above the shoals is a channel with 8 to 10 feet at low water extending about  $2\frac{1}{2}$  miles inland, or to the point to which lumber is brought by the river current.

In order to permit of the passage of rafts, scows, and small tow-boats, an agreement was entered into on 9th August, 1916, with Mr. F. A. Fowles, for the removal of 14,000 cubic yards, barge measurement, at the rate of  $35\frac{1}{2}$  cents per cubic yard.

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Work was in progress between 21st August and 11th November with the dredge *Fowlis*, when a total of 6,568.9 cubic yards were removed in making a cut about 1,900 feet long, 30 to 40 feet wide, and with 2 to 4 feet at low water across the shoal above the bridge. Material, mud, packed sand, gravel, and shells.

## COCAGNE BAR.

Cocagne bar, Kent county, is a fishing settlement at the northern end of Cocagne harbour, 5 to 6 miles north of Cocagne village, and 10 miles southeast of Buetouche.

Some years ago the people made, by hand digging and at their own expense, a cut about 8 or 10 feet wide leading out towards the strait, which is still used.

In 1915 this cut was widened and extended by the department to a length of 1,700 feet and width of 15 to 20 feet, with depths of 2½ to 3 feet at low water ordinary spring tides.

Dredging was resumed 30th August to 13th November, 1916, when the cut was carried shorewards about 250 feet, or to about 350 feet from high water mark, extended about 250 feet at the outer end and given a width throughout of about 40 feet. The cut has now a total length of about 2,200 feet.

A cut running southwards towards the main Cocagne harbour was also begun by overcasting in a length of 985 feet, 18 to 23 wide and 1 to 2 feet deep.

The material consisting of mud and sand removed in scows amounted to about 4,547 cubic yards, barge measurement, costing 32½ cents per cubic yard, and the eastover was about 1,311 cubic yards, place measurement, costing 20.6 cents per cubic yard.

## GRAND LAKE.

Grand lake, situated in Queens county, is the largest lake in the province of New Brunswick, and flows into the St. John river through the Jamseg.

Near the mouth of the lake, a shoal had formed across the channel by deposit from the inflowing tide. Dredging was formerly done at this place in 1902, but the channel had practically filled again in 1914.

During the fiscal year 1915-16, a contract was awarded to L. W. Nickerson for the removal of approximately 75,500 cubic yards, place measurement, of class "B" material, at 14½ cents per cubic yard, dredging to be done to the proposed grade of 9 feet below low water for a width of 150 feet, the length of channel required being 6,075 feet; 53,694.6 cubic yards, place measurement, was removed.

Dredging was resumed on May 31, 1916, and was completed on June 16 of the same year, when 13,542.9 cubic yards, place measurement, of silt, sawdust, etc., was removed within the limits and grades required.

## MARTIN'S HEAD.

Martin's Head, St. John county, is situated at the mouth of Quiddy river, on the north shore of the Bay of Fundy, 12 miles east of Great Salmon river, and 11 miles west of Point Wolfe.

The breakwater, begun by the department in 1914-15, and later extended, was 768 feet long, consisting of a timber groyne made of piling, sheathed for 154 feet, and of pile bents, close-piled on the seaward side, for 614 feet. All the timber for this work has been supplied free of charge by the Pejepscoot Paper Company.

During 1916-17 the pile breakwater was extended 60 feet; a breastwork, 575 feet long, and two groynes, each 75 feet long, consisting of piles, sheathed on the seaward side, were constructed. The work was in progress between 22nd June and 7th September, 1916.

## NEGUAC.

Neguac lies on the northern side of Miramichi bay, about 27 miles northeast of Chatham. The public wharf, built by the department in 1892 to 1894, is the terminal point for trips of the daily river steamer.

The covering and superstructure of the wharf having been weakened by wear and decay, its reconstruction and repair was begun during the fiscal year 1916-17.

Work was in progress between 28th June and 15th July, between 29th July and 25th August, between 11th and 23rd September, and on 29th September.

## NELSON.

Nelson is a village and settlement on the south side of the Miramichi river opposite Newcastle, and 5 miles above Chatham.

In order to provide a berth at the wharf for overseas shipments, an agreement was entered into on 9th August, 1916, with Mr. Peter England, for the removal of 13,500 cubic yards at 35 $\frac{3}{4}$  cents per cubic yard, barge measurement, and dredging was in progress between 16th August and 3rd November, when a total of 13,495 cubic yards were removed.

In front of the wharf there were previously depths of 8 to 10 feet which were increased to 16 to 19 feet in a berth about 500 feet long with an approach from the river channel of equal depth. The shallower section is at the upper end where the dredging was close to rock. Material, mud and clay.

## PARTRIDGE ISLAND.

Partridge island is a rocky eminence standing at the mouth of St. John harbour, and dividing the entrance into east and west channels. The island is the property of the Dominion Government, and is used for lighthouse, quarantine, and military purposes. At the northern end of Partridge island, two piers of cribwork were built by the department many years ago, and are now in a very dilapidated condition, being unfit to repair.

During 1916-17 an extension was constructed to the low-water landing, consisting of pilework 40 feet in length, with an average height of 18 feet. For this extension fifteen piles, steel shod, were driven, and securely capped and braced; a timber trestlework was constructed on top to protect the landing from vessels at high water; bags of concrete were placed in the corner of this pier, on ballast poles, where it had been damaged by a heavy storm and lifted. A new set of steps was placed at the inner end. The work was carried on, but not continually, between October, 1916, and March, 1917.

## POINT SAPIN.

Point Sapin, Kent county, is a settlement and important fishing station on the Gulf of St. Lawrence, about 8 miles south of the entrance of Miramichi bay.

A breakwater was constructed in 1912, inside which was originally 5 to 6 feet at low water. The depth has, however, considerably decreased through the accumulation of sand, therefore dredging was carried on during the fiscal year 1916-17, between 13th April and 9th June, to improve the approaches and berths.

The dredging covered the berths for 114 feet inside the pierhead and 200 feet along the approach and an area about 75 feet wide in the angle between the two; also a cut across the bar formed opposite the end of the pierhead, about 50 feet square. The depth given was about 2 $\frac{1}{2}$  to 4 feet at low water. Material, sand.

The total quantity removed was 1,853 cubic yards, at a cost of 44 cents per cubic yard, barge measurement.

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## RICHARDSON.

Richardson, Charlotte county, is a very prosperous fishing village 11 miles south of St. Andrews.

The wharf at Richardson, built by the Provincial Government in 1887, was transferred to the Federal Government in 1915, and consists of a pile approach, 132 feet long and from 21 to 31 feet wide, with a cribwork pier-head, 40 feet by 24 feet.

During 1916-17, the cap, fenders, stringers, bracing, and upper section of the cribwork of the pier-head were renewed; a floating slip was constructed and a freight shed was built on the wharf. The slip will not be put in place until the spring. The work was begun on July 31 and suspended on November 25, 1916.

## RICHIBUCTO CAPE.

Richibucto cape lies 6 miles southeast of the entrance to Richibucto harbour, and  $5\frac{1}{2}$  miles north of Chockfish river. The distance from Richibucto cape to Prince Edward Island is  $14\frac{1}{2}$  miles.

The works begun in 1908, will consist of a main breakwater and a southern pier forming a sheltered harbour about 2.8 acres in extent.

During the fiscal year, the outer end of the southern pier which had settled, was raised with two tiers of logs in a length of 40 feet and with one tier for 32 feet and 30 cubic yards of stone was placed in the work.

A crib 99 feet long, 28 feet wide at bottom and  $10\frac{1}{2}$  to  $12\frac{1}{2}$  feet high, was built to fill in the space between the original end of the pierhead of the breakwater and a detached block to give better shelter for the fishing boats. Two ballast floors were laid in the crib, the space between them,  $5\frac{1}{2}$  feet to 6 feet deep, being filled with stone.

Work was in progress between September 20 and October 7, 19th and 24th, and 30th and 31st October, between 14th and 23rd February and 13th and 31st March.

## RIVER ST. JOHN AND TRIBUTARIES.

## BAYSWATER.

Bayswater is a summer resort of considerable importance at the lower end of the Kennebecasis river, in Kings county, and is the western terminus of the ferry *Maggie Miller*, which plies on that river.

Work of construction of a ferry landing was carried on during the months of July, August, December, 1916, and was finished in March, 1917.

The work done consists of the construction of four cribwork blocks for the purpose of forming a slipway for the ferry. These blocks are 40.7 by 12 feet, 29 by 12 feet, 41 by 10.6 feet, and 29 by 10.6 feet, respectively, and each block is approximately 18 feet high. The blocks are constructed entirely of round cribwork partially filled with ballast and are battered on both sides at the rate of 1 in 6, with ends plumb.

## KENNEBECASIS ISLAND.

Kennebecasis island is situated near the mouth of the Kennebecasis river, in Kings county, just below Long island.

Work on the construction of a ferry landing was begun 11th September, 1916, and completed on 28th February, 1917.

The work consisted of the construction of four cribwork blocks for the purpose of forming a slipway for the ferry *Maggie Miller*. These blocks are 42.5 by 13.6 feet, 28.1 by 13.6 feet, 42.4 by 13.2 feet, and 27.9 by 12 feet, respectively, and each block is approximately 20 feet high. Construction is of round cribwork, double fendered with flatted timber.

## REMOVAL OF SNAGS.

Owing to extensive lumber operations on the St. John river there are annually a great number of snags to be removed. In the main, these consist of logs which have become waterlogged and partly submerged. Very frequently these logs lie in an inclined position, with one end on the bottom of the river and the other at or near the surface. They constitute a very serious danger to navigation, and each year a large number are removed.

In 1916 snagging began on 11th September and was finished on the 4th November. Work was also performed on the Kennebecasis, and snags were removed between Perry point and Hampton.

## ST. CROIX RIVER.

This work is fully described in the annual report for 1916.

The St. Croix river forms part of the western boundary of New Brunswick, and at the same time a portion of the boundary between the Dominion of Canada and the United States. In 1911 an arrangement was entered into with the United States Government whereby the Department of Public Works of Canada agreed to contribute 10 per cent of the cost of dredging a channel in the St. Croix river. The total estimated quantity was 443,835 cubic yards, to provide a channel 9 feet deep at mean low tide, and 100 feet wide, from the upper steamboat wharf at Calais, to the public landing at St. Stephen; thence 150 feet wide, to the lower steamboat wharf at Calais; and thence 12 feet deep and 200 feet wide, to the mouth of the river, covering a distance of about 3½ miles.

During 1916-17 the improvement to navigation by dredging in St. Croix river was completed. Work on the third contract (let during the previous fiscal year) was resumed in April, and was completed in October, 1916. The quantity of mill waste, mud, gravel, etc., removed during this period, above the required depth, was 73,428 cubic yards, barge measurement, and of boulders, 11.68 cubic yards.

## ST. JOHN.

The ordinary winter season's wear and tear to the government sheds and wharves necessitated the doing of considerable renewal and repair work; this was carried out by day labour during the summer season, and two additional offices for shed No. 14 were constructed.

The face of the outer end of the Union pier had been loosened by storms, and temporary repairs were made to the portion that required immediate attention by the addition of new vertical ties and fenders.

A portion of the water-pipe main leading to berth No. 15 was lowered to carry it below the frost line under the track depression, and a branch line laid to supply berth No. 15. A pipe sewer, running from Union street, was extended across the newly filled area to connect up with that already laid, running to berth No. 15. Temporary pipes were run along berth No. 15, to supply steamships with water. Three fire-protection hydrants were also installed.

A roadway was built by day labour from Protection street to dock No. 16. One-half the cost of this, where it is partly on land leased to the Canadian Pacific Railway Company, is to be paid by that company, under the terms of their lease.

The Canadian Pacific Railway Company constructed and filled in with earth a trestle running towards berth No. 16. This necessitated the extension of a sewer, running south from Germain street to carry it clear of the embankment. One-half the cost of this was paid by the Government, under the terms of the joint agreement between the Crown, the city, and the Canadian Pacific Railway *re* transfer of this land.



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Several small pieces of work were done for the Marine and Fisheries Department, the total amounting to \$500.45.

## BEACON BAR.

*Construction of Temporary Shed and Superstructure for same, etc.*

The Naval Transport Department found that additional shed-room was needed for handling munitions of war, so tenders were called for the construction of a temporary shed on pier No. 1, berth No. 16, West St. John, to be equipped with water works, electric lighting, office-heating systems, etc., and contract was awarded to Mr. D. C. Clark, on 27th November, 1916. This contract included the construction of a portion of the timber substructure for the shed, on a unit-rate basis. Good progress has been made with the work.

To avoid any possibility of further settlement of the wharf wall at berth No. 16, it was decided to construct the substructure for the temporary shed on pile and timber work, instead of an earth filling placed behind the concrete top portion of the wall. Work was started in November, 1916, under authorization of Order in Council of November 14, 1916.

Plant was hired from the Maritime Dredging and Construction Company, the Canadian Pacific Railway, etc., the earth shifted from behind portions of this wall to form an embankment down the centre of the pier to carry the tracks at the rear of the shed, work being done by the Maritime Dredging and Construction Company's crews of men, on a cost plus 10 per cent basis; also by day labour. Piles were driven and a portion of the timber work done under day work, the balance of the construction being done by Mr. D. C. Clark, under his contract.

Tenders were called for the supplying of 5,000 yards of rock ballast, to be placed at the rear of the wharf wall, in connection with timber work, and the contract was awarded to Messrs. Kane & Ring, on December 22, 1916. Three thousand cubic yards have been placed during the fiscal year. Under the terms of the contract, no payments are to be made until the work is completed.

An agreement was entered into with the Canadian Pacific Company to lay tracks across the government property to and along the embankment at the rear of the shed. They first extended the trestle, that they had built out from the shore towards the pier on their property, across government land to the pier embankment. This was filled in and the resulting embankment widened to carry the tracks to the shed; later, they were authorized to, and did, construct a temporary sea-wall to protect the exposed portion of the embankment from erosion.

*Timber Retaining Wall and Back Filling.*

On February 1, 1913, a contract was entered into with the Maritime Dredging and Construction Co., Ltd., for placing earth filling at the back of the quay walls, then under construction. They completed the amount of work specified in that contract during the fiscal year 1915-16. Tenders were called for the completion of the filling, and the contract awarded to the above-mentioned company on July 15, 1916, and 224,532 cubic yards have been placed by them. This contract also called for the construction of a rock-ballasted timber crib-wall to retain the filling at the southern end of the wharf wall and of the reclamation area. This wall was completed in November, 1916.

On November 7 the department suspended operations when they hired the reclamation plant of the company, and no further work was done by them during the balance of the fiscal year.

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A portion of the land northward of berth No. 15 was leased to the Canadian Pacific Railway Company for railway-yard extension purposes, and under the terms of this lease, dated September 26, 1916, they completed the reclamation of the greater part of that area, depositing 37,107 cubic yards of material.

## COURTNEY BAY.

This work is described in the annual report for 1915:—

On March 25, 1912, a contract was entered into with the Norton Griffiths Company for the construction of harbour improvements in Courtenay bay, east side of St. John harbour. The works consists of a breakwater, 4,570 feet long, of rubble stone deposited on the beach, which is from 3 to 10 feet above low tide, the top of the breakwater being 13 feet above high tide (ordinary maximum spring tides rise 27 feet); the construction of two piers on the northern side of the bay; these piers are 800 feet long, 300 feet wide, and are to be built of timber cribwork sunk in 34 feet of water at low tide, on which a concrete superstructure 21 feet high will be built; the excavation of a basin inside the breakwater and a channel leading thereto from the main entrance channel of the harbour, the total quantity of dredging being approximately 11,000,000 cubic yards; the approximate estimated cost of the work is \$7,500,000, and the contract is stipulated to be finished in 1917.

In connection with the works, the contractors are bound to build a dry dock, 900 feet long, with an entrance 110 feet wide; the dock is to be constructed and equipped under the Dry Dock Subsidy Act of 1910.

During the year 1916-17, the work of covering the breakwater with large stone was continued. Three-quarters of the top, seven-eighths of the inner, and practically all of the outside of the wall is now completed. A small portion of this stone was taken from the dry dock prism proper, the balance from the adjacent quarry.

Four dredges excavated in the basin, increasing the area of the hole to 98 acres. A portion of the pier sites was excavated to an average depth of 15 feet below low water. One dredge excavated 519,885 cubic yards from that portion of the channel adjoining the basin, making a depth of from 25 to 32 feet at low tide. Part of this material was used in reclamation work at Beacon Bar wharves.

Due to the unsatisfactory progress made, the contractors were notified to suspend operations on November 30, and no work has been done since that date.

*Main Channel.*

The main entrance channel of St. John harbour has a length of 4,500 feet, being 600 feet wide for 1,800 feet, and widening gradually to 1,000 feet in the remainder of its length. The departmental dredge "*Fielding*" has carried on improvements in the channel since 1908. The work consists of dredging this channel from a minimum depth of 19 feet at low water to a depth of 32 feet at low water, and the maintenance of this depth.

During 1916-17 the departmental dredge *Fielding* removed 15,769 cubic yards, scow measurement, of sand and gravel, in the main channel of St. John harbour, from 18th October, 1916.

## ST. JOHN WEST.

On the west side of St. John harbour there are ten deep-water berths, including those at Sand point, Rodney slip, and the new docks lately constructed on the site of Beacon bar. Owing to the fact that a considerable amount of filling-in occurs here each season, it is necessary to have the berths for steamers cleared up, previous to the winter-port season.

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Between 21st August and 15th September, 1916, the departmental dredge *Fielding* removed 32,315 cubic yards, barge measurement, of soft mud from Sand Point slip, berths Nos. 3, 4, 5, and 6, and berth No. 7.

To remove material close to the face of the wharves (which the departmental dredge *Fielding* was incapable of removing) Contractor J. S. Gregory's dredge *Keta* was employed, at the rate of 29 cents per cubic yard, scow measurement. In berths Nos. 3, 4, and 5, this dredge removed 6,002.5 yards, barge measurement, of soft mud, between 2nd and 12th October, 1916.

In slip No. 1, berths 15 and 16, the Maritime Dredging and Construction Company's dredges *Beacon Bar* and *Leconfield* removed 21,888 cubic yards, barge measurement, of mud, gravel, clay, and stones, between 16th October and 20th December, 1916. Of this quantity, 7,259 cubic yards, barge measurement, were deducted for material dumped by this company in the berth in connection with their reclamation contract, and 1,842 cubic yards, barge measurement, were also deducted, being removed outside the authorized limits.

## SHIPPIGAN GULLY.

Shippigan gully, a passage between Shippigan island and the mainland. Works were begun in 1875 to improve the channel at the gully in which there was then a least depth of only 3½ feet at low water. The construction of dams and breakwaters, concentrating the current in one channel, increased the depth to nearly 6½ feet in 1898, 8 feet in 1903-04, and about 8.5 feet at low water or 14.3 feet at high water ordinary spring tides in 1915.

Work was in progress between 24th June and 17th November, 1916, on the reconstruction and repair of the eastern breakwater and the construction of breastworks on the east beach.

The breastworks partly replace breastworks built many years ago and which had decayed or been carried away. They cover a considerable section of the beach between the east breakwater and the dam across what was formally the eastern gully, about 3,600 feet north of the breakwater.

Including groynes, about 12 to 15 feet long, which project from the main line of breastworks, and four connecting breastworks, 77 feet long between the two lines at the lighthouse, the total length of breastworks constructed during the year was 3,906 feet, of which about 900 lineal feet were of heavier construction.

A 106-foot block in the eastern breakwater, 368 feet from the outer end, partly rebuilt last year, was completed. About 140 close-piles were driven and the work was filled to about 2 feet from the top with brush and stone.

In a section 60.4 feet long, 130 feet beyond the last, a new face was built on the north side to strengthen and straighten this face of the breakwater. The new face is 3 feet in average distance from the old, and is composed of ten main and sixty-seven close-piles, two walings and ten cross-ties reaching over the old work. Brush and stone were placed in the space between the old and new faces and over the old work. Two close-piles were driven in the 130-foot section to replace two which were broken.

A small new crib, 17 feet square, composed of three tiers of logs filled with brush and stone, was built at the inner end of the rebuilt block and the tops of all piles, new and old, and of the cap-timbers, were painted with carbolineum.

## QUEBEC.

## ANSE À BEAUFILS.

This work is described in the annual report for 1914.

Anse à Beaufile, in the municipality of Cape Cove, county of Gaspé, is situated on the Gulf St. Lawrence, 6 miles south of Percé.

During the last six months, the inside end of the breakwater was rebuilt for a length of 40 feet by 20 feet in 5 feet of water at low water spring tides.

## BAIE ST. PAUL.

Baie St. Paul is situate in the county of Charlevoix, on the north shore of the river St. Lawrence, 64 miles below Quebec. Population, 4,000.

During last season, the following works were undertaken and completed in rebuilding of portion of wharf and freight and passenger shed destroyed by fire the previous fall; approximately 700 cubic yards of cribwork was rebuilt and a new shed 60 by 24 feet erected, and other repairs were made. Work was done by day labour.

## BATISCAN RIVER.

Dredging was undertaken to maintain a 6-foot channel, from the government wharf at Ste. Geneviève de Batiscan, to the St. Lawrence river, a distance of 28,000 feet, and was done as follows: In the channel on a length of 3,200 feet by 60 feet wide, to 6 feet below zero; another length of 600 feet by 50 feet wide and 6 feet below zero, east of the first location; a basin, 400 feet long by 100 feet wide, to 6 feet below zero, near the railway bridge, and at the ferry site on a length of 400 feet by 60 feet wide to 6 feet below zero, west of the bridge.

The total quantity removed by dredge P.W.D. No. 106, during the working season, was 38,215 cubic yards of clay and sand. The work was started May 20, and discontinued September 12, 1916.

## BIC.

Bic, on the south shore of the St. Lawrence river, in the county of Rimouski, is an important village and a favourite summer resort. There are two wharves; the Bic wharf, which is located on the south shore of the harbour, and the Pointe à Cote wharf which is located at the end of the point of the same name.

The work done at Bic during the fiscal year, 1916-17, consisted in the placing of a crib, 28 feet long by 21 feet wide, at the head of the wharf. Some repairs were also done to the planking. This wharf was built in 1884 and 1887.

## CAP CHAT.

(This work is described in the annual report for 1913.)

The first municipality of the county of Gaspé on the St. Lawrence river shore, 45 miles below Matane.

During the last six months, the whole length of the old portion of the pier on a length of 525 feet was raised 2 feet after renewing from three to seven tiers of cross-ties, and fully reballasting. The shore end was widened 30 feet and extended 35 feet towards shore by a protection breastwork.

## CAP DE LA MADELEINE.

The Cap de la Madeleine parish, county of Champlain, is situated on the northern bank of the river St. Lawrence, about one mile easterly of the St. Maurice river outlet.

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The Dominion Government built an approach and a wharf in 1887. In 1913 an extension was decided upon, and the new work was completed in 1915.

During the fiscal year the whole approach was protected by a riprap placed on both sides, on a length of 200 feet, and finished with a 6-inch layer of concrete.

All this work was done by agreement, including the construction of a shed, 26 by 32 feet.

## CAPE COVE.

Cape Cove, Gaspé county, is an important fishing station, on the coast of Gaspé, some 9 miles south of Percé, the shire town.

During the last six months the outside end of the wharf was raised 15 inches, reballasted with some 800 cubic yards of stone ballast, and the corners sheathed and protected by iron straps.

## CHICOUTIMI BASIN.

Chicoutimi basin, in the west part of the town of Chicoutimi, is the landing place of the ferry plying between Ste. Anne and the town of Chicoutimi.

During the present fiscal year an extension of 90 feet in length, 36 feet at one end, 45 feet at the other, and 25 feet in height, was built to the present wharf. This construction consists in piles driven into the bottom at every 10 feet.

A movable slip has also been built and placed into the old portion of the wharf. The work was commenced on 23rd May and completed July 4.

## DUCK CREEK.

Duck creek is situated on the north shore of the gulf St. Lawrence, about 1 mile above Thunder river, Saguenay county, and is a meeting place for fishermen of the district.

During the present fiscal year a spur dyke was built, 520 feet in length, across the entrance of the creek; this dyke is for the purpose of collecting a sandbank in order to protect fishing boats sheltering there against the action of the sea.

The work was commenced on 17th October, and completed 27th.

## FATHER POINT.

Father point, in the county of Rimouski, is situated on the north shore of the St. Lawrence river, 6 miles below the town of Rimouski.

The work done during the fiscal year 1916-17, consisted in the construction of a revetment work along the east side of the wharf on a length of 80 feet, to protect the wharf against the action of the sea, where the break in the wharf occurred in November, 1914.

This revetment does away with the batter of the wharf; it is built straight up, thus giving to the wharf at the top an extra width of 4 feet. This construction is made of square timber 12 by 12 very strongly jointed to the main construction. The wharf was built in 1904-5.

## GRANDS MECHINS.

Grands Mechins, also called St. Edouard des Mechins, in the county of Matane, is situated on the south shore of the St. Lawrence river, 30 miles below Matane.

During the fiscal year 1916-17, the work done consisted in the completion of the construction of a crib 100 feet long by 13 feet wide and a mean height of 28 feet, which was placed along the west side of the wharf, in order to protect it and to prevent its destruction. Sheathing has been renewed on a length of 21 feet on the old wharf.

The Mechins wharf was begun in 1906 and completed in 1909.

## HA HA BAY.

*Dredging.*

Dredging was done at Port Alfred, situated on the east side of Ha Ha bay, between St. Alphonse and St. Alexis, where the Ha Ha Bay Sulphite Company is erecting a powerful chemical pulp mill.

The object of this work is to facilitate the approach, by ocean steamers, to the company's wharf.

Work was started by dredge *No. 115*, on 5th to 9th of June, when 2,662 cubic yards of material, scow measurement, were removed; from 24th July to 11th October, the work was continued by dredge *No. 110*, and 81,032 cubic yards of material, scow measurement, were removed, making a total amount, for the present fiscal year, of 83,694 cubic yards, scow measurement.

The dredging was done to 27 feet below 0, corresponding to extreme low water over an area of 68,300 square feet, and to 14 feet over an area of 37,600 square feet. The material was of very soft clay.

In a recent survey, it was found that filling-in had taken place, since the suspension of the work.

## HONFLEUR.

Honfleur is situated on the Peribonka river: it is the head of navigation, there is a ferry plying to the opposite shore for the accommodation of people from the parishes of St. Felicien, Peribonka, Mistassini, etc.

During the present fiscal year, the construction of the wharf begun last year has been continued, the work done consist of an abutment of round timbers, 15 feet in width and 27 feet long; an approach of 56.6 feet in length, by the same width, built with piles, the head block which is 25.6 in width by 40 feet in length, has also been raised 6 feet.

The work which was carried out by day labour was commenced on August 2 and suspended on September 15.

## HOSPITAL BAY.

Hospital is a fishing harbour on the northwest side of Grindstone island. The crib, partly built in 1916, was secured and completed.

## ILE PERROT SOUTH.

Ile Perrot South, a post village in Vaudreuil county, 3 miles from Ste. Anne de Bellevue.

The wharf built by contract in 1886-90, being in a dilapidated condition, it was decided to build a new wharf in front of the church where it will be less exposed to the spring ice-shove, and more centrally located.

The new wharf was partly built last year, and during the present fiscal year the wharf was completed by day labour.

## ISLE VERTE.

The village of Isle Verte, in the county of Temiscouata, is situated on the south shore of the St. Lawrence, 16 miles below Rivière-du-Loup, and 130 miles below Quebec.

The renewing of the superstructure of the wharf began four years ago, was continued during the last fiscal year, and a length of 104 feet, ending at the outer block, by a width of 22 feet and a mean height of 18 feet, was altogether renewed from top to bottom.

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The flooring at the shore end of the wharf was renewed on a length of 165 feet by a width of 22 feet, and further repaired where urgently needed.

A few stringers, which were decayed, were also replaced.

These works were performed by day labour during the months of July, August, and September.

## LACHINE.

*Dredging.*

Lachine, an incorporated town, in Jacques Cartier county, on lake St. Louis, and on Grand Trunk railway, 8 miles from Montreal.

The object of this dredging was to give better access to Ottawa River Navigation steamboat *Empress*.

From 27th July to 28th departmental dredge *No. 119* removed some 174 cubic yards, scow measurement, of ashes in making a 10-foot basin in front of Grand Trunk Railway wharf.

Dimensions of work done: one cut, 140 feet long by 20 wide to a depth of 10 feet below low water level, corresponding to 6 feet 5 inches below flooring of Grand Trunk Railway wharf.

## LAPRAIRIE.

(This work is described in the annual report for 1916.)

Laprairie, a town in Laprairie county, on the south shore of the St. Lawrence, and a station on the Grand Trunk railway.

*Dyke.*

During the present fiscal year the Duranceau & Poupore contract was cancelled. Total cost of contract, \$75,685.

Another contract was given, on 18th of November last, to the Carleton Construction Company, to complete the dyke, at the estimated cost of \$79,420.47. No work has been done as yet by the contractor on this contract.

*Plank Roadway.*

Last fiscal year, in order to accommodate the traffic during the construction of the dyke, a plank roadway was constructed in eight days alongside the dyke for a length of 6,500.

During the present fiscal year, the plank roadway and temporary bridge were maintained in good order; the planks were renewed as they broke and the road was always in first-class condition; this work was performed by day labour.

## LONGUEUIL.

Longueuil is a post town, in Chambly-Verchères county, on the south line division of the Quebec, Montreal and Southern railway, and situated on the south shore of river St. Lawrence, opposite Montreal. Population, in 1914, 6,000.

During 1916 the department undertook four different dredging improvements, at or near Longueuil.

- (a) Boating club.
- (b) Canada steamships.
- (c) Garage.
- (d) Government wharf.

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(a) *Boating club*.—From June 19 to 24, departmental dredge No. 119 removed some 871 cubic yards, scow measurement, of clay, sand, and boulders in making a cut alongside Grand Trunk Railway wharf, 300 feet long by 25 feet wide to 3 to 4 feet at low water. Hours of actual dredging, 39; cut, 25 feet wide; face removed from  $2\frac{1}{2}$  to 4 feet; distance advanced, 293; dumping ground, 7 to 8 miles downstream, on the northwest shore of river St. Lawrence, or below Racine pier.

The site of dredging is immediately upstream of Canada Steamships Line wharf, in a small bay, which is formed with the old Grand Trunk Railway wharf. The latter is leased every year to the Longueuil Boating Club.

The probable duration of the improvement will be forever.

To complete, as originally proposed, will require the removal of 7,543 cubic yards, place measurement, or 10,757 scow measurement, and 1 foot of subgrade also included in the above quantity.

Dimensions of work to be done: a 4-foot basin, on a length of 143 feet along shore by 317 along Grand Trunk Railway wharf. A dredge of "121" type should complete whole 4-foot basin in a few working months with a gauge of not less than 4 feet, in order to make only the required depth.

(b) *Canada Steamships*.—From 15th May to 8th July, 1916, dredge No. 110 removed some 23,853 cubic yards, scow measurement, of clay and boulders, in making a 12-foot channel, for ferry boat plying between Longueuil and Montreal. Hours of actual dredging, 228; cut, from 35 to 37 feet; face removed, from 1 to 5 feet; distance advanced, 6,767 feet.

Dimensions of work done, during season 1916, are as follows: 490 feet long, parallel with current, by 300 feet, the whole to a depth of 12 feet below extreme low water level.

The site of dredging done is some 1,500 feet northwest from Canada Steamship Lines wharf, at Longueuil, in the St. Lawrence.

Owing to the fact that the site of dredging done is surrounded by deep water, with heavy current, the probable duration of the improvement will be forever; but every spring ice-shoves may carry big boulders and other material into dredged area.

To complete, as originally proposed, will require the removal of 18,106 yards, place measurement, or 24,141, scow measurement. The material to be removed is clay, sand, boulders, and hardpan, easy to dredge with a powerful plant. Dimensions of work to be done, 450 feet long, parallel to current, by 350 wide, to a depth of 12 feet clear below extreme low water level, or zero of gauge at Longueuil.

(a) *Longueuil Garage*.—From May 29 to May 30, departmental dredge No. 110, and June 9 to 17, departmental dredge No. 119, removed some 1,498 cubic yards, scow measurement, in completing light-craft channel leading to Longueuil garage. Material removed: clay, boulders and hardpan, hard to dredge and at the same points the dredge struck rock, leaving hardly 2 feet of water at low level.

Dredge No. 110 removed 534 cubic yards, scow measurement. Hours of actual dredging, 9; cut, 37 to 40 feet wide; face removed, 3 feet; distance advanced, 330 feet.

Dredge No. 119 removed some 964 cubic yards, scow measurement. Hours of actual dredging, 51; cut, 25 feet wide; face removed,  $2\frac{1}{2}$  to 4 feet; distance advanced, 293 feet.

Dimensions of work done: one cut, 350 feet long, alongside Canada Steamships Lines' wharf, by 25 feet wide at bottom to a depth varying from 2 to 5 feet.

The site of dredging accomplished is immediately downstream of Canada Steamships Lines' wharf, and starts at some 230 feet from face of said wharf.

Owing to the fact that the site is well protected from storms, and absolutely no current, the probable duration of improvement will be forever.

(d) *Government Wharf*.—From August 1 to August 4, departmental dredge No. 119 removed some 179 cubic yards, scow measurement, in removing two small



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shoals in front of government wharf. Hours of actual dredging, 21; cut, 20 feet wide; face removed, from 1 to  $1\frac{1}{2}$  feet; distance advanced, 230 feet; dumping ground, 6 miles return, downstream, on the northwest shore of river St. Lawrence, below Racine pier.

The probable duration of work done will be for over thirty years.

To complete, as originally proposed, will require the removal of 11,626 cubic yards, place measurement, or 15,501 cubic yards, scow measurement. Material to be removed is clay, sand, and gravel, easy to dredge.

Dimensions of work to be done: 200 feet in front of wharf by 650 feet outer by 320 feet deep, to a depth of 12 feet below extreme low water level, or zero of gauge at Longueuil.

## MONTREAL.

*Point St. Charles.*

*Grand Trunk Boating Club.*—Grand Trunk clubhouse is situated on the north-west side of river St. Lawrence, opposite Nun's island, near the north boundary line of city of Verdun, some  $1\frac{1}{2}$  miles upstream of Victoria bridge.

The object of this dredging was to increase the flowing section of the river between Grand Trunk boating clubhouse and Price island.

From May 18 to July 3 departmental dredge *No. 121* worked here and removed some 6,495 cubic yards, scow measurement, in completing an improvement below the clubhouse and along Price island. Material: Clay, sand, boulders, and hardpan. The number of cubic yards, *in situ*, corresponds to scow measurement, with an expansion factor of  $33\frac{1}{3}$  per cent for conversion into scow measurement. Hours of actual dredging, 288; cut, from 15 to 22 feet wide; face removed, from  $1\frac{1}{2}$  to 7 feet; distance advanced 2,349 feet; distance to dumping ground, 1 mile upstream in a deep place, close to Nun's island.

Dimensions of work done: a cut, 300 feet alongside Price island, by 250 feet across; immediately below clubhouse, 185 feet along shore by 80 feet wide, and below ice-houses wharf, the removal of a shoal 130 feet long parallel with dyke by 60 feet wide, the whole to a depth of 5 to 6 feet below low water level.

Owing to the fact that the site of dredging done is well protected from storms, material removed very hard, the duration of the improvement will be for ever.

## NOTRE DAME DES SEPT DOULEURS.

Isle-Verte, or Notre Dame des Sept Douleurs, in the county of Temiscouata, is an island of the St. Lawrence, situated opposite the parish of Isle-Verte, on the south shore of the St. Lawrence.

In order to accommodate the inhabitants of Notre Dame des Sept Douleurs, Isle-Verte, the construction of two small wharves, one at the extremity of the island, was started in 1914-15, but was not completed. During the last fiscal year, the work on the two shore sections already built, was resumed to their completion.

*East.*—The section built at the lower end of the island, being 61 feet long, 21 feet wide at the top, with a batter of 1 in 12, was completed by the addition of the stringers, flooring, and cap pieces. Its total height being now 13 feet.

Four mooring iron rings, together with three ladders, were placed on the wharf. The earth approach was graded on a length of 150 feet and a wooden railguard 120 feet long was placed alongside.

*West.*—The section built at the upper end is 72 feet long at the top and 30 feet at the bottom, the width being 20 feet at the top with a batter of 1 in 12.

The height not having been found sufficient, one row of face-timbers was added during the present fiscal year, and the stringers, flooring and cap pieces laid on so as to complete the work.

The actual height of the wharf is 14 feet.

Four mooring iron rings were placed on the wharf, and the approach was somewhat improved.

These works were carried on by day labour during the months of July and August.

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## PORT LEWIS.

Port Lewis, a post village on lake St. Francis, in Huntingdon county, is 8 miles distant from Huntingdon.

During the year 1899 a right of way, together with an old wharf, were bought from Mr. Z. Caron for \$150.

During the present fiscal year a reinforced concrete wall, 18 inches thick at base, 9 inches at top and 6 feet 6 inches high, was constructed around the edge of the old crib from low-water level. A concrete flooring, 110 feet long, 6 inches thick, and 18 feet wide, was laid on the stone approach.

This work was done by day labour.

## POUPORE.

Located on the lower reach of Riviere du Lievre 12 miles above Buckingham. The extensive landslide which took place in 1903 below the lock and dam at this place choked the river for a distance of over one-half mile, and, for a number of years, considerable dredging has been required to improve the channel.

Departmental dredge No. 102 worked at the new boat channel, started in 1915, from July 10 to October 31. During this period 25,673 yards of clay were removed in two single cuts of 30 feet, aggregating 3,078 lineal feet to grade 10 feet, except for the last 196 feet of cutting, which, owing to high water, was made to grade 8 feet only.

## RIMOUSKI.

The town of Rimouski, chef-lieu of the county of the same name, is situated on the south shore of the St. Lawrence river, 180 miles below Quebec. The wharf, which is 2,240 feet long by 42 to 50 feet wide, constitutes, with the protection of the island Barnabé, one of the best harbours.

A contract was entered into with Messrs. Raymon & Talbot, on March 21, 1914, at schedule price, for the construction of a line of cribwork and a tidal basin.

During the fiscal year 1916-17, the work done consisted in the building of the superstructure on the caissons already sunk, the lineal length of which aggregates 1,041.3 feet. Work is completed on the cribs uniting the old wharf with the new works, and on 524 feet of the 900 feet of caissons sunk in 25 feet of water L.W.S.T. The remaining part is also very nearly completed. Filling to the extent of 33,413 yards has been done. A good part of the basin has been dredged and 122,616 yards of material have been removed. The berth of the caissons remaining to be sunk has been cleared.

## RIMOUSKI RIVER.

The work done at Rimouski, during the fiscal year 1916-17, consisted in the maintenance and renewing of the wharf and the breakwater at the mouth of the Rimouski river.

The flooring of the breakwater was partly renewed; a winch was placed; a wooden stairway was removed 40 feet to accommodate navigators, and a shed, 28 feet long by 12 feet wide, was built and placed on a trestle along the east side of the breakwater.

At the wharf, track foundations were renewed on a length of 116 feet; 3,000 square feet of flooring were replaced, three electrical lighting and one mooring post were renewed; other minor repairs were also made.

## RIVER ST. MAURICE.

*Middle Channel.*—The river St. Maurice flows through the Laurentide mountains, a distance of 360 miles, and discharges in the St. Lawrence river at Trois-Rivières. The outlet is divided, by islands, into three branches, called the Eastern, the Middle, and the Western channels.

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Last season the dredging was done as follows: Cutting of sand and clay shoals to help the floating of logs, at foot of Ile Christophe, and 66,840 square feet at 4 feet below zero, east of Ile Caron, and digging a channel 620 feet long by 60 feet wide by 8 feet below zero, near the foot of Ile Wayagamack; also digging of channel 150 feet long, averaging 60 feet wide at 8 feet below zero to the west of Ile Caron.

This dredging has been executed during the last season by dredge *Capital*. The total material removed was 25,448 cubic yards of clay and sand, completing the total yardage to be dredged as per agreement entered into with the department the previous year.

The work was started on May 4, and completed July 3, 1916.

*Western Channel*.—The department decided to dig a channel 80 feet wide and 14 feet deep at low water, from the St. Lawrence river to the wharf, and dredge out a basin in front of it. A contract was entered with "La Compagnie Générale d'Enterprises Publiques" of Lévis, Que., dated September 27, to do this work.

During the last season, only a portion of the contract was finished. The dredge *New Welland* made a cut 963 feet long by 80 feet wide to 14 feet deep at low water of the said channel, and a part of the said basin; this part dredged is 523 feet long, having an upstream width of 215 feet, a downstream width of 60 feet, and a depth of 14 feet at low water. The work was started November 4, and discontinued October 25, 1916.

## RIVER CHICOT.

River Chicot is a creek draining farm lands, about 12 miles northwest of the St. Cutbert station (on the Montreal-Quebec, Canadian Pacific Railway main line) and running southeast of St. Cutbert for a distance of 4 miles, into river St. Lawrence, northwest branch, 4 miles downstream, of Berthierville.

From October 12 to November 4 departmental dredge *No. 119* removed some 5,855 cubic yards, scow measurement, of clay and sand, in completing an 8-foot channel and basin.

Hours of actual dredging, 158½; cut, from 10 to 20 feet; face removed, from 3½ to 10 feet; distance advanced, 1,400 feet; dumping ground, half mile downstream in a deep place close to southwest shore of river St. Lawrence.

Dimensions of work done: a channel, 560 feet long, parallel with river Chicot, by 50 feet wide average, and supplementary cut, south of dredged channel, 100 feet long by 10 feet wide which cut was made in east-over and material thrown on upstream side of river Chicot. The number of cubic yards east-over is 200; this material will be levelled by farmers in order to facilitate loading of hay.

The channel has been dredged to a depth of 8 feet below extreme low water level, corresponding to 30 feet on marine gauge, at Sorel, Que.

The site of dredging done is immediately southeast or downstream of public road, in river Chicot.

Owing to the fact that river Chicot carries sediments, etc., the probable duration of improvement will be eight to ten years.

## RIVIÈRE-DU-LOUP (EN HAUT).

*Dredging.*

The river flows through the county of Masginongé, and discharges into lake St. Peter, 21 miles above Trois-Rivières. It is navigable on a distance of about 3½ miles from the lake to the town of Louiseville.

During the last season dredging was performed from Tourville's mill to the lake, to maintain a 7-foot boat channel above low water. The dredge was placed at four different places, and dredging was done as follows: Two cuts 55 feet wide to 7 feet

below zero, giving a total length of 1,402 feet in channel and in front of wharves; a cut 100 feet by 40 feet by 7 feet below zero; a cut 350 feet by 40 feet by 7 feet below zero; and a cut 1,530 feet by 40 feet by 7 feet below zero, all south of the first cut.

The total lengths dredged are 1,402 feet by 55 feet and 7 feet below zero, and 1,980 feet by 40 feet by 7 feet below zero.

The quantity removed was 4,964 cubic yards, scow measurement, and 6,972 cubic yards cast over, making a total yardage of 11,936 cubic yards of clay.

The work performed by dredge P.W.D. No. 106 was started September 18, and completed October 25, 1916.

#### RIVIÈRE DU MOULIN.

Rivière du Moulin is a municipality adjoining the town of Chicoutimi, and is situated on the south side of the Saguenay river.

During the present fiscal year the protection work along the bank of the Saguenay river, commenced in 1913, has been completed: 301 feet of cribwork, averaging 9 feet in height by 6 feet at the bottom, has been built, and back filling has been placed for a distance of 576 feet.

The work was carried out by day labour.

#### RIVIÈRE-OUELLE.

The pier is situated at Pointe des Orignaux, 5 miles distant from the village of Rivière-Ouelle, in the county of Kamouraska, on the south shore of the St. Lawrence, opposite Murray Bay.

The wharf, which is 1,162 feet long, together with a head block of 240 feet by 50 feet, is subject to very severe use, owing to the considerable traffic over it.

During the last fiscal year work was commenced and the western half of the superstructure of the head of the wharf, 112 by 50 feet, was renewed upon a depth of 6 feet, not a single piece of old timber being left. About 60,000 feet, b.m., lumber were used for this work.

A considerable quantity of stone ballast, mixed with earth, had to be taken out to allow the proper execution of the work which, on the other hand, was rendered more difficult and expensive on account of the buildings to be dealt with.

The old shed was removed and replaced on the new work, the coal shed was repaired and new foundations were provided under the lighthouse.

The hardwood sheathing of the western corners of the outer block was repaired and other minor repairs were performed on the wharf.

These works were commenced on 1st July and completed on 12th October.

#### RIVER SAGUENAY.

##### *Dredging.*

The channel under way in the Saguenay river starts from the town of Chicoutimi down to the foot of the Battures, a distance of 8 miles.

The object of the dredging is to provide a channel, 250 feet in width on the tangent, and 350 to 500 feet in width in the curves, affording a minimum depth of water of 16 feet at extreme low water.

During the present fiscal year the departmental dredge No. 115 removed 67,746 cubic yards, scow measurement.

Operations were started June 12 and suspended October 28, and consist in the dredging of a cut on the south side of the section from opposite river Lachance to below river Caribou, and half a cut on the north side, eastward across the river.

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The channel was also cleared up of horse backs and lumps opposite river Valin and river Gauthier, and east of there two cuts were dredged in the centre of the channel. This section was particularly the hardest, as far as the performance of the work is concerned, of the whole channel, on account of the swift current.

The material removed was mostly clay, with a few boulders, excepting in the last location where there was a great quantity of boulders. Since the beginning of the work the channel from Chicoutimi down almost to Rivière au Foin is clear of all obstructions and affording a minimum depth of 16 feet at extreme low water, on its full width.

## ST. ANNE DE BELLEVUE.

St. Anne de Bellevue, a town in Jacques Cartier county, at the confluence of the rivers St. Lawrence and Ottawa, and the Grand Trunk railway and Canadian Pacific railway, 21 miles west of Montreal.

The object of this dredging is to do away with present channel leading through Becker's dam, which is the cause of serious delay to boats, and especially tows going up and down Ottawa river.

Becker's dam has to be rebuilt, both sides, on the whole length.

From June 6 to October 31, departmental dredge *No. 123* removed some 33,978 cubic yards, scow measurement, of clay, sand, boulders, hardpan, and rock in making a new 10-foot channel. Hours of actual dredging, 986½; cut, from 13 feet to 39 feet; face removed, 4 to 10 feet; distance advanced, 2,979 feet; distance to dumping ground within 2 miles, in a deep place along Ile Perrot islets, some 1,500 feet south of present channel. The material removed here was so hard that dredge *No. 123*, starting work at 7 a.m. with a new set of manganese steel teeth, and working whole day, removed only 100 cubic yards of split rock, in pieces varying from 1 to 4 square feet; the rock removed is white granite, and by night the set of teeth was worn out. So far not one pound of explosive has been used, although the dredge has been able to reach the required depth.

Dimensions of work done during season 1916 are as follows: One cut 150 feet wide at bottom by 570 feet long to a depth of 10 feet clear at low-water level.

Site of dredging extends below Ste. Anne's lock, from opposite the head of Becker's dam, going southeastward, and well protected from storms.

Owing to the fact that the site of dredging is well protected from storms, nearly no current and hard material, the probable duration of the improvement will be thirty years.

To complete channel, as originally proposed, will require the removal of 12,156 cubic yards, place measurement, of solid rock, and 63,285 cubic yards, place measurement, of sand, clay, boulders, and hard-pan.

Dimensions of work to be done: 2,300 feet long by 200 feet wide to 10 feet at low-water level, corresponding to 9 feet on lower sill, Ste. Anne's lock.

Owing to hard material, to complete a 10-foot channel, will take about two to three working seasons for a dredge of the "123" type.

## STE. ANNE DES MONTS.

Ste. Anne des Monts is an important municipality, 54 miles below Matane, on the south shore of the St. Lawrence river.

During the last six months a landing pier, 1,540 feet long and 32 feet wide at top, giving 31 feet of water at L.W.S. at outside end and 10 feet of water L.W.S. at a distance of 430 feet from outside end towards shore, was completed, at a total cost of \$112,000; that is 40,000 yards at \$2.80 per cubic yard.

## STE. ANNE DU SAGUENAY.

Ste. Anne du Saguenay, Chicoutimi county, is situated opposite the town of Chicoutimi; it is an important farming place, with a population of about 2,000. There is a ferry plying every half hour between the two places.

During the present fiscal year an addition of 340 feet by 25 feet, and 125 feet by 20 feet, has been built. It is an ordinary construction on piles with the exception that the portion of 125 feet where the foot of the piles is protected by a round-timber construction. The head block has been raised 2 feet; floor and stringers renewed over an area of 1,860 square feet; on the approach, stringers to raise the floor have been placed over an area of 2,750 square feet; movable slip, 53 feet long and 12 feet in width, has been placed, and freight shed has been entirely repaired and painted.

The work was carried out by day labour, was started in June and suspended on 22nd December.

## ST. FULGENCE.

St. Fulgence is a parish of about 1,200 inhabitants, situated on the north side of the Saguenay river, about 9 miles below Chicoutimi; a boat plys daily between that place and the town of Chicoutimi.

The wharf consists of a head-block 75 feet by 43 feet, and piers of 25 feet by 20, spaced 25 feet from each other and spanned over by flooring and stringers.

During the present fiscal year the superstructure of the head-block and two of the piers were renewed on an average height of 4.5 feet; stringers and flooring have been renewed over a distance of 225 feet by the full width of the head-block and approach.

The work was carried out by day labour, was commenced on 1st August and completed on 1st December.

## ST. GREGOIRE (SAULT MONTMORENCY).

St. Gregoire is situate in the county of Quebec, on the north shore of river St. Lawrence, about 9 miles below Quebec. Population, 2,500.

During the past season the wharf at St. Gregoire was completed. This involved the placing in position of 450 cubic yards of cribwork filled with stone; 150 square yards 3-inch spruce flooring, including floor stringers; and 21 square yards 6-inch hardwood sheathing.

## STE. JEANNE DE L'ILE PERROT.

Ile Perrot is situated on lake St. Louis, in river St. Lawrence, between Beauharnois and Ste. Anne de Bellevue, at the western extremity of the island of Montreal.

The object of this dredging was to give a swinging basin downstream of present wharf (built in 1915) in order that boats may take the range of channel to leave.

From 28th June to 25th July, 1916, departmental dredge No. 719 removed 4,979 cubic yards, scow measurement, of clay and boulders, in completing an 8-foot basin, downstream of government wharf. Hours of actual dredging, 173; cut, from 20 to 25 feet; dumping ground downstream of dredged channel, below a ridge interfering neither with navigation nor ice.

Dimensions of work done: one cut 210 feet long, parallel with channel, by 50 wide, at its narrowest; another cut, starting at 150 feet from wharf, upstream of present channel, 90 feet long by 20 wide; the whole to a depth of from 6 to 7 feet below extreme low water, 7 feet 3 inches below top of wharf.

Owing to the fact that the site of dredging done is well protected from storms, and no cross currents, the probable duration of the improvement will be forever.

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## ST. JOHNS.

A delightfully situated town of Quebec, "chef-lieu" of the district of Iberville, on the Richelieu river, 27 miles from Montreal.

During last February and March the protecting pier or ice-breaker on which is built the lighthouse, was rebuilt from extreme low-water level. Three steel plates, 7 feet long and 4 feet wide, were placed to protect the new construction.

This reconstruction was done by day labour.

## ST. ROCH.

St. Roch de Richelieu, a post village in Richelieu county on the Richelieu river and on the Quebec and Saguenay railway, 11 miles from Sorel.

In the present fiscal year the Dominion Government bought two plots of land adjoining each other, one from Mad. J. B. Paquette, including a small wharf, 17 feet wide by 23 feet long. This piece of land has a frontage on the river of 75 feet, and reaches back to St. Ours street, a distance of 84 feet from the water's edge, and has an area of six thousand five hundred and seventy-eight square feet (6,578), more or less.

The other one from M. A. Giard, has a frontage on the river of 75 feet, an average depth of 71 feet, and an area of five thousand three hundred and twenty-five square feet (5,325), more or less.

These two plots of land, including the wharf, were bought for \$600.

Repairs were made to the wharf, a new wooden flooring was laid on the head-block and approach, stringers were replaced, a new cap-piece was made, and the slope of the slip was altered.

This work was done by day labour.

## TROIS-RIVIÈRES.

The city of Trois-Rivières, on the northern bank of the river St. Lawrence, is situated midway between Montreal and Quebec. Population, 22,000 inhabitants.

The new coal dock, 640 feet long, with an ice-breaker and a railway embankment, is built at the Western Section of the harbour. Work started in 1910 and was completed in 1914.

During the fiscal year repairs were undertaken in the superstructure and embankments. The following materials were used:—

*Stone.*—One hundred and twenty-two toise of stone were placed as a protection along the eastern and western embankments, also inside of the cribs where settlement has occurred on a length of 640 feet, a width of 16 feet and a depth of 3 feet.

*Piles.*—Piles were placed on the outside face of the timber dock, on a length of 40 feet. An open joint existing between two cribs of the structure was closed with square and round piles. Fifty pitch-pine poles, 50 feet long, 12 by 15 inches, were used in all.

*Filling in.*—A washout having occurred in the earth embankment, a bed of facines was placed on a surface of 150 by 80 feet, covered with 100 toise of stone, 300 cubic yards of blue clay, and 2,850 cubic yards of earth.

*Flooring.*—Fifteen thousand feet b.m. of 3-inch hemlock was placed to renew part of the flooring, and a large portion of the latter was re-levelled.

The stone and earth were delivered by agreement between the department and Mr. David Larivière, and the work was done by day labour.

## VERCHÈRES.

Verchères, a post village in Verchères county, on the St. Lawrence river and on the Quebec, Montreal, and Southern railway; twenty-one miles from Montreal.

The public wharf built in 1905 consists of:—

- (a) A pile headblock, 116 by 40 feet;
- (b) A pile approach, 136 by 29 feet, including an icebreaker;
- (c) A shed, 48 by 18 feet, and
- (d) The stone approach, 200 by 18 feet.

The wharf was carried away by the ice shove this spring. In order to use the wharf during the last navigation season, minor repairs were made. The worst part of the wharf was reinforced and the approach repaired..

## VERDUN.

*Dredging.*

The object of this dredging was to facilitate the passage of ferry boats between public wharfs at La Tortue and Verdun, a distance of  $3\frac{1}{2}$  miles.

From July 6 to November 8, departmental dredge No. 121 removed some 11,115 cubic yards, scow measurement, of clay, sand, boulders, and hardpan, in making an 8-foot channel and 7-foot basin. The number of cubic yards *in situ* corresponds with scow measurement with an expansion factor of  $33\frac{1}{3}$  per cent for conversion into scow measurement. Hours of actual dredging, 809 $\frac{1}{2}$ ; cut, from 12 to 22 feet wide; face removed, from 1 to 6 feet; distance advanced, 7,583 feet.

Dimensions of work done: Cleaning of a basin immediately downstream of Verdun wharf, on a length of 100 feet alongside the bank by 50 feet wide average; a shoal 2,100 feet from Verdun wharf, 350 feet long by 60 feet wide; opposite cast-over, left years ago, or 1 mile from Verdun wharf, on a length of 380 feet for the upstream side by 200 feet for the downstream by a width of 250 feet; 1,400 feet from cast-over, 150 feet long by 50 feet wide; a basin immediately downstream of La Tortue wharf, 110 feet alongside wharf approach by 60 feet wide along shore, and in front of said wharf, cleaning of numerous boulders on an area of 100 feet. The whole to a depth of 8 feet below extreme low water level, for the channel, and 7 feet clear for basin.

Owing to hard material, site reasonably protected from storms, the probable duration of the improvement will be for over twenty years, but stones may be deposited in ferry channel every spring by ice shove.

## ONTARIO.

## RAYFIELD.

Bayfield, in the county of Huron, is situated at the mouth of the Bayfield river, where it empties into lake Huron.

Repairs were made to the north pier by day labour; work was commenced September 5 and completed December 7, and consisted of the following: Construction in concrete of a wall 60 feet in length in the inner face of the north pier. The sheet facing on the inner side of the south pier for a distance of 310 feet was secured. An effort was made to save the outer end of the north pier by timbering, but owing to stormy weather, a section about 90 feet in length was washed away to below water level.



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## BELLEVILLE.

Belleville, in the county of Hastings, is situated at the mouth of the Moira river, which empties into the bay of Quinte.

A contract, dated March 6, 1916, was let for the construction of a warehouse; work was commenced April 20 and final estimate given July 3.

The building for which the above contract was let consisted of a baggage-room, waiting-room, and freight shed, 114 by 45 feet, with a metal shingle roof.

By Order in Council, dated October 12, 1916, the wharf and other structures were handed over to the Belleville Harbour Commission for maintenance and operation under certain conditions, the temporary light and its operation being also transferred.

## BLACK RIVER.

Black river, in the county of Ontario, flows through the townships of Dalton and Rama, before emptying into the Severn river.

Until September 1 this department controlled the operation of the stop-logs in the dam at the junction of canal and Black river, in lot 17 in the 6th concession of Rama. On the above date, an Order in Council was passed transferring the control of this dam to the Department of Railways and Canals.

## BOBCAYGEON.

Bobcaygeon, an incorporated village of 1,200 people, is situated 20 miles north-east of Lindsay, on the Canadian Pacific railway.

The work of constructing a floating wharf by day labour was commenced September 1, completed November 29, and consisted of a wharf 40 feet in length, 14 feet in width, and 2 feet 3 inches in depth; two anchorage pedestals were also constructed in concrete 4 by 4 feet, and landing-way 5 feet in length by 4 feet in width.

## BRACEBRIDGE.

Bracebridge, township of Macauley, district of Muskoka, is a town of 3,500 population, situated on the north branch of the Muskoka river, 5 miles above its discharge into Muskoka lake.

The renewal in concrete of the wooden superstructure in the old wharf was performed by day labour; begun June 16, and completed December 31, 1916, consisted of the removal of all the old superstructure down to low water level, being 150 feet in length and 20 feet in width, and replacing same by concrete walls, stone-filled heart and concrete deck, and the replacing of the shelter and warehouse.

## BRUCE MINES.

Bruce Mines is a town of about 700 in population, situated on the north shore of the north channel of lake Huron, on the line of the Canadian Pacific railway, about 40 miles easterly from Sault Ste. Marie.

Work of repair by day labour was commenced on 7th June, 1916, and completed on 13th January, 1917.

This wharf was built about the year 1903-04, and consisted of a stone approach 500 feet long by 20 feet wide; a pilework approach 450 feet long by 20 feet wide; and a combined crib and pilework head-block about 91 feet square. The work performed during the fiscal year 1916-17 consisted of the complete reconstruction of the wooden superstructure, excepting 350 feet of the inner end of the pile-work approach, which has been entirely replaced by stone-fill; the warehouse was enlarged

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and reconstructed, and a small boat landing, 100 feet in length, constructed along the east side of the pile-work approach.

## BURLINGTON.

Burlington, in the county of Halton, is situated near the westerly extremity of lake Ontario, about 30 miles west of Toronto, on the Grand Trunk and Canadian Pacific railways.

Work on the revetment wall was resumed on July 15, final estimate given on November 16, and consisted of the placing of 2,273 cubic yards of talus stone on outside of revetment wall and small items of work necessary to the satisfactory completion of the contract.

## BURLINGTON BAY (ELSNORE WHARF).

Elsnore wharf is an old wharf situated on Burlington bay, about three-quarters of a mile from Burlington channel.

The removal of the above wharf, 400 feet in length by 20 feet in width, was commenced by day labour, June 20, and was completed July 13.

## BURLINGTON CHANNEL.

Burlington channel, in the county of Wentworth, is simply a dredged channel through a low-lying piece of land, known as Burlington beach, connecting lake Ontario with Burlington bay.

To repair damage to site of Royal Hamilton Yacht Club, work was commenced August 10, completed September 7, and consisted in filling in the site with 800 cubic yards of sand, levelling, and top-dressing same. A picket fence was constructed along the pier and along the roadway to protect the public from the end of the bridge when swinging.

The bridge opened for the season April 7 and closed December 23.

*Dredging.*

In order to complete the removal of the shoal at the lake end of the channel, that was begun in 1915-16, it was necessary that dredging operations be continued, and departmental dredge *Quebec* proceed with the work.

The removal of this material, commenced on July 10, was completed on August 16, and involved the excavation of 16,503 cubic yards, place measurement, or 22,330 cubic yards, scow measure, in securing a depth of 20 feet below zero level of lake Ontario. The area worked over extended from between the piers at the east end into lake Ontario for a distance of 730 feet, the width varying from 165 feet to 290 feet at the east end of the cutting.

## COBOURG.

Cobourg, in the county of Northumberland, is situated on lake Ontario, on the Grand Trunk, Canadian Pacific, and Canadian Northern railways.

Work was commenced by day labour on June 19, completed October 31, and consisted in the following improvements:—

A section of old crib superstructure on east pier, 106 feet in length by 33 feet in width, was removed to a depth of 1 foot below zero of gauge, and was replaced by concrete superstructure, consisting of concrete blocks, reinforced mass concrete, 10-inch by 12-inch oak walling and two cast-iron nigger heads weighing approximately 400 pounds each.

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A section of checkwater, 28 feet in length at extreme west end, was entirely removed by dredging.

The superstructure on the next 50 feet adjoining removed section was torn down to one foot below water level and replaced with concrete superstructure, the outer 16 feet being at elevation of 252 above mean sea-level, and balance of 50-foot section, at elevation 250.2 above mean sea-level.

The work on checkwater commenced on September 15, and was completed November 16.

On the west side of east pier, a section, 45 feet in length at east end of checkwater, was repaired, consisting of renewal of face timbers, cross-ties, and back-filling.

*Dredging.*

Authority was given to have the R. Weddell Company complete the removal of the 11,612 cubic yards, place measurement, remaining from the quantity arranged for in the previous year; and an additional 10,000 cubic yards, place measurement, was authorized to complete the improvements. The entire quantity was removed for 20 cents per cubic yard, place measurement.

Work was commenced on May 24, completed on August 17, and consisted in providing depths varying from 16.5 to 17.5 feet below zero over irregular areas, and required the removal of 21,880 cubic yards, place measurement.

## COLLINGWOOD.

Collingwood, in the county of Simcoe, is located on the Georgian bay, and is a station on the Grand Trunk railway, 95 miles northwest of Toronto.

In order that vessels might enjoy full benefit of the dredging done by the department in 1913, it was considered essential to the interests of navigation that an additional quantity, estimated at 19,600 cubic yards, place measurement, be removed in widening the entrance channel to the harbour where same curves and the range lines change.

Authority for the removal of this yardage by departmental dredge *Industry* was given and work was commenced September 23, completed October 25, and consisted in the removal to a depth of 20 feet, 15,574 cubic yards, place measurement, of clay, hardpan, and small boulders in enlarging the area dredged in 1913, on the east side of the curve in the entrance channel.

## FORT WILLIAM.

Fort William, district of Thunder bay, a city of 18,850 people, is situated at the mouth of the Kaministikwia river, near the northwest end of lake Superior.

Contract was extended with the Thunder Bay Contracting Company, Limited, for the construction of 2,300 lineal feet of quay walls at the mouth of the Mission river, so as to include the placing of approximately 6,000 cubic yards of additional stone filling, which was found to be required in cribs Nos. 89 to 100, inclusive.

Authority was received to proceed with the rectification of cribs Nos. 101 to 105, inclusive, the work to be performed by the Thunder Bay Contracting Company, Limited, on the basis of cost, plus 10 per cent.

The work of placing the additional stone filling in cribs Nos. 89 to 100, inclusive, was performed between July 25 and August 11 last, a total quantity of 5,336 cubic yards being placed at the contract rate of \$1.30 per cubic yard. Operations in connection with the rectification of cribs Nos. 101 to 105, inclusive, were commenced on October 14, and were closed down for the season on December 9 last. The work performed in this connection to date consists: (1) In the removal of the concrete

superstructure on cribs Nos. 102 and 103; (2) in the dredging in rear of the cribs to be rectified to a depth of about 35 feet below L.W.L.; and (3) in the placing of heavy weights along the rear half of cribs Nos. 102, 103 and 104, so as to cause them to settle back into line. The operations referred to proved effective, and a much-improved alignment of these cribs was obtained. The weights were then removed and a certain amount of back filling was replaced in rear of the cribs in order to hold them in place. The work of rectification should be completed early during the coming season.

#### *Dredging.*

Dredging was performed in this harbour during the present season, under contracts Nos. 7170 and 7339, by the Great Lakes Dredging Co., Limited.

The object in doing the work performed, which was embraced in the above contracts, was to continue the development of the harbour to the depth and dimensions adopted by the department in 1908, in order to provide ample accommodation in all portions of the harbour for safe navigation by the largest freighters on the Great Lakes..

Extent of harbour, 13.02 miles of navigable channels, varying in depth from 20.0 feet to 27.0 feet and in width from 175 to 600 feet excepting through bridge spans.

Total area of present harbour, 805.0 acres.

Total area removed by dredging, 353.6 acres.

Harbour frontage available for dockage, exclusive of frontage in Thunder Bay, 22.2 miles. Frontage already built up with wharves and retaining walls, 7.62 miles.

*Contract No. 7170.*—Dredging under this contract was performed by dredge *No. 5* between June 3 and June 13 last, when the removal of the quantity authorized, namely, 12,422 cubic yards, scow measure, was completed. This work consisted in the removal of certain shoals to a depth of 25 feet below L.W.L. in the Grand Trunk Pacific terminal basin adjacent to the Mission channel.

The total quantity removed under this contract was 12,422 cubic yards, scow measure, which consisted almost entirely of class "B" material.

In connection with this contract, it might be stated that prior to the current fiscal year, a total quantity of 7,124,248 cubic yards, scow measure, had been dredged at a total cost of \$1,515,089.16, so that the total quantity removed on the completion of this contract is 7,136,670 cubic yards and the total expenditure \$1,517,147.96. In this work, a total area of 22,587 square feet was dredged and the average depth of cutting, allowing for 10 per cent expansion from place to scow measurement, was 1.34 feet.

The following unit prices obtained in this contract, viz.: Rock, \$2.85 per cubic yard, scow measure; all other materials, 16 cents per yard. Extra haul, 1 cent per cubic yard per mile over 3½ miles.

*Contract No. 7339.*—Dredging under this contract, which consists in widening and deepening the Kaministikwia and Mission rivers, was performed by dredges *Nos. 5* and *6* and *Dominion*, and by clam-shell scow *Empire*, between the following dates: Dredge *No. 5*, between June 14 and November 25; dredge *No. 6*, between June 3 and October 4. scow *Empire*, between June 7 and September 15, although the operations of this scow were not continuous; dredge *Dominion*, between June 3 and December 9. Authority was received authorizing the removal of 276,941 cubic yards, scow measure, from the areas covered in the original contract, and 1,493,819 yards from the West Fort basin. An additional quantity of 250,000 cubic yards was authorized for removal from the former areas. The total quantity removed under this contract during the current season was 1,418,319 cubic yards, scow measurement, consisting entirely of class "B" material.

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The work performed was as follows:—

*Kaministikwia river.*—The turning basin at West Fort William was made much larger, about 16 acres included in the second expropriation being removed, and there now remains only about 1 acre, which will be removed during the coming year. Almost the whole of the West Fort basin has now been excavated to a depth of 25 feet below L.W.L., but it is found as a result of soundings taken during the past winter that there has been a large amount of filling-in over the area dredged last season. Such filling-in is due to bank slides and sedimentation. In this work, 940,973 cubic yards of sand and clay were removed.

The river was deepened along its south bank, where shoals had formed and slides had occurred, over an area extending from the bend in river below the West Fort turning basin to the Imperial Oil Company's property, a total quantity of 87,923 cubic yards being removed.

Small shoals were also removed on the south side of the river between the Canadian Pacific railway bridge, over this river, and the McKellar river, a total quantity of 4,489 cubic yards being removed.

A large area of the river was scraped and deepened where shoals had formed, extending from a point approximately opposite elevator "B" to the inner end of the Empire elevator wharf, the total quantity removed being 115,211 cubic yards.

The entrance channel to this river in Thunder bay was deepened and completed during the present season so as to have its full depth of 25 feet below L.W.L. for a total width of 600 feet. The actual dredging operations in this case were confined to the northerly half of the channel, and the total quantity removed by the dredge *Dominion* was 103,689 cubic yards.

The total quantity removed in widening and deepening under this contract in the Kaministikwia river during the present season was 1,252,285 cubic yards.

*Mission River.*

Deepening was performed, including the removal of a few shoal spots over a small area of this river fronting the Canada Starch works, and a few shoal spots were also removed near the junction of this river with the Kaministikwia river. The quantity removed was 9,984 cubic yards.

The whole of the entrance channel to this river in Thunder bay was scraped and deepened to a depth of 25 feet below L.W.L., excepting over a small section of the channel adjacent to the Mission River revetment wall, which forms its southerly boundary. The total quantity removed in this work was 156,050 cubic yards.

The total quantity removed in the Mission river under the above contract during the season was 166,034 cubic yards.

In the work performed under this contract, exclusive of the dredging performed in the West Fort turning basin, an area of 5,297,163 square feet, was dredged and the average depth of cutting, allowing for 10 per cent expansion from place to scow measurement, was 2.21 feet. In the West Fort turning basin in the total area dredged was 1,693,775 square feet, while the average depth of cutting after allowing 10 per cent for the expansion factor, was 13.6 feet.

In connection with Contract No. 7339, it might be stated that prior to the current fiscal year a total quantity of 12,934,065 cubic yards, scow measure, has been dredged at a total cost of \$2,122,595.56, so that the total quantity removed to date under this contract is 14,364,806 cubic yards, and the total expenditure \$2,373,901.93. Of the quantity authorized for removal under this contract, the balance to be moved at the end of the current fiscal year is 602,441 cubic yards, of which 552,846 yards is to be moved in connection with the extension authorized in the West Fort turning basin. It might also be pointed out that in order to complete the work originally contemplated in connection with this contract, additional authority for the removal of 1,235,152 cubic yards is required.

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The following unit prices obtain in this contract, viz.: Rock, \$2.40 per cubic yard, scow measure; all other materials, 10 $\frac{1}{4}$  cents for widening, and rock, \$2.85 per cubic yard, scow measure; all other materials, 22 $\frac{1}{2}$  cents for deepening. One cent per cubic yard, scow measure, per mile, over 3 $\frac{1}{2}$  miles of haul.

Synopsis of quantities of materials removed by the various dredges, operating in this district on the above contracts, during the current fiscal year:—

	Cubic Yards, Scow Measurement.
Dredge No. 5 . . . . .	407,014
“ No. 6 . . . . .	350,613
“ <i>Dominion</i> . . . . .	636,776
Clam shell <i>Empire</i> . . . . .	36,338
Total . . . . .	<u>1,430,741</u>

Synopsis of quantities removed by dredging under the above contracts in accordance with the respective locations of areas dredged:—

## KAMINISTIKWIA RIVER.

	Cubic Yards, Scow Measurement.
West Fort turning basin . . . . .	940,973
West Fort turning basin to Imperial Oil Company . . . . .	87,923
C.P. Ry. bridge to McKellar river . . . . .	4,489
Elevator “B” to Empire Elevator Co.’s dock . . . . .	115,211
Northerly half of entrance channel . . . . .	103,689
Total . . . . .	<u>1,252,285</u>
MISSION RIVER.	
Entrance channel . . . . .	156,050
G.T.P. basin . . . . .	12,422
Kaministikwia river to Starch works . . . . .	9,984
Total . . . . .	<u>178,456</u>
Grand total . . . . .	<u><u>1,430,741</u></u>

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## KAMINISTIKWIA RIVER.

	Width.	Least depth	Gen. depth.
	feet.	feet.	feet.
Entrance channel in Thunder bay.....	550-600	23.2	26.0
From Empire elevator, at mouth, to subway.....	400-350	23.2	26.0
From subway to C.P. Ry. bridge.....	350-300	20.0	24.0
Through C.P. Ry. bridge.....	110	20.6	
From C.P. Ry. bridge to Mission channel.....	300	20.3	22.5
From Mission channel to bend above elevator " D ".....	300	22.0	25.5
At waterworks crossing above elevator " D ".....	175	21.0	23.0
From waterworks crossing to G.T.P. bridge.....	400	22.5	26.0
Through G.T.P. bridge.....	90	18.4	
From G. T. P. bridge to upper end of C.N.R. coal wharf.....	350	23.3	26.0
At bend in river above C.N.R. coal wharf.....	200	23.2	
Over the West Fort turning basin to the Mutual elevator.....	1,300	20.3	24.0
<i>Mission Channel.</i>			
Entrance channel.....	450	22.2	25.5
Least depth along revetment wall over a width of from 50 to 150 feet from face.....		21.0	
From entrance channel 1, 200 feet north of inner end of slip No. 3.....	300	22.0	25.0
From Fort William coal dock wharf to Fort William Starch works.....	350-400	22.5	25.5
From Fort William Starch works to junction with Kaministikwia river.....	400	21.0	24.0
Shoal opposite down stream end of Starch works.....		20.5	
G.T.P. turning basin, west of entrance channel.....			26.5
G.T.P. turning basin over area 150 feet out from limits.....		21.0	
G.T.P. Slip No. 1, the most westerly slip west of turning basin.....		22.9	25.0
G.T.P. Slip No. 2, west of turning basin.....			24.0
G.T.P. Slip No. 2, over area 50 feet from limits.....		22.3	
G.T.P. Slip No. 3, the most northerly slip west of turning basin.....			23.6
G.T.P. Slip No. 3, over area 190 feet from limits.....		21.7	
<i>McKellar Channel.</i>			
From Thunder Bay to C.P. Ry. bridge.....	350-400	23.2	26.0
Through C.P. Ry. bridge.....	70	22.2	

From the above statement, it will be seen that a considerable quantity of material is still required to be removed in connection with certain works of widening that have not yet been attended to in the local harbour and in deepening other portions thereof. The widening still required to be done in this harbour is as follows: (1) The removal of a certain area of land in the Mission river, at present occupied as a service ground by the Thunder Bay Contracting Company, Limited, in connection with their construction work for the department on the Mission River revetment wall; (2) the removal of a small portion of land on the Kaministikwia river where the city water mains cross; and (3) the removal of a small area of land still required to be dredged in connection with the extension to the West Fort turning basin. The first and third of these items should be proceeded with during the coming season, but it will be impossible to attend to the second item until the city of Fort William lowers the water mains referred to, or otherwise alters their location.

The sections of the harbour that particularly require deepening are as follows: (1) Kaministikwia river from subway through Canadian Pacific Railway bridge to the Mission channel; (2) through the Grand Trunk Pacific bridge; (3) over the West Fort turning basin to the Mutual elevator; (4) Mission channel from the junction with the Kaministikwia river to the Grand Trunk Pacific turning basin.

As regards the probable duration of the improvements effected, continuous work will likely be necessary to keep the dredged areas at the required depth.

## FREDDY CHANNEL.

Freddy channel (Honey harbour) is located in the township of Gibson, district of Muskoka, and is about 15 miles distant by water from Midland. It is one of the direct channels on the boat route from Penetanguishene to Parry Sound, and is patronized by tourists during the navigable season.

For the purpose of securing a depth of water in the channel to allow boats having a draught of 9 feet to navigate in safety, work was begun in 1915, when 2,900 cubic yards, place measurement, was removed.

On May 23, 1916, authority was given to complete the work, and the Penetanguishene Dredging Co., Limited, resumed operations on May 23, and completed June 23, 1916.

The material removed consisted of 4,018 cubic yards, place measurement, class "B" material, clay, gravel, and boulders.

Shoal No. 1, eastward of Portage island, 409 feet in length, 50 feet wide, and dredged to a depth of 9 feet below zero of gauge.

Shoal No. 2, west of shoal No. 1, 215 feet long, 50 wide and dredged to a depth of 9 feet.

Shoal No. 3, opposite island No. 95, 918 feet in length, average width of 40, and dredged to a depth of 9 feet below zero of gauge, elevation 580.0, making a total length in the three shoals of 1,542 feet. The total area of work done is 51,015 square feet with an average cut of 2.13 feet.

The work is not permanent, being subject to filling in from northwest winds.

## FRENCH RIVER—BIG CHAUDIÈRE.

Big Chaudière on the French river, 12 miles from its source, on lake Nipissing, 30 miles from Sturgeon Falls, 35 miles from North Bay, and 43 miles from Callander. The latter being the port best adapted for handling of heavy materials, freight, etc.

The construction of steel gates, towers, and operating machinery for the regulating dam across the Big Chaudière river, so as to regulate the level of lake Nipissing, was commenced August 1 and completed October 30, 1916.

*Coffer Dam.*

The construction of a coffer dam was undertaken to drain the site of the substructure, which was completed in October, 1915, and prepare the site for the erection of the superstructure. The original coffer dam was removed during the winter of 1916 in order to provide an outlet for the waters of lake Nipissing, which had reached an alarming level.

Work was done between November 1 and December 5.

Work was done enlarging the discharge section at the site of the original coffer dam built in 1914.

The discharge section at the site of the original coffer dam was made smaller than in a state of nature by rocks and sand accumulating in the bed of the river when the coffer dam was removed. This was dredged out to the original discharge area, by government dredge, from October 9 to November 4, 1916.

## GODERICH.

Goderich, in the county of Huron, is situated at the mouth of the Maitland river, which empties into lake Huron.

Work was resumed on the Birmingham contract on April 1, was completed and final estimate given on August 8, and consisted in the construction of the last 300 feet of the southwest breakwater, with a width of 30 feet, the construction being concrete caisson substructure and mass concrete superstructure.



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Work on riprapping was commenced on October 2, was completed on October 31, and consisted in placing 1,046 tons, 75 pounds of riprap stone along the river breakwater.

Work on repairs to piers was commenced on August 10, continuing throughout the year, and consisted of the following:—

*South Pier.*

Patching decking of central and outer end to the extent of approximately 300 square feet, and patching the capping over same area to extent of 40 lineal feet with 12- by 12-inch timber.

At easterly end, commencing at concrete decking of Commercial dock, the two top-face timbers, including the capping, were completely renewed with 12- by 12-inch hemlock timber, for a length of 144 feet.

The decking commencing at the same point was renewed for 114.7 feet with 3-inch hemlock for a width of 3 feet, laid longitudinally with pier. Then 50.4 lineal feet laid crosswise of pier, at a width of 12 feet, and then 220.5 lineal feet laid crosswise of pier, at a width of 18 feet. The above decking includes sleepers and blocking.

*Timber Dock.*

Approximately 100 square feet of decking was patched, with the old planking taken from the south pier.

*River Breakwater.*

A new walk constructed of old south pier planking was built for 216 lineal feet, and 4 feet wide at outer end of river breakwater. Also 245 feet of new 12- by 12-inch hemlock capping was placed on the outer or river edge.

*North Pier.*

Approximately 100 feet of 12- by 12-inch capping was placed along the north pier in scattered positions, also 1,100 square feet of the decking was overhauled. This comprised levelling up, removing old decking, placing stringers where required and relaying decking. Some old planking was used again, but about two-thirds of the new decking, which was 2 inches thick, was entirely new.

The majority of the work was from about shore line outward for some 600 feet, and practically half the width of pier, but there were other scattered areas renewed.

Work on removal of checkwater was commenced July 13, was completed August 8, and consisted in removing, by dredging, checkwater crib 128 by 30 feet. Also the removal of 3,066 cubic yards of soft material.

## HAMILTON.

Hamilton, in the county of Wentworth, is situated on Burlington bay, an inlet at the western extremity of lake Ontario, and is a station on the Grand Trunk and Canadian Pacific railways.

Authority was given for filling in behind revetment wall, in vicinity of Jutten and Marshall properties, said work to be done by the Ottawa contractors under agreement dated June 8. Work was commenced June 24 and was completed July 31.

To repair concrete on revetment wall, an agreement was entered into with the Ottawa contractors, under date of June 8, to do this work, which consisted in renewing surface in concrete of revetment wall, where required, also straightening channel bars.

*Dredging.*

Departmental dredge *No. 117* commenced work on August 17, 1916, and continued until October 12, when the plant was transferred from this district, and on October 13 it was resumed with departmental dredge *No. 114*, which carried on until October 28. The quantity removed by dredge *No. 117* was 59,086 cubic yards, scow measurement, and by *No. 114*, 3,264 cubic yards, scow measurement.

The removal of this total quantity of 62,350 cubic yards, scow measurement, resulted in the widening of the channel in front of the Oliver Plow Works from 40 to 100 feet for a length of 1,300 feet and to a depth varying from 19 to 20 feet below zero; the widening of the channel leading to the International Harvester Company by 80 feet for a length of 1,300 feet, and 40 feet for a length of 350 feet to a depth varying from 19 to 20 feet. In addition to this, an area 1,200 by 80 feet in dredged channel was cleaned up to a depth of 20 feet.

Owing to the silty nature of the material underlying a large part of the area gone over, it is expected that further dredging will have to be undertaken during the coming season.

## HAWKESBURY.

Hawkesbury is located on the south shore of the Ottawa river, about 53 miles below the city of Ottawa.

In order to restore the navigable channel to Captain Lawlor's wharf, used for public traffic, departmental dredge *No. 103* continued the improvements started last season. The dredge operated here from May 27 to October 31, under an agreement with the Riordon Pulp and Paper Co., Ltd. During this period, the total yardage removed was 36,703, scow measurement, of which 22,560 yards was waste pulp, 7,535 sand and gravel, 1,639 clay, 4,644 hardpan, and 325 yards of boulders. Eight single cuts, 25 feet wide, were made, aggregating 2,270 lineal feet to grade elevation 118 or original bottom of channel.

From November 13 to 16, departmental dredge *No. 103* also removed 1,431 yards clay, in connection with the laying of new water main for the R. P. and P. Co., under an agreement with Fuller & Co.

## KINGSTON.

*Harbour Improvements, Combined Roadway and Wharf.*

The object of this work is to provide bridges, roadway, and sidewalk for vehicular and pedestrian traffic over the Cataraqui river; also a wharf for general use of navigation in conformity with the plan for general improvements of Kingston harbour.

Work continued throughout the year, from April 1, 1916, to March, 1917, and has been completed.

*Repairs to Temporary Bridge.*

Driving a row of batter piles along both sides of bridge; building an extension to bridge for sidewalk and putting guard-rail along both sides of bridge so as to strengthen the bridge and make it safe for heavy traffic. Work was done from May 1 to October 15.

*Highway Bridge.*

This is a bascule bridge being built over the channel leading into the inner harbour or Anglin's bay, designed to be lifted so as to permit vessels to pass in and out.

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The delivery at site of steel, operating machinery, machinery covers, safety gates, lights, and all appurtenances for bascule bridge, the erection in place of approximately 95 per cent, and the inspection and testing of operations thereof.

This work is practically completed, and will be opened to permit of navigation on April 16, 1917.

Work continued throughout the year, from April 1, 1916, to March 31, 1917.

## LITTLE DETROIT.

(This work is fully described in the annual report for 1916.)

Work was commenced on 4th October, and was completed on 2nd November, during which period 1,490.9 cubic yards, place measurement, of rock were removed.

## OWEN SOUND.

Owen Sound, in the county of Grey, is situated on Owen Sound, an arm of the Georgian bay, and at the mouth of the Sydenham river.

Work of dredging was commenced May 25, completed July 6, and comprised the removal of 26,781 cubic yards, place measurement, or 35,762 cubic yards, scow measure of mud, sand, sawdust, and sunken logs. This material was scattered irregularly over the total area of the inner harbour, and when removed left a clear depth of 20 feet below zero, or elevation 580.0.

## PENETANGUISENE.

*Dredging.*

Penetanguishene is a town located on a part of the Georgian bay, in the township of Tay, county of Simcoe.

For the purpose of affording sufficient depth of water at the north end of the government wharf to allow large boats to turn into the main channel, the work consisted of the removal of material from an area 120 feet in length by 100 feet in width, amounting to 1,500 cubic yards, place measurement, class "B" soft clay.

An agreement was entered into with the Penetanguishene Dredging Co., Limited, to do the work at a price of 40 cents per cubic yard, place measurement, and work was begun July 4, and completed July 10, 1916.

The work is of a permanent nature.

Further work was done for the purpose of creating increased draught of water to enable large boats to navigate to and from the harbour in safety, and was done by the government dredge *No. 109*, and consisted of the removal of 50,938 cubic yards *in situ* or 67,917 cubic yards, scow measure; expansion factor, 33½ per cent.

The material dredged consisted of class "B" material, sand and mud. The dimensions of the work being 553,000 square feet, having an average length of 5,530 feet and an average width of 100 feet and an average cut of 2.45 feet and dredged to a depth of 20 feet below zero of gauge elevation 580.0. Shoal No. 1, opposite dumping ground, 100 feet wide and 300 feet long; shoal No. 2, opposite Trudeau point, length 1,500 feet by 100 feet wide; shoal No. 3, from end of shoal No. 2 to south end of Esplanade, an average length of 2,250 feet by an average width of 166 feet. The channel, as located and dredged, extends northerly from the wharf to the line of light, thence north-easterly.

The work was begun July 12 and completed September 15, 1916.

The work, as completed, will be of a permanent nature.

## PICNIC ISLAND.

This work is fully described in the annual report for 1916.

Picnic island lies to the north of Manitoulin island in the district of Algoma, about  $1\frac{1}{2}$  miles west of the town of Little Current, on the main steamship channel through the North channel of lake Huron.

Authority was given to resume work at this place, with the object of finally completing it during the season.

Work was commenced on June 29, and completed on November 3, 1916, during which time 9,810 cubic yards of rock were dredged and removed by scows.

## PORT ARTHUR.

Port Arthur, district of Thunder Bay and Rainy River, has frontage on the lake, within its present limits which admit of further extension, of  $7\frac{1}{2}$  miles.

Port Arthur, with Fort William, which directly adjoins Great Lakes navigation and is therefore one of the most important Canadian ports. Through it, a considerable portion of the western grain crop is handled for transshipment east. For this purpose, there are seven elevators in operation and two under construction. The total actual storage capacity is 16,865,000 bushels.

A contract was let early in the summer of 1913 to W. E. Phin, Esq., Hamilton, Ont., providing for the removal of 942,000 cubic yards, scow measurement, of class B material, in the main harbour, at a unit price of 13 cents; and 528,794 cubic yards, scow measurement, were removed in 1913.

In 1914, under the same contract 416,410 cubic yards, class B material were removed.

*Contract No. 9490, extended.*—Authorized, prior to December 15, 1916, the removal from the main harbour of 1,095,000 yards, scow measurement, class B material; and 611,729 yards were removed during the season of 1915.

Authority was received for the removal of 483,271 yards, being balance of the total quantity authorized April 14, 1915.

1. *Main Harbour South.*—Work started May 16, 1916, and the main harbour south was widened from an average width of 1,825 feet to a width of approximately 2,175 feet, having an average length of 2,615 feet.

The quantity excavated was 146,509 yards, scow measurement, class B.

2. *King's Channel.*—King's channel was also widened, and 40,316 yards, scow measurement, class B, material, were removed.

The place measurement from soundings is 32,289, giving expansion factor of 21.8 per cent.

The depth dredged was 25 + 1 foot for sub-grade.

3. *Alongside C. N. R. Steel Dock.*—On July 10, the removal of 8,200 yards, scow measurement, class B, was authorized, and 8,179 yards were removed.

Approximate dimensions as follows: Length, 300 feet; width, 75 feet; depth made, 22 + 1 foot for sub-grade.

4. *Joint Slip between Government Elevator and Davidson and Smith Elevator.*—Six thousand nine hundred and forty-eight yards, scow measurement, were also removed under authority, and the depth made was 25 + 1 foot for sub-grade.

5. *Channel and Slip to give access to Saskatchewan Co-operative and Grain Growers' Elevators.*—An Order in Council was passed on 5th July, extending Phin's dredging contract by the addition of 268,000 yards, scow measurement, class B material, to provide for the dredging of a joint slip between the Saskatchewan Co-operative and Grain Growers' Elevators, together with a channel extending out from the slip to the 25-foot line.

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This work was authorized and consisted of:—

*Channel*.—Length, 1,500 feet; width, 400 to 175, and average 288 feet; depth made, 25 + 1 foot for sub-grade; quantity removed, 108,021 yards.

*Slip*.—Length, 1,200 feet; width, 175 feet; depth made, 25 + 1 foot for sub-grade; quantity removed, 112,373 yards, scow measurement.

Approximately 35,000 yards, or 220 feet in length, still remain to be removed in this slip.

SUMMARY.

Widening main harbour south. . . . .	147,509	cubic yards, scow measurement.
Widening King's channel. . . . .	40,316	" " " "
Alongside C.N.R. coal dock. . . . .	8,179	" " " "
Joint slip between Government elevator and Davidson & Smith elevator. . . . .	6,948	" " " "
Channel to Saskatchewan and Grain Growers elevators. . . . .	108,021	" " " "
Joint slip between Saskatchewan and Grain Growers elevators . . . . .	112,373	" " " "
	423,346	" " " "

All depths mentioned refer to zero of the Public Works Department staff gauge, which is 601.86 M.S.L. The water during the navigation season is practically always above this zero level.

All the material removed was class B, consisting of sand and clay, except in the slip between the Grain Growers' and the Saskatchewan Co-operative elevators, where hardpan and loose shale rock were encountered.

Satisfactory releases were obtained covering structures which might have been affected.

Only one dredge, the *Kennaquhair*, was employed during 1916.

The average haul to the dumping grounds was 2 miles, but the greater portion of the dredged material was deposited on the sites of the Saskatchewan Co-operative Elevator Company.

The work was closed for the season on December 14, 1916.

PORT BURWELL.

Port Burwell is at the mouth of Otter creek, on the north shore of lake Erie, and is an important harbour of refuge.

On May 22, instructions were received that repairs be made to the piers, revetment walls, etc.; work began July 17 and was finished November 30.

Owing to changed conditions in the harbour, piers, and breakwaters, it was thought best to remove the checkwater, about 40 feet in length. This was done by dredges *Nos. 114* and *117*.

*Dredging.*

Much sediment is deposited in the inner harbour by Otter creek, particularly when in freshet; also south of the breakwater, lake currents and storms drift sand into the dredged cuts. A great amount of dredging is thus necessary to maintain a depth of water to accommodate vessels using the port.

The quantity and cost of dredging was as follows:—

Dredge <i>No. 114</i> , April 26 to September 25, 52966 cubic yards at 20.3 cents. . . . .	\$ 10,799 90
Dredge <i>No. 117</i> , May 1, to June 24, October 24 to December 7, 10367 cubic yards at 17.7 cents. . . . .	18,437 86
Total cost of dredging. . . . .	29,237 76

Area and dimensions dredged as follows:—

Location.	Dimensions.	Cubic yards place.	Expansion p.c.	Cub. yds. scow.
Checkwater.....	100 by 80 by 12-07	3,576.05	23.6	4,420
North of ferry slip on east side along ferry dock.....	450 by 44 by 3.73	2,735.44	23.6	33.81
Turning basin.....	700 by 228 by 7.01	41,988.67	23.6	51,898
Between piers.....	1,075 by 110 by 2.37	10,372.17	23.6	12,820
Channel east of breakwater.....	1,160 by 250 by 4.72	50,763.02	26.34	64,134
South of outer end of breakwater.....	625 by 209 by 3.27	15,820.80	26.34	19,988
Total quantity.....				156,641

Depths dredged, south of turning basin, 20 feet; turning basin and between piers 20 to 24 feet; and end of piers southwardly, 20 to 25 feet.

Much difficulty was experienced during the season in maintaining in the turning basin and south of the breakwater a navigable depth of water.

Dredge No. 114 has not sufficient capacity to cope with the conditions at Port Burwell.

#### PORT HOPE.

Port Hope, in the county of Durham, is situated on the north shore of lake Ontario, 60 miles east of Toronto.

To provide the necessary depth of 16 feet in the approaches to the warehouse to enable vessels to discharge and take on cargoes, it was necessary that dredging be undertaken, and tenders were called on an estimated quantity of 38,000 cubic yards, *in situ*, and authority was given to have the removal of this yardage undertaken by the Randolph Macdonald Company at 18 cents per cubic yard. Work was started June 14, completed August 22, and consisted in the removal of 38,096 cubic yards, *in situ*, of sand and silt, spread over the following area: Starting at a point 150 feet north of the warehouse on the east pier, the area was 73 feet in width and increased to 177 feet in width 260 feet south from the starting point; the channel then averaged 179 feet in width for 425 feet, when it was again contracted to an average width of 165 feet between entrance piers, continuing at approximately this width, a distance of 200 feet to deep water.

#### PORT MAITLAND.

The work performed during season 1916, consists of dredging a 300-foot channel from deep water in the lake to a point in the river at the mouth of the Welland canal feeder discharge. Total length covered, approximately 5,000 feet; 200 feet on the west side of the channel, dredged through bar in outer entrance to piers, was dredged to 21 feet below L.W.L., the remaining 100 feet to an extreme depth of 28 feet below L.W.L. A channel, approximately 50 feet wide, and 400 long was dredged to 12, 12 and 14 feet below L.W.L. in the mouth of the Welland canal feeder discharge to allow fishing tugs to unload fish and take on coal supply.

The balance of the work performed consisted in dredging to 21 feet below L.W.L. the car ferry slip in the east side of the river, a turning basin on the opposite side of the river, and a portion of the proposed 435-foot channel to be dredged from the Welland canal feeder discharge upstream. Total length of channel improved, approximately 7,400 feet.

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Total length of proposed channel to be deepened and widened from deep water in the lake up to lot No. 10 is approximately 20,000 feet. Total amount of material to be removed in the whole project amounts to approximately 1,581,000 cubic yards, place measurement. Total amount authorized to be removed under present contract, 826,000 cubic yards, of which 628,703 yards was removed during last season. Nature of material removed: Channel through outer bar, sand and gravel: in river, silt, sand, and clay.

Total quantity removed (hydraulic and dipper), 626,319 cubic yards P.M.; total place measurement quantity removed by dipper dredge, 122,757 cubic yards P.M.; total scow measurement quantity removed by dipper dredge, 153,059 cubic yards S.M.; giving an expansion factor of 24.7 per cent.

Of this total amount of 122,757 cubic yards, 43,417 yards, place measurement, were removed within lines and grades as authorized, and spoiled. The balance of 79,340 yards is the amount removed below lines and grades and spoiled, together with the amount removed for commercial purposes.

Contract rate of payment, 12 cents per cubic yard, place measurement.

Contractor: The Great Lakes Dredging Co., Ltd., Port Arthur, Ont.

Period of operation: Hydraulic dredge *Shuniah*, June 10 to December 13, 1916; dipper dredge *No. 8*, June 30 to November 17, 1916. An additional two years will probably be required to complete the proposed improvements.

The spring survey shows that an exceptionally small amount of filling-in has taken place over the area dredged during season 1916.

## RIVER THAMES.

*Dredging.*

The city of Chatham is on the Thames river, 18 miles from lake St. Clair.

There is a large and important water-borne traffic to and from this city.

The dredging at this place consisted of deepening the river in front of the wharf.

Area: 854 feet by 50 depth 10 feet below zero; quantity removed, 11,050 cubic yards, scow measurement.

The work was done by P.W. dredge *No. 120*; work was commenced on October 5 and ended October 30.

Distance scow towed to deposit,  $3\frac{1}{2}$  miles downstream.

*(Mouth.)*

All traffic between the city of Chatham and points on the river Thames and the Great Lakes has to pass the bar in lake St. Clair at the mouth of the river.

For the purpose of deepening the entrance, Public Works dredge *No. 120* worked from June 7 to October 2, dredging a channel 7,000 feet long by 50 wide, removing 50,270 cubic yards, scow measurement; depth dredged, 14 feet below zero.

Distance scows towed, to deposit, from 1 to 2 miles northeast of channel.

## ST. JOHN CREEK.

St. John creek, in the county of Ontario, flows through the township of Rama, rising in St. John's lake and emptying into the Black river.

The department owned and operated a concrete stop-log dam for the regulation of water level.

By Order in Council dated September 1, this dam was transferred to the Department of Railways and Canals.

## SAULT STE. MARIE.

Sault Ste. Marie, including the contiguous town of Steelton, has a population of some 20,000, and is situated on the St. Mary's river, opposite the St. Mary's falls.

Work of repair by day labour was commenced on June 6 and completed on October 31, 1916.

The work consisted in entirely renewing the concrete face wall of the wharf in places where it was badly eroded and in a dangerous condition. This wall is 6 feet high by 4 feet thick, and a total length of 200 feet was blasted out and renewed with fresh concrete. A large portion, about 24,000 square feet, of the surface of the wharf was refinished with fine trap rock and thoroughly solidified by a heavy steam roller. Some small repairs were also made to the warehouse.

Authority was given to construct a building on the government wharf for the use of the Customs Department, to replace the old one which was destroyed by a fire a short time previously.

Work was commenced on the 1st February, and was completed on 31st March, 1917.

The work consisted in the construction of a frame building, 42 feet long by 22 feet wide, the interior of which is divided into two offices and a storage room, the latter for the use of this department.

## SEVERN RIVER.

Severn river, in the county of Ontario, runs from lakes Couchiching and St. John, flowing northwesterly through the township of Rama and district of Muskoka into the Georgian bay.

The dams are for regulating the water levels in lakes Simcoe and Couchiching, and were transferred to the control of the Department of Railways and Canals by Order in Council, dated September 1, 1916.

## TORONTO.

(This work is fully described in the annual report for 1915.)

Toronto, county of York, is a city of some 500,000 inhabitants, situated on the north shore of lake Ontario.

*Section "A" Sea Wall.*—Actual construction of this proposed pile and reinforced concrete retaining wall has not yet been commenced.

*Section "B" Breakwater.*—Commenced crib building on May 28, 1914, the first crib being sunk in position at the west or Humber end of the work on July 31, 1914. From that date to December 31, 1916, forty 100-foot standard cribs and eight 30-foot return cribs have been placed. Of these, ten were built 14 feet in width; twenty, 16 feet in width, and the return cribs in accordance with the above. Of these cribs, thirty standard and six return cribs were placed on a sandy bottom on prepared berths, and practically filled with stone. Along both faces of this cribwork, some 1,303 piles 28 and 30 feet long have been driven in place at 5-foot centers. On June 23, 1914, preparatory to placing these cribs, the contractors commenced dredging berths at the Humber end, working in an easterly direction, and in all 56,149 cubic yards, seaw measurement, of sand, clay, etc., were removed.

Work also commenced at the eastern end of this breakwater in close proximity to the northwestern corner of the new western channel, ten standard cribs 14 feet in width, and two 30-foot return cribs, scribed to conform to the rock bottom, were placed and filled with stone.

As these cribs were built for the sand section, and the contractors were required to scribe and place them on the rock section, they were allowed payment for the additional work required in scribing at cost, plus 10 per cent under clause 36 of their contract, the total additional cost to the department being \$2,688.16.



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Certain cribwork placed by the contractors during the season of 1914 required rectification, and this rectification was performed without extra cost during the past season, to the entire satisfaction of the department. In order to increase the stability of this section, the contractors have been instructed to construct all remaining cribs 16 feet in width.

The total expenditure on this section of the work to the end of the fiscal year amounted to \$170,963.07.

*Section "C" Ship Channel and Turning Basin.*—During the present year the following progress has been made: Round bent piles and anchor piles have been rectified over a length of 4,410 lineal feet of wall; new work has been performed to the extent of 4,735 lineal feet, making a total of 9,145 lineal feet of wall completed with 6- by 12-inch by 20-foot hemlock caps, and 10- by 12-inch by 20-foot British Columbia fir stringer. A total length of 8,786 lineal feet has been close-sheeted with 12- by 12-inch by 40-foot sheet piling, of which 4,410 lineal feet is rectified work and 4,376 lineal feet is new work. Waling of British Columbia fir, 12- by 12-inch by 22-foot has been placed over a total length of 8,001 lineal feet, of which 4,410 lineal feet is rectified work and 3,591 lineal feet is new work. The necessary structural steel has also been placed. The structure has been anchored back with 2-inch diameter anchor rods extending 50 feet to the anchor piles, in the rear of the wall, which have a barricade laid over a length of 8,511 lineal feet; 1,350.5 cubic yards of mass concrete have been placed over a length of 720 lineal feet. A total of 1,964,345 cubic yards have been dredged and deposited as back filling where directed. That portion of the work requiring rectification, which was contained in the area unwatered by means of coffer dams, was rectified by the contractors without cost, and to the entire satisfaction of the department.

It is the intention to complete the rectification of this section under the same terms during the coming fiscal year, when the remainder of the section will be unwatered. The total expenditure on this section of the work to the end of the fiscal year 1916-17 amounted to \$953,673.53.

*Section "D" Retaining Walls and Northern Slip.*—During the present year the following progress has been made: Round bent piles and anchor piles have been rectified over a length of 2,457 lineal feet of wall; new work has been done to the extent of 250 lineal feet, making a total of 2,707 lineal feet of wall completed with 6- by 12-inch by 8-foot hemlock caps and 10- by 12-inch by 20-foot British Columbia fir stringer. A total length of 2,707 lineal feet has been close-sheeted with 12- by 12-inch by 40-foot sheet piling, of which 2,457 lineal feet is rectified work and 250 lineal feet is new work. Waling of British Columbia fir 12- by 12-inch by 22-foot has been placed over a total length of 4,237 lineal feet, of which 3,737 lineal feet is rectified work and 500 lineal feet is new work. The necessary structural steel has also been placed. The structure has been anchored back with 2-inch diameter anchor rods extending 50 feet to the anchor piles, in rear of the wall, which have a barricade laid over a length of 1,937 lineal feet, 4,857 cubic yards of mass concrete have been placed over a length of 2,707 lineal feet. Extra anchorage rendered necessary over some 1,529 lineal feet of northern slip walls owing to defective nature of holding ground, entailed an expenditure of \$12,576.01, which was carried out by the contractors on a basis of cost plus 10 per cent, in accordance with clause 36, page 33 of the contract. The work on the northern slip or Don diversion portion of this section has been completed. That portion of this work requiring rectification, which was contained in the area unwatered by means of coffer dams, was rectified by the contractors without cost, and to the entire satisfaction of the department.

It is the intention to complete the rectification of this section under the same terms during the coming fiscal year, when the remainder of the section will be unwatered.

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## WAUBAUSHENE.

Waubauskene is a town on the Georgian bay, in the township of Tay, county of Simcoe, with a population of about 1,000. The Midland division of the Grand Trunk Railway system has a station and freight yards in the town.

The object in doing the work was for the purpose of making a channel of deeper draught of water to enable tugs towing blocks of logs direct into the mill-yards of the Georgian Bay Lumber Company and the Fesserton Lumber Company.

The channel is well sheltered from all quarters excepting from the northwest.

Authority was given to remove 18,500 cubic yards of class "B" material, place measurement. The work was let to the Penetanguishene Dredging Co., Limited, at a price of 26 cents per cubic yard. The material, as dredged, consisted of sand, mud, and some hard-pan. The dimensions are 5,637 feet long, average width 106 feet, and dredged to a depth of 11 feet below zero of water level; elevation 580.0, with an average cut of 3.2 feet. The area completed in 1916 is 156,094 square feet.

The remaining portion to be done to complete the channel is 52,199 cubic yards, *in situ*, class "B" material.

The work was begun July 31 and completed November 16, 1916. Quantity removed, 18,293 cubic yards, place measure.

In all probability the work, when completed, will be permanent.

## MANITOBA.

## ASSINIBOINE RIVER.

The floods in the spring of the year damaged the dykes along the banks of the Assiniboine river, east of Portage la Prairie, to such an extent that repairs had to be made to save the remainder of the work.

These repairs consisted of the installation of two 60-foot culverts, 3 feet in diameter, the building of 1,192 lineal feet of new dykes, and the repairing of 3,492 lineal feet of old dykes.

## BIG GEORGE ISLAND.

In order to provide a much-needed harbour of refuge, work was begun on a channel from lake Winnipeg into a natural harbour at Big George island, Selkirk county. Part of the work consisted in dredging out a temporary shelter for the dredge.

The temporary shelter, as completed, has a length of 910 feet, a width in bottom of 35 feet, and carries a depth of 6 feet below low water. The channel, as completed, has a length of 455 feet, a width in bottom of 35 feet, and carries a depth of 9 feet below low water.

It was necessary to scow most of this material, and will in time require dredging owing to filling in.

Operations were carried on between July 17 and October 21, 1916, by dredge *No. 204*, the quantity removed being 7,675 cubic yards, scow measurement, clay, boulders, and gravel, which had to be towed a distance of 1 mile.

This work was done at a cost of 66.58 cents per cubic yard.

## DAUPHIN RIVER.

To enable the lake-going boats to make use of the Marine and Fisheries wharf, the channel from the mouth of the Dauphin river, Selkirk county, to the wharf was deepened by dredging.

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Four cuts were necessary of a length of 2,382 feet and an average width of 35 on bottom, and carries a depth of 9 feet below low water.

It was necessary to scow the material a distance of about one mile. No filling-in is anticipated.

Operations were carried on between May 25 and July 15, 1916, by dredge *No. 204*, the quantity removed being 10,027 cubic yards, place measurement, of gravel, rock and boulders.

The work was done at a cost of 52.63 per cubic yard.

## HOLE RIVER.

Hole river is situated on the east side of lake Winnipeg, opposite Black island. Above the fourth rapids on the Hole river a rock-fill dam was constructed, which was intended to hold the river at spring-water level and thereby make it navigable up to and across Hole River lake, a distance of about 15 miles. The dam as constructed was 90 feet long and an average height of about 5 to 7 feet.

All the rock was blasted nearby, and the number of yards placed in the dam is about 200.

*Dredging.*

To enable boats to navigate the river dredging was done, which consisted of the removal of blasted rock that was blocking the channel.

The total quantity of rock removed was 281 cubic yards. The channel now carries a depth of 9 feet below low water.

It was necessary to cast over the material; no filling-in will take place.

Operations were carried on between August 16 and August 23, 1916, by dredge *No. 202*.

The work was done at a cost of 117.33 cents per cubic yard.

## LE PAS.

Le Pas, Le Pas county, is the northern terminus of the Canadian Northern railway, and the southern terminus of the Hudson Bay railway, with a population of about 2,000.

The site for the wharf has been acquired for the sum of \$1,870, and about twenty-eight cords of stone was acquired.

## RED RIVER.

*Crescent Island.*

Owing to silting up of the river-bed at this point, dredge *No. 205* worked there improving the steamboat channel.

Three cuts were necessary of a total length of 5,363 feet to a width of 40 in the bottom, and carrying a depth of 10 feet below low water.

All of this material was towed a distance of 1 mile; further dredging will in time be required, owing to filling-in.

Operations were carried on between June 7 and July 20, 1916, and again from September 20 to October 31, 1916, by dredge *No. 205*, the quantity removed being 71,676 cubic yards, scow measurement, of mud and sand.

This work was done at a cost of 11.19 cents per cubic yard.

*Middle Ground.*

In order to improve the navigable channel and enlarge the sectional area of the river, thereby lessening the danger of ice jams and floods in the vicinity of Selkirk,

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dredging was continued below Sugar island, about one and one-half miles north of Selkirk, at what is called the "Middle Ground."

The dredging consisted of three cuts having a total length of 5,210 feet by 160 wide, to an average depth of 4 feet, and carries a depth of 11 feet at low water.

It was necessary to cast over the material, which will in time require further dredging owing to filling-in.

Operations were carried on between July 31 and October 31, 1916, by dredge *No. 201*, the quantity removed being 123,590 cubic yards of silt, place measurement.

The work was done at a cost of 6.31 cents per cubic yard.

#### *New Channel.*

Owing to the spring freshets, the channel at the mouth of the Red river had to be dredged to remove deposits of silt.

Operations were carried on between May 6 and July 29 by the dredge *No. 201*, the quantity removed being 53,589 cubic yards, sandy clay, place measurement, which was all cast over, consisting of two cuts as follows: 1,182 feet by 100 by 3 feet, and 2,395 feet by 140 by 3 feet, and carries a depth of 11 feet below low water.

Operations were carried on between May 13 and May 24, 1916, by dredge *No. 204*, the quantity removed being 1,534 cubic yards of sand, scow measurement, tow, one-half mile. This work consisted of one cut 280 feet long, 40 wide in bottom, and carries 11 feet depth below low water.

Operations were also carried on between May 20 and June 7 by dredge *No. 205*, the quantity removed being 3,298 cubic yards, scow measurement, of sand; towed one-half mile. This work is 593 feet in length, 40 wide, and carries a depth of 10 feet below low water.

Total cubic yards, 58,421, and cost per cubic yard, 8.24 cents.

#### *New Entrance Channel.*

Owing to the ice preventing the placing of stone in the protection work at the mouth of the Red river during the winter of 1915-16, this work had to be left over until last summer, when it was completed.

The storms of 1916 completely wrecked a portion of the old protection wall on the west side of the channel at the mouth of the river, thereby endangering the remainder of the wall. About 648 feet of this was replaced by class B work, which seems to be the only type of work that will stand the action of heavy storms.

#### ST. ANDREWS LOCK AND DAM.

The work of removing the stone, which had been used as a cofferdam at St. Andrews, was completed this year. This stone seriously interfered with the proper escape of the water from the dam, the current being directed by it across the navigable channel, offering a menace to navigation.

Four cuts were necessary of a total length of 1,929 feet to a width of 40 in the bottom, of an average depth of 5.82 feet.

It was necessary to tow all material a distance of 1 mile. No filling-in is anticipated.

Operations were carried on between July 31 and September 19 by P.W.D. *No. 205*, the quantity removed being 14,900 cubic yards, scow measurement, of rock, gravel, and boulders.

The cost of this work was 27.4 cents per cubic yard.

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## SELKIRK SLOUGH.

In order to improve the channel for navigation, further dredging was required this year in the West slough, which is used by the department as a winter harbour, and has the government shipyard near the head.

Two cuts were necessary of a total length of 4,932 feet to a width of 40 in the bottom and carried a depth of 10 feet below low water.

It was necessary to tow all of the material a distance of 1 mile. No filling-in is anticipated.

Operations were carried on between July 26 and August 16, and again between August 23 and October 31 by dredge No. 202, the quantity removed being 32,450 cubic yards, scow measurement, of clay.

The cost of this work was 24.45 cents per cubic yard.

## SNAKE ISLAND.

Dredging was required at Snake island, Dauphin county, for the purpose of improving the channel from the lake to the government fish hatchery on the island.

The channel, as completed, consists of three cuts of a total length of 1,538 feet, a width of 35 on the bottom, and carries a depth of 6½ feet at low water.

It was necessary to scow the material a distance of one-quarter mile, and will in time require further dredging owing to filling-in.

Operations were carried on between August 16 and September 15, 1916, by dredge No. 210, the quantity removed being 5,581 cubic yards, scow measurement, of gravel, clay, and boulders.

The work was done at a cost of 28.38 cents per cubic yard.

## WINNIPEGOSIS.

Owing to low water on lake Manitoba, the channel from Mossy river to the lake required dredging, as did also the channels at the Armstrong Trading Company's wharf, the Canadian Lake Fisheries dock, and the Standard Lumber Company's wharf.

The work, as completed, consisted of 3,414 lineal feet, with a width of 25 feet in the bottom; 479 lineal feet, 8 feet wide in the bottom; and 30 lineal feet, 20 feet wide in the bottom; and all carries a depth of 8 feet below low water.

All of the material was scowed a distance of three-quarters of a mile, and will in time require further dredging, owing to filling-in.

Operations were carried on between July 7 and August 17, 1916, by dredge No. 210, the quantity removed being 9,208 cubic yards, scow measurement, of sand, clay, boulders, and hardpan.

The work was done at a cost of 31.05 cents per cubic yard.

## BRITISH COLUMBIA.

## BELLA BELLA.

Bella Bella is situated on the east coast of Campbell island, 170 miles from Prince Rupert. This place is an old Hudson's Bay Company post, and has been used since 1833 as a landing place for supplies and mail for the settlers in the surrounding country. It is proposed to rebuild the wharf, which has been turned over to the Department by Mr. J. A. Pauline, its present owner. The proposed wharf would be 40 by 80 feet, with an approach 120 feet long, and will be built of creosoted piles.

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## BISHOPS BAY.

Bishops Bay, Comox-Atlin district, is situated on the mainland coast of British Columbia, on the strait of Georgia, about 20 miles west of Powell river, and some 100 miles northwest of the city of Vancouver. It is of considerable importance as a shipping point for fish, and a regular place of call for coastwise steamers.

Authority was granted to build a landing float on the bay. An agreement was entered into with James McDonald & Co. to supply all labour and material in place for \$689.12.

The complete work consists of a cedar log and timber-decked float 36 by 50 feet and approach 6 by 120 feet, with the usual anchorage, and shed 10 by 12 feet. Construction was started November 21, and completed November 27.

## BURTON.

Owing to the action of the current on a high gravel bank, 1,900 feet long and 20 feet high, on the east side of the Columbia river, below Burton, bars were formed in the slack water at the head of the Lower Arrow lakes, necessitating almost continuous dredging to keep the channel open. To assist in establishing a permanent channel at this place, it was decided to protect the eroding bank by a brush-and-rock mattress.

Work was continued on November 7, 1916, and completed on February 6, 1917; during this time the lower portion of the bank was matted for a length of 1,450 feet and an average width of 55 feet. This work completed the bank protection on a length of 2,750 feet.

## COURTENAY RIVER.

The Courtenay river runs in a southeasterly direction into Comox harbour. Courtenay, near its mouth, the northerly terminus of the Esquimalt and Nanaimo railway, is the principal town of the Comox valley, which is about 6 miles wide and 40 miles long.

During 1914 and 1915 the original tortuous channel over the tidal flats between Comox bay and the mouth of the Courtenay river had been straightened by dredging a new channel 3,000 feet long and 100 feet wide by means of the departmental dredge *King Edward*. Further improvements were required between the point where the dredge had ceased work and the town of Courtenay. Authorization was granted for the orange-peel bucket dredge *Victoria* to make a channel, 80 feet in width, by removing numerous boulders and snags, to provide additional depth over two bars, at the river mouth and below the town of Courtenay, respectively, to facilitate the navigation of boats coming up the river. The dredge commenced work on February 12, 1917, and on March 31 had covered a distance of 1,500 feet, commencing from the Courtenay bridge, in addition to improving the channel at the river mouth. The main portion of the work still to be done consists of providing additional depth on the upper bar.

The material was all overcast to the sides of the channel. The estimated quantity was 2,999 cubic yards, including 132 isolated boulders; also fifty-two snags. Filling-in may take place, necessitating further work in two or three years in order to keep the channel clear.

## CRACROFT.

Cracraft float, Comox-Atlin district, is situated on the southwesterly coast of Cracraft island, and is a regular place of call for coastwise steamers.

A new float, 30 by 50 feet, with an approach 350 feet long by 6 feet wide, shed 12 by 16 feet, with the usual anchorage, was built.

Work was commenced on November 24 and completed March 3, under agreement with James McDonald & Co., at unit prices.

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## FRASER RIVER—NORTH ARM JETTY.

The work undertaken at the mouth of the north arm of the Fraser river has for its object the making and maintaining of a navigable channel through the Sandheads at the mouth. The complete scheme embraces the dredging of a channel 21,685 feet long, 300 wide, to 10 feet at L.W.O.S.T., and the construction of a bulkhead and mattress jetty, 22,191 feet long, paralleling the dredged channel on the south side.

The construction of the jetty was completed in the fiscal year 1915-16, details of which may be found in the annual report for that year.

The Pacific Dredging Company, of Vancouver, completed this contract on December 31. During this fiscal year, 747,728 cubic yards of material have been removed, making a total of 3,028,234 cubic yards removed to complete the cut.

*Dredging.*

A request was made by the New Westminster Board of Trade and various industries interested to do some dredging at the mouth of the North arm of the Fraser river, below Lulu Island bridge.

Authority being granted, the *King Edward* commenced on July 24 to dredge a channel some 1,200 feet long, 150 feet wide, to 10 feet B.L.W. and completed in August 26 the removal of 37,300 cubic yards of sand and fine gravel, which was deposited at the upper end of Poplar island.

It is quite possible that more dredging will have to be undertaken in this locality in the near future, as the natural tendency is to silt up.

*South Branch.*

The South branch is that portion of the north arm running from Eburne south and southwest to the gulf of Georgia. The object of the work is to provide a channel with a depth of 10 feet at L.W.O.S.T., connecting with the channel dredged by the department in front of Eburne in 1911.

The whole work consists of a channel 6,225 feet long and 150 feet wide, the total material removed being 227,025 cubic yards of sand and silt in place, of which 101,790 cubic yards were removed on a distance of 3,700 feet last year.

Authority being granted to complete this work, the *King Edward* started operations April 10 and continued to the 18th, when she was ordered to Powell river. Starting again on May 16, work was resumed to completion on July 30, during which time 125,235 cubic yards were removed. It is expected that this work will be permanent.

*Steveston Jetty (2nd Unit).*

The work being done at the mouth of the main branch of the Fraser river has for its object the confining of the waters passing over the Sandheads to a defined channel, which is being dredged parallel to the proposed jetties. The proposed jetty on the north side of the channel is 27,000 feet long. Of this total length there was completed, by March 31, 15,800 feet, including 6,900 lineal feet of the first unit.

The work done during the fiscal year 1916-17 was the building of the second unit of the jetty, with a length of 7,100 feet and an extension to the second unit of 1,800 feet. The contract for the construction of this second unit was let to the Marsh-Hutton-Powers Company, of New Westminster, dated June 4, 1915. The extension of this contract was authorized by Order in Council passed on 15th August, 1916, for an additional length of 1,800 feet.

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Work was begun on June 18, 1915, and consists of a brush mattress and rock mound, which is made up of the following materials, the quantities being approximate:

	Original contract.	Extension.	Total.
Brush mattress.....	120,262 cubic yards	25,000 cubic yards	145,262 cubic yards
Rock, large.....	48,350 tons.	12,500 tons.	60,850 tons.
Rock, small.....	77,800 tons.	19,100 tons.	96,900 tons.
Lumber.....	42,600 feet B.M.	6,300 feet B.M.	48,900 feet B.M.

The following table shows the materials already placed and the balance yet to be done:—

		Balance to be done.
Brush in mattress.....	141,700 cubic yards	3,562 cubic yards
Rock, large, in place.....	54,000	6,850 tons to be
Rock, not graded.....	6,850	graded.
Rock, small.....	96,100	800 tons.
Lumber.....	35,500 feet B.M.	13,400 feet B.M.

#### Sandheads.

The Fraser river sandheads extend from Steveston west about 5.5 miles to deep water in the gulf of Georgia. These sandheads are bare at low water, except the channel runs between them. Several years ago, this channel showed a tendency to cut a straight course through the bar to the north of the old channel, and the natural tendency of the river, materially assisted by dredging, has resulted in the production of the main ship canal at this place. This channel has obtained a minimum depth of 15 feet at low tide, and it is to maintain or increase this depth and straighten out the channel that the work is being performed.

The department dredges *No. 303* and *King Edward* have been employed this year maintaining and improving the channel paralleling the jetty from buoy No. 24 to the gulf of Georgia. The following table shows the work performed by each dredge:—

#### Dredge "303".

Intervals of dredging.	Cubic yards (Hopper measurement)	Material.
April 1st, 1916, to March 31st, 1917.....	692,800	Sand and clay.

#### King Edward.

Intervals of dredging.	Cubic yards (Place measurement)	Material.
Aug. 28th to Oct. 10th.....	41,460	Sand and clay.
Oct. 16th to Nov. 25th.....	34,855	
	76,315	



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This shows a total of 769,115 cubic yards removed from the channel during this fiscal year.

The *King Edward* confined its operations to a cut 1,800 feet long by 150 wide, through a bar that had formed at the outer end of the cut between buoys Nos. 1 and 3, while the *No. 303* assisted the *King Edward* in widening the cut at this point, besides removing material from various parts of the channel between No. 3 and No. 24 buoys.

On the whole, the dredged channel appears to be maintaining the depth dredged, alternate filling-in of the bottom taking place at different stages of high water in the river.

## HOPE POINT.

Hope point, Comox-Atlin district, is situated on the southeasterly end of Gambier island, Howe sound, about 20 miles northwest from the city of Vancouver.

Authority was granted to build a float at Hope Point, and an agreement was entered into with James McDonald & Co., of Vancouver, to supply all labour and material in place for the lump sum of \$921.22.

The completed work consists of a cedar-log and timber-decked float, 34 by 44 feet, with an approach 6 by 100 feet connected with the shore by cribbing 8 by 10 feet, and fastened at the outer end by boomsticks to the shore. A shed, 10 by 12 feet, was built on the float. Work was commenced September 6 and completed September 22.

## JEDIDIAH ISLAND.

Jedidiah island, Comox-Atlin district, is situated between Texada island and Lasqueti island in the strait of Georgia, some 50 miles northwest of the city of Vancouver.

Authority was granted to build a float on the island; work was commenced October 5, by day labour, and completed March 31.

The completed work consists of a new float, 16 by 34 feet, approached 10 by 120 feet on sawn-timber bents, a gangway 6 by 32 feet, and a shed 10 by 12 feet.

## KITIMAT VILLAGE.

This village is situated at the head of Kitimat arm on the west coast of British Columbia, 150 miles from Prince Rupert.

The work of building a landing float started early in November and completed in the same month. This float is 20 by 60 feet, with a floating approach 6 feet wide and 190 feet long. Three clumps of dolphins were driven in front of the float so as to break the weight of any large ships which land at this point. In August last, the settlers of Kitimat village requested that two floats be built in Kitimat bay instead of one, building the smaller float on the opposite side of the bay, where the large one was to be built, to accommodate small gasoline boats. Authority to proceed with this extra work was received, and work was done by day labour in a most satisfactory manner.

## LILLOOET RIVER.

The Lillooet river, New Westminster district, drains Lillooet lake, passes through a flat country known as Pitt Meadows, and empties into Pitt river, about two miles above the junction with the Fraser.

Authority was granted to make a diversion of the river by cutting a straight channel through a narrow neck of land, doing away with a sharp bend, to facilitate the driving of logs and prevent the water from backing up and overflowing the land.

An agreement was entered into with J. W. Pike, of Vancouver, to make a cut 328 feet long, 80 wide, and 4.5 feet deep, representing the removal of 8,425 cubic yards, including slopes, at the rate of 12 cents per cubic yard.

## LITTLE RIVER (CAPE LAZO).

Authorization was granted for the construction of a wharf at Little river, Comox-Atlin district, about 3 miles north of cape Lazo, on the east coast of Vancouver island, where there is a Dominion Government wireless station.

A wharf, 80 by 30 feet, was constructed, with shed and slip and approach 315 by 14 feet with an additional 30 feet widened to assist the turning of teams. The work was carried out by contract by James MacDonald & Company, and completed in December, 1916.

## LLOYD POINT.

Lloyd point, Comox-Atlin district, is situated on the mainland coast of British Columbia, opposite Redonda island, in Homfrey channel, some 120 miles northwest of the city of Vancouver.

It was considered that a float would be cheaper and more convenient than a wharf for the settlers at this point, so a float 30 by 40 feet was built. A small shed, 10 by 12 feet, with 8-foot wall, was built on the float to accommodate the public and to store freight in bad weather. An agreement was entered into with James McDonald & Co. to build this float, supply all labour and material in place.

Work commenced November 21 and was completed February 26.

## NANAIMO.

Nanaimo, Nanaimo district, is the centre of the coal mining industry of Vancouver island; also of the herring fisheries. It is about 40 miles distant from Vancouver, and 73 miles north of Victoria.

Nineteen fir and twenty creosoted bearing piles were driven in the wharf-head and approach, and the caps, stringers, joists, decking, and handrail renewed. The original approach was lengthened 20 feet in order to reduce the grade to the street, and the shed removed to the northwest corner of the wharf.

The work was completed by day labour between September 19 and October 23, 1916.

*Dredging.*

(This work is described in the annual report for 1916).

The Lobnitz rockbreaker was engaged the whole of the year, reporting an estimated quantity of 11,537 cubic yards of rock broken. The departmental dredge *Ajax* removed the following material, according to dredge captain's returns, between November 1 and December 8, 1916:—

	Rock.	Hardpan, gravel, silt, etc.	Total cubic yards, scow measurement.
North Channel. { Nicol rock.....	3,483	390	3,873
{ Block "H".....	545		545
{ Block "I".....	268		268
{ Block "J".....	1,396		1,396
Removed 1916-17.....	5,692	390	6,082
Removed at above location 1914-15.....	3,940	890	4,830
"                    1915-16.....	11,100	4,450	15,550
	20,732	5,730	26,464

This leaves an estimated quantity of 27,874 cubic yards (place measurement) still to be removed.

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No further work is required on block "I," which has now a minimum depth of 29 feet at low water. The present minimum depth at low water on block "H" is 24.8 feet, on block "J" 21.7 feet, and on Nicol rock is 18.6 feet. A considerable quantity of broken rock was ready for excavation at the end of the fiscal year, but before sending the dredge to remove it, further work was considered desirable.

## NEW BRIGHTON.

New Brighton, Comox-Atlin district, is situated on the southwest side of Gambier island, some 35 miles from the city of Vancouver.

Authority was granted to build a float at Brighton Beach, and an agreement was entered into with James McDonald & Co., of Vancouver, to supply all labour and material in place.

The completed work consists of a cedar-log and timber-decked float, 34 by 46 feet, an approach 6 by 280 feet with the usual anchorage, and a shed 12 by 14 feet.

Work was commenced September 13 and completed September 26.

## OKANAGAN RIVER.

When the regulating dam at the head of the Okanagan river was built, the static head provided for, based on the lowest known discharge from Okanagan lake of 400 c.f.s., was one-half foot. It was found, however, in the spring of 1916, this discharge had dropped to 180 c.f.s., necessitating the placing of a stop-log, a foot vertical, across the discharge opening, in an endeavour to maintain the lake level at near low-water mark. This formed a head of 1.8 foot, which caused considerable scouring to the river bottom for some distance below the dam and, owing to the extra pressure, some leakage through the dam. This scouring and leakage could be arrested by placing rock and brush along the back of dam, and rock on the bottom where the scouring was taking place; advantage was taken of high water from 8th to 22nd August to haul the required material by scow, and the dredge *Heron* was used to handle the rock at the dam. During this period, about 75 cubic yards of rock was placed in the channel where the scouring was taking place, and the same quantity piled on the bank at the dam. Between September 28 and October 11, the water having dropped, this latter rock was carefully hand-placed, on brush and tules, along the back of the dam.

During this winter, a second stop-log, 10 inches vertical, was placed in the discharge opening of the dam, which has had the following effect: On May 5, the discharge through the dam over one stop-log, with level of lake at minus .45 was 417 c.f.s.; with second stop-log, lake at same level, was 223 c.f.s. From this, it may fairly be inferred that the difference between the two discharges, 194 c.f.s., was being throttled by the extra stop-log, which would naturally raise the level of the lake; or that the inflow to the lake was 194 c.f.s. below normal, and that the dam was holding the lake above the level, due to quantity of water discharged into it.

From 26th to 31st March, eight loads of rock were placed about the central swing pier of the road bridge, crossing the head of the Okanagan river, immediately below control dam, to counteract the effect of the current from the dam on the river bed, and stop scouring. Thirty-four loads of rock were also deposited on the banks, near control dam, for use in future repairs.

The dumps made by dredge near the Fairview road bridge were scraped, levelled, and otherwise trimmed up so as to prevent material washing back into the river channel.

*Dredging.*

From 12th May the *Heron* was employed until 13th July running a cut south from the railway bridge, involving the handling of 7,513 cubic yards. This distance was

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again gone over and 3,391 yards was rehandled, the work terminating on 7th August. The total amount of material handled, consisting of sand and gravel, was 10,904 cubic yards.

On 24th August the *Heron* was engaged until 27th September in deepening channel to grade line from above the railway bridge near Beaver creek. On this work, 3,863 cubic yards was single-handled.

## PORT CLEMENTS OR QUEENSTON.

Port Clements is situated at the head of Masset inlet, on Graham island, one of the Queen Charlotte islands, which are located 100 miles in the Pacific ocean, west from Prince Rupert.

The wharf, built in 1913, using green piles, was in such bad condition from the action of teredoes that it was in danger of total collapse. The rebuilding of the wharf, as well as the approach, by using creosoted piles, was done by day labour, and was started early in July, completed in October, and is a very satisfactory piece of work, and it is expected will stand about ten or twelve years. This wharf is 40 by 60 feet wide, an approach of 650 feet long and 16 feet wide, with a freight-shed built on the wharf, 16 by 16 feet. A pile dolphin was also driven 60 feet out from the wharf, against which the stern of a ship rests when laying at the wharf.

## POWELL RIVER.

Powell River, Comox-Atlin district, is a town with a population of about 2,000, situated on the mainland of British Columbia, 80 miles northwest of Vancouver city.

The harbour is protected from southeast winds by a breakwater, built in 1911-12, by the Powell River Paper Company and purchased by the department the same year. Authority was granted to build a wharf, and it was decided to construct it along the west side of the breakwater.

An agreement was entered into with James McDonald & Co., on July 15, to build the wharf, supply all labour and material in place for \$2,500.

The completed work consists of a pile and post-bent and timber superstructure, 46 by 70 feet, an approach 14 feet wide and 650 feet long, and a small shed 16 by 26 feet. The east side of the approach and pier-head rest on the breakwater. Work was started July 22 and completed on August 8.

*Dredging.*

Authority being granted to dredge a berthing channel alongside the Powell River Paper Company's wharf, the *King Edward* started May 1 to remove a cut 350 feet long by 175 wide to 30 feet B.L.W.O.S.T., removing 14,515 cubic yards of sand, silt, gravel, and clay, by May 10.

## REFUGE BAY.

The wharf at Refuge bay is situated on the north of Porcher island, about 26 miles in a southwesterly direction from Prince Rupert. This wharf, having fallen down owing to the action of teredoes, was rebuilt with creosoted piles in 1915, and is 40 by 60 feet, with a freight shed 14 by 16 feet.

The work of rebuilding the approach was completed this year, and was done by day labour, creosoted piles being used, and was started about October 15, and by the middle of November it was necessary to stop work owing to shortage of creosoted piles, but the work was resumed again and completed in January. This approach is 390 feet long and 16 wide.

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## ROBERTS CREEK.

Roberts Creek, Comox-Atlin district, is a settlement on the mainland coast of British Columbia, some 23 miles west of the city of Vancouver, and a regular port of call for coastwise steamers.

This wharf was built in the year 1914-15.

An addition was built, 20 by 120 feet, along the east side of the old pier-head, forty creosoted and thirty-five fir piles were used, and 16,037 feet of lumber, as well as eight fender piles driven on the face of the old wharf.

Work was commenced June 15 and completed July 25.

## SMITH'S LANDING.

Smith's Landing, Comox-Atlin district, is situated on the south shore of Howe sound, about two miles from Granthams Landing and some 25 miles from the city of Vancouver. It is a regular place of call for steamers from Vancouver.

Work at this point was the construction of a new pile bent and timber decking wharf, 36 by 48 feet, with a pile bent addition 14 by 30 feet to the existing approach, and a shed 10 by 12 feet.

All the bearing piles in the wharf were creosoted to withstand the attacks of the teredo.

The work was performed by James McDonald & Co., at unit prices, between August 22 and September 5.

## SMITHS LANDING (CORTEZ ISLAND).

Smiths Landing, Comox-Atlin district, is situated on the east side of Cortez island, some 105 miles northwest of the city of Vancouver.

To build a float at this point, a contract was entered into with James McDonald & Co. at unit prices of \$30 per M. for lumber, and \$22 for cedar logs in place.

This work consists of a float, 30 by 45 feet, of cedar logs with deck of 6- by 6-inch cross-ties and 2- by 12-inch planking, and 6- by 6-inch cross-ties, and an approach 6 by 250 feet, with the usual anchorage, and a shed 10 by 12 feet.

Work was commenced November 20, 1916, and completed March 27, 1917.

## SQUAMISH.

Squamish, Comox-Atlin district, is a town of considerable importance as a terminus of the Pacific-Great Eastern railway, situated at the head of Howe sound.

A retaining wall to prevent the material dredged from the channel at the mouth of the east branch of the Squamish river from working back into the channel was built. The retaining wall is 2,300 feet long and 14 high along the east side of the approach to the Squamish wharf, with a wing 200 feet long on the outer end.

Work started August 1, 1916, and was completed February 5, 1917.

*Dredging.*

Authority was granted to dredge a channel in the east branch of the river, 7,200 feet long, 120 wide at the bottom to 8 feet B.L.W.O.S.T., from deep water at the mouth to the town of Squamish, entailing the removal of some 400,000 cubic yards of sand, gravel, etc.

The *King Edward* started on this work November 27, and up to March 31 removed 125,800 cubic yards, or 31.5 per cent of material from the outer end of the channel and deposited it behind the retaining wall built this year alongside the Government wharf.

As this channel is protected on both sides, the dredging is expected to be of a permanent nature.

## STAPLEBY.

Stapleby, Comox-Atlin district, is about three miles from Ucluelet on the west coast of Vancouver island, and is the natural point of outlet from Kennedy lake, Wreck bay, and Long beach. A boat landing has been constructed consisting of a float, 20 by 15 feet, approach on piles 170 by 6 feet, with head 34 by 9 feet, shed 9 by 18 feet, and gangway 32 by 4 feet. This work was completed by day labour between the 2nd and 31st October, 1916.

## SURGE NARROWS.

Surge Narrows float, Comox-Atlin district, is situated on the northwest coast of Read island, and is a regular place of call for coastwise steamers.

An agreement was entered into with James McDonald & Co. to build a float, supplying all labour and material in place.

The completed work consists of a cedar-log and timber-decked float, 34 by 60 feet, with boomsticks to keep float in position, and a shed 12 by 20 feet was built on the float.

Construction was commenced November 21 and completed February 27.

## VANCOUVER.

A contract for the construction of a wooden freight shed on the government wharf was let to Messrs. Snider Bros. and Brethour, for the sum of \$44,990.

Work was commenced in April and completed, with the exception of some minor details, on November 30.

Messrs. Snider Bros. and Brethour supplied, in addition to the above, one valve to reduce the pressure on plumbing fixtures, one hydrant and two 8-inch gate valves and brackets under electric supports, amounting to \$348.25, while the city of Vancouver laid and connected an 8-inch water main from Powell street to the wharf system at the north end of Salisbury drive.

*Railway Track.*

Authority was granted to build a spur track on the government property on the east side of the government wharf, to assist in the handling of freight which is loaded directly from ship to car or *vice versa*, thus avoiding delay and expense in trucking through the shed, and for the use of a travelling crane.

The track as laid out on the ground includes a tangent 1,139 feet along the east face of the government shed and 217 feet of a 15-degree curve to the north side of Stewart street. This will eventually be produced across Stewart street and connected by the Canadian Pacific Railway to their own line, when permission is granted by the Railway Commission.

Work was commenced February 7, by day labour, and completed March 22.

*Roadway.*

Authority was granted to build a plank roadway from the end of Salisbury drive to the lower end of the railway entering the shed at the south end of the Government wharf.

The completed work which was done by day labour, consists in a plank roadway 258 feet long and 24 wide, 4-inch plank and 6- by 12-sills being used.

This work was commenced February 2 and completed February 16.

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FIRST NARROWS.

*Dredging.*

The entrance to Burrard inlet from the sea is through a contracted channel known as the First narrows. This channel is of varying width, the least being opposite Prospect point, where it was originally 450 feet between 30-foot contours. The work being performed has for its object the widening of this channel to 1,200 feet and deepening it to 35 feet below L.W.O.S.T. The departmental ladder dredge *Mastodon* has been used on this work with very satisfactory results. The following table gives the details for this year:—

Dates between which work was performed.	Cubic yards, scow measurement.	Material.
April 1, 1916, to March 31, 1917. . . . .	516,510	Gravel and sand.

The work undertaken this year was performed under considerable difficulty. The outer main cut has been worked periodically from year to year from the outer ends to the centre, on account of the city water pipes that cross the narrows having to be removed to allow the dredging to be done. A hogsback, some 850 feet long by 400 wide, remained to be removed this year. The action of the strong current caused the upper part to spread, and necessitated covering additional area as the cut silted up on each side of the hogsback.

The dredge operated with only one shift this year which necessarily made the yardage smaller than previous years. The following table gives the amount removed to the 31st March, 1917:—

1911-12. . . . .	249,620	cubic yards, scow measurement.
1912-13. . . . .	207,000	" " " "
1912-13, Parthia Shoal. . . . .	134,700	" " " "
1913-14. . . . .	737,180	" " " "
1914-15. . . . .	922,480	" " " "
1915-16. . . . .	969,020	" " " "
1916-17. . . . .	516,510	" " " "
	<hr/> 3,736,510	" " " "

The grand total for the improvement of the First narrows as outlined in 1915-16 annual report, amounted to 3,553,526 cubic yards, place measurement, or 4,264,231 cubic yards, scow measurement, with an expansion factor of 20 per cent; of this amount there still remains 527,721 cubic yards to complete the original scheme. The work as proposed embraces this 527,721 yards from the original north shore cut, 88,587 yards from a triangular piece at the extreme east end, and 197,755 yards to complete Parthia shoal to a minimum depth of 35 feet, making a total of 814,065 yards, scow measurement, to complete the work in the narrows to 35 feet B.L.W.O.S.T., as at present contemplated. Of this amount it is proposed to remove 676,743 cubic yards during the year 1917-18.

It is not possible to give the dimensions of the work this year, owing to its irregular nature.

*False Creek.*

The dredging in False creek has for its object the utilizing as an additional harbour to that of Burrard inlet of a long, narrow, shallow basin of tidal water running from English bay to the centre of the city. This work necessitates the deepening of a channel some 13,500 feet long, 350 wide, and 20 feet deep at L.W.O.S.T. from grade at English bay to the Great Northern Railway Bridge crossing the creek, together with a dredged cut some 2,400 feet long and having an average width of 188 feet, running northerly from the inner end of the main channel and having a depth of 12 feet B.L.W.O.S.T, besides providing for two turning basins on opposite sides of the channel.

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On March 3, 1913, a contract was awarded to the Pacific Dredging Company of Vancouver, B.C., to remove 3,300,000 cubic yards of various materials at a flat rate of 21 cents per cubic yard, place measurement. A further amount of 542,000 cubic yards was authorized on December 24, 1913, to be taken out of the turning basin at the inner end of the cut. Authority was also granted to remove 425,274 cubic yards from a turning basin on the south side of the main channel just east of Granville Street bridge.

This work was completed during the month of April. The total excavation is made up as follows:—

Main channel. . . . .	3,108,727.60	cubic yards.
“ “ slopes. . . . .	267,123.40	“ “
Turning basin No. 1. . . . .	539,662.00	“ “
“ “ No. 1, slopes. . . . .	41,520.05	“ “
“ “ No. 2. . . . .	337,080.50	“ “
“ “ No. 2, slopes. . . . .	16,082.70	“ “
	<hr/>	
	4,310,196.25	“ “

## VICTORIA HARBOUR.

Victoria, the capital of British Columbia, with a population of 50,000, lies at the southern end of Vancouver island and at the eastern end of the Juan de Fuca strait. Ocean-going vessels at present dock at the outer wharves near the entrance to the inner harbour, which is between Shoal and McLoughlin points.

The dredging carried out during the past year had as its main object the further improvement of the channel to James bay by the removal of rock to the south of Pelly island and to the west of Songhees point, also the removal of rock to the east of Songhees point to provide additional facilities for vessels leaving the Canadian Pacific Railway wharves, and the removal of Turpel's rock in the centre of the upper harbour. The navigable area is being gradually increased year by year, and the grade of 20 feet below low water, over areas already covered, is maintained. The following plant, which worked on single shift only, assisted with the work done: Dredges *Ajax*, *Mud-lark*, *Victoria*, Lobnitz rockbreaker *No. 1*, drill plants *No. 1* and *2*. The dredges *Ajax* and *Victoria* worked at various places away from Victoria during the year.

The dredging which is being carried out at the entrance to the harbour by the Pacific Dredging Company to provide fill for the piers constructed at Ogden point has resulted in the widening of the west side of the channel between McLoughlin point and Behren's island from 100 to 300 feet, while a considerable improvement has been made at the entrance to the outer wharves by the deepening of an area approximately 16 acres in extent from 30 to 35 feet below low water, which will facilitate the manœuvring of vessels when entering and leaving. A considerable amount of material has also been removed from West bay. While this work has been in progress, the departmental plant has been withdrawn from this part of the harbour. The removal of rock to the south of Pelly island has been continued, resulting in an increased width of about 200 feet. Platform rock, which at the beginning of 1914 was dry at low tide, has been entirely removed, and Princess rock has been cut back about 150 feet. The beacon marking the channel south of Pelly island has been placed 250 feet west and 100 north of its position one year ago, with the result that vessels are now enabled for the first time in the navigation of the harbour to take an approximately straight course between Laurel point and the bend in the channel at Shoal point.

The dredging of a new channel to the north of Pelly island has been commenced where it has been ascertained that a minimum width of 300 feet can be obtained without any rock work. An additional average width of 80 feet was provided near the narrowest part of the channel on its northerly side, west of Songhees point. The entrance to the Canadian Pacific railway wharves, where silting up had taken place, was dredged to 20 feet below low water, and a mooring basin having the same depth was



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provided in James bay. A great improvement was made to the southeast of Songhees point by the complete removal of Beaver and Tuzo rocks, resulting in an additional 200 feet of width, straightening the channel for the Canadian Pacific Railway boats when leaving port and enabling the spar buoy to be dispensed with. Additional width of about 80 feet has been provided at Hospital rock east of Songhees point, and further improvement will be given at this point in the near future which will be of considerable assistance to vessels when manœuvring on leaving port. The removal of rock immediately south of the Esquimalt and Nanaimo Railway bridge has been commenced, as it is advisable that this work should be done prior to the construction of the proposed Johnson street bridge. A basin was dredged to 14 feet at low water at the city garbage wharf at the expense of the city of Victoria and additional depth provided at the Marine Department's wharf. Progress is being made with the removal of Turpel's rock, the main obstacle remaining in the upper harbour. A berth was provided at the shipbuilding yards, in which new vessels can lie in the period between launching and completion, while the area fronting their launching ways is being deepened to 20 feet below low water, and this same depth has been given at the Victoria Whaling Company's wharf. A channel dredged to 5 feet below low water to the city yard north of the Point Ellice bridge was completed early in the fiscal year.

Summary of material removed from Victoria harbour during the year by the departmental plant:—

	Cubic Yards.	
	Rock.	Total.
North side of channel, Pelly island to Songhees point . . . . .	13,089	
Songhees point to E. & N. Ry. bridge . . . . .	7,709	
Turpel rock, upper harbour . . . . .	1,407	
		22,196
	Hardpan, Clay and Silt.	
To 20 feet below L.W.L.—		
Near Shoal point . . . . .	6,800	
Improvements to, and widening of channel between entrance to harbour and Songhees point . . . . .	135,819	
Adjacent to C.P. Ry. wharves . . . . .	21,804	
West side of channel between Songhees point and E. & N. Ry. bridge . . . . .	18,242	
Upper harbour, north of E & N. Ry. bridge . . . . .	16,015	
To 14 feet below L.W.L.—		
City garbage wharf, Upper Harbour . . . . .	620	
To 5 feet below L.W.L.—		
Channel to city asphalt plant . . . . .	988	
		200,389
Total excavation during the year (scow measurement).		222,585

The quantities of rock to be credited to the drill plants and rock breaker are as follows:—

Lobnitz rock breaker "No. 1" . . . . .	11,978	cubic yards.
Drill plant "No. 1" . . . . .	6,646	" "
Drill plant "No. 2" . . . . .	3,572	" "
	22,196	" " scow measurement.

The excavated material was removed as follows:—

	Rock.	Hardpan, Clay and Silt.	Total.
By dredge <i>Ajax</i> . . . . .	16,441	95,815	112,256
" " <i>Mudlark</i> . . . . .		100,985	100,985
" " <i>Victoria</i> . . . . .	5,755	3,589	9,344
	22,196	200,389	222,585
The calculated place measurement quantities removed are as follows.	12,170	151,176	163,346

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The nature of the material removed consisted of granite of a very hard nature and lacking in cleavage, hardpan, blue clay, mud and sand.

The work of first importance during 1917-18 is the further removal of rock to the south of Pelly island, in the vicinity of Songhees point and on the west side of the channel between Songhees point and the Esquimalt and Nanaimo Railway bridge, and the removal of Turpel's rock.

The excavation of the new channel to the north of Pelly island will be continued, and this may be looked upon as preliminary to the eventual removal of the whole of the rock in this vicinity and in the meantime will give an alternative entrance to the harbour.

## WELCOME HARBOUR.

Welcome harbour, Comox-Atlin district, is situated in Half Moon bay on the mainland, opposite Welcome pass, and about 40 miles from Vancouver. The work consists of a float, 28 by 42 feet, of nine cedar logs, nine cross-ties, 8 by 10, fastened to the logs by drift bolts, and flooring 2 by 12 plank spiked to the cross-ties with 6 by 6 guard rails all around. This float is anchored to a 6-ton rock connected with a 1-inch chain, 110 feet long. A shed, 12 by 16 feet, was built on one end.

This work was performed by day labour, commenced October 4 and completed October 21.

## WESTHAM ISLAND.

To do very necessary protection work at Westham island, in the main channel of the Fraser river, where the current has been eroding the banks and endangering the dykes, wing dams were built. The completed work consists in 300 feet of bank protection and a new wing dam 125 feet long.

Work was commenced in June and completed in October.

## WILLIAM HEAD.

William Head is a quarantine station on the Juan de Fuca straits, 10 miles from Victoria, where ocean-going steamers report before proceeding to Victoria and Vancouver.

The work carried out during the fiscal year 1916-17 was as follows:—

*Approach to Main Wharf.*—The southerly approach to the main wharf, 374 feet in length, which was about twenty years old, required general renewals. Three bents at the shore end were renewed, together with caps, stringers, and handrail throughout the approach. The water pipe to the wharf was replaced and covered in.

Included with the above was the renewal of a Howe truss, 48 feet, and repairs to the bents carrying same; also replacing of the gates leading to the wharf.

*Repairs to coal wharf.*—One outside stringer, two fender chocks, and the guard were renewed.

*Repairs to float and boat-house.*—Two cedar logs, 35 feet long, were taken from the beach and bolted in place, and the decking renewed.

The timbers of the derrick on the main wharf were renewed and the water main and roads repaired.

*Dredging.*

A request was received from the medical superintendent of the station that additional depth be provided adjoining the coal wharf for turning and mooring facilities for the D.G.S. *Madge*. The removal of 1,639 cubic yards, place measurement, of sand and mud was made by the dredge *Victoria*. A depth of 16 feet at low water was given over most of the area covered and 1,645 cubic yards, place measurement,

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or 2,286 cubic yards, scow measurement, of material were removed between October 16 and 26, 1916. The area dredged will fill up by deposit of silt at a slow rate, and should not require re-dredging for ten years.

Repairs and improvements were made on harbour works at the following places that are not mentioned in the body of the report:—

*Nova Scotia.*—Anderson's Cove, Arichat, Baker's Point, Barrington Head, Bass River, Battery Point, Belliveau's Cove, Black Point, Blanche, Boularderie Centre, Broad Cove Marsh, Burlington, Canso, Caribou Island, Catalone Gut, Centreville, Chebogue, Chegoggin, Comeau's Cove, Cottage Cove, Cow Bay, Devil's Island, Digby, Eatonville, East Chezzetcook, Findlay Point, Fox Island, Gabarous, Georgeville, Glace Bay, Hall's Harbour, Hampton, Herring Cove, Irish Cove, Jamesville, Jeddore, Johnston's Harbour, Kelly's Cove, L'Ardoise, Lingan Beach, Little Anse, Little Bras d'Or, Little Harbour, Livingston's Cove, Long Cove, Mabou, Marble Mountain, Margaree, Margee Island, Margaretville, Meteghan, Meteghan River, Middle River, Mill Cove, Morden, McKay's Point, Neeum Trench, Neil's Harbour, New Campbellton, Newellton, North River, Nyanza, Parker's Cove, Path End, Phinney's Cove, Pietou Island, Pleasant Bay, Port George, Port Hastings, Port Hood, Port Lorne, Port Maitland, Port Wade, Portuguese Cove, Poulemond, River Hebert, River John, Rose Bay, St. Joseph's, Salmon River, Sandy Cove, Saulnierville, Seaforth, Seal Island, Seaside, Selma, Short Beach, Skinner's Cove, South Cove, South Side, South Wallace, Spry Bay, Stony Island, Summerville, The Wharfs, Three Fatham Harbour, Trout Cove, Turner's Island, Upper Washabuck, Upper Woods Harbour, Washabuck Centre, Wedge Point, West Chezzetcook, Western Head, West Pubnico, White Point, Whitewaters, Whycocomagh, Wolfville, Yarmouth.

*Prince Edward Island.*—Belfast, Brae, Brudenell, Chapel Point, China Point, Cranberry, Cove Head, Graham's Pond, Head St. Peter's Bay, Hickey's, Hurd's Point, Little Sands, Lennox Island, Murray Harbour South, Naufrage Pond, New London, Prim Island, Pownal Bay, Port Hill, Summerside, Tignish.

*New Brunswick.*—Albert, Anderson's Hollow, Baker's, Bass River, Bay du Vin, Black's Harbour, Burnt Church, Campbellton, Chockfish, Dorchester, Earl's Wharf, Edgett's Landing, Fairhaven, Gautreau Village, Grand Anse, Hatfield Point, Hopewell Cape, Iroquois River, Lameque, Leonardville, Loggieville, Long Point, Mills' Point, Maugerville, McGowan's, North Head, Oak Point, Oromocto, Petit Rocher, Portage River, Quaco, Richibucto Beach, St. Andrew's, Sackville, Scotchtown, Stonehaven, Thomas Creek, Wilson's Beach.

*Quebec.*—Anse St. Jean, Anse a l'Eau, Anse aux Gascons, Ayer's Cliff, Aylmer, Barachois de Malbaie, Belœil, Berthierville, Brewer's Creek, Bryant's Landing, Buckingham, Cap St. Ignace, Carleton, Chateauguay, Chicoutimi, Contrecoeur, Cross Point, Desjardins, Dodd's Landing, East Templeton, Escoumains, Esquimaux Point, Fabre, Fassett, Gatineau River, Georgeville, Glen Almond, Grindstone, Grosse Isle, Grosse Roche, Havre aux Maisons, High Falls, Hudson, Iberville, Ile Perrot North, Kamouraska, Lake Megantic, Lanoraie, Lavaltrie, Les Eboulements, l'Islet, Magog, Malbaie, Matane, Mechins, Mille Vache, Montmagny, Moose Bay, Natashquan, Nominigüe, North Hatley, Peribonka, Piche Point, Pierreville, Pointe St. Pierre, Pointe a Cote, Pointe a Elie, Point Shea, Poltimore, Repentigny, Rigaud, Riviere aux Vases, River du Loup, River Noire, St. Alexis, St. Alphonse de Bagotville, St. Andrew's, Ste. Anne de la Pocatiere, St. Anicet, St. Antoine Station, St. Barthelemi, St. Charles Borromeo, St. Charles de Caplan, St. Eloi, St. Emelie, St. Famille, Ste. Felicite, St. Francois du Lac, St. Francois Sud, Ste. Genevieve, Ste. Genevieve de Batiscan, St. Godfroy, St. Ignace de Loyola, St. Ireneé, St. Joseph de Sorel, St. Laurent, St. Louis River, St. Mathias, St. Michel, St. Omer, St. Ours, St. Paul de l'Isle aux Nois, St. Simeon, St. Valier, Seven Islands, Sorel, Squateek, Terrebonne, Vaudreil, Verdun, Ville Marie, Wendover, Woburn, Woodman's Beach.

*Ontario*.—Allandale, Beaumaris, Brighton, Burleigh Falls, Charlton, Crow's Landing, Cumberland, Dyer's Bay, Grand Bend, Griffith's Island, Juniper Island, Kenora, Kensington, Kingsville, Leamington, McCracken's Landing, Meaford, Midland, Minaki, Oliphant, Pelee Island, Pembroke, Porcupine, Port Bruce, Port Stanley, Rondeau, Rosseau, St. Joseph's Island, St. Williams, Sand Point, Sandy Point, Saugeen River, Silver Centre, Southampton, Stanley Island, Sturgeon Falls, Thornbury, Wheatley, Warton.

*Manitoba*.—Gimli, Hnaua, Winnipeg.

*British Columbia*.—Ainsworth, Argenta, Bingley's Landing, Bold Point, Campbell River, Capilano, Chilliwack, Churchouse, Comox, Cowan's Cove, Crofton, Deer Park, Dignan's Bay, Eagle Cliff, East Arrow Park, Eburne, Fanny Bay, Fulford Harbour, Gillies Bay, Glen Valley, Gower Point, Grace Harbour, Granite Bay, Grant-ham's Landing, Gray Creek, Halcyon, Heriot Bay, Kincolith, Lund, Maples, Mary Island, McDonald's, Metchosin, Nootka Island, Pender Harbour, Pitt River, Prince Rupert, Quatsino, Renata, Revelstoke, Robert's Bay, Roy, Royston, Saanichton, Savary Island, Seaside Park, Shoal Bay, Shushartie Bay, Sidney, Sidney Island, Skidegate, Stewart, Stag Bay, Tofino, Tucker Bay, Union Bay, Van Anda, Vargas Island, Whaletown, Winter Harbour, Wolf-sens Bay, Wyatt Bay.

#### DREDGING OPERATIONS.

##### *Contract Dredging 1916-17.*

*Brundages Point, N.B.*—Under agreement with New Brunswick Dredging and Construction Co. Dredge *New Brunswick*.

Quantity removed: 2,699 cubic yards, place measurement, at 27½ cents per cubic yard. Class B, sand.

Amount passed for payment, \$742.23; inspection, \$18.61; total expenditure, \$760.84.

Work commenced: May 22, 1916; completed, May 25, 1916.

Object of work: To provide depth of 4 feet below low water in log pond of Wilson Box Co. at above place.

*Bathurst, N.B.*—Under contract No. 10158 with Northern Dredging and Construction Co., Ltd. Dredges *Hayward* and *Invasion*.

Quantity removed: 285,091.9 cubic yards, place measurement, at 30 cents per cubic yard. Class B, sand and mud.

Amount passed for payment, \$92,598.90; inspection, \$1,941.52; total expenditure, \$94,540.42.

Work commenced: June 27, 1916; suspended for season, November 24, 1916.

Object of work: To dredge turning basin 21 feet deep at L.W.O.S.T., and at highway bridge and channel in inner harbour, up to basin, 17 feet deep and 200 feet wide.

*Black River, N.B.*—Under agreement with Felix Michaud. Dredge *Excavator*.

Quantity removed: 6,692.56 cubic yards, scow measurement, at 36 cents per cubic yard. Class B, mud sand, and shells.

Amount passed for payment, \$2,332.77; inspection, \$228.25; total expenditure, \$2,561.02.

Work commenced: July 1, 1916; completed, October 2, 1916.

Object of work: To dredge a channel 30 feet wide, 1,000 feet long, above the highway bridge across the flats which at low tide cut off deep water above the bridge from Buetouche harbour.

*Cobourg, Ont.*—Under agreement with R. Weddell Co. Dredges *Togo* and *Trenton*.

Quantity removed: 21,888 cubic yards, scow measurement, at 20 cents per cubic yard. Class B, sand.

Amount passed for payment, \$4,377.60; inspection, \$199.60; total expenditure, \$4,577.20. Work commenced: May 24, 1916; completed, August 17, 1916.

Object of work: To complete widening and deepening of outer harbour and to facilitate turning of car ferry south of check-water when inner harbour is frozen.

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*Church River, N.B.*—Under agreement with F. A. Fowlie. Dredge *Fowlie*.

Quantity removed: 6,568.9 cubic yards, scow measurement, at 35½ cents per cubic yard. Class B, mud and sand.

Amount passed for payment, \$2,331.96; inspection, \$186.26; total expenditure, \$2,518.22.

Work commenced: August 21, 1916; suspended for season, November 11, 1916.

Object of work: To dredge channel 40 feet wide through shoals above and below the bridge and give passage from Miramichi bay to deep water in river.

*False Creek, B.C.*—Under contract No. 9,493 with Pacific Dredging Co., Ltd. Dredges *Puget Sound* and *Robson No. 1*.

Quantity reported to have been removed: 1,073,745 cubic yards, place measurement, at 21 cents per cubic yard. Class B, sand, gravel, clay and boulders.

Amount passed for payment, \$225,486.45; inspection, \$13,263.97; total expenditure, \$238,750.42.

Work commenced: April 1, 1916; completed, March 7, 1917.

Object of work: To complete dredging of channel 350 feet wide and 20 feet deep at L.W.O.S.T., up to Columbia street, channel at Columbia street 12 feet deep, commenced in 1913, and to provide another turning basin east of Granville Street bridge.

*Freddy Channel, Ont.*—Under agreement with Penetanguishene Dredging Co. Dredge *Hackett No. 4*.

Quantity removed: 4,018 cubic yards, place measurement, at 40 cents per cubic yard. Class B, sand, clay, mud, hardpan and rocks.

Amount passed for payment, \$1,607.20; inspection, \$98; total expenditure, \$1,705.20.

Work commenced: May 23, 1916; completed, June 23, 1916.

Object of work: Removal of shoals 2 and 3. To complete main channel by dredging a cut about 740 feet long 48.5 feet wide and 10 feet deep.

*Fort William, Ont.*—Under contract No. 7170 with Great Lakes Dredging Co. Dredge *No. 5*.

Quantity removed, 26½ cubic yards, class A, at \$2.85; 12,395½ cubic yards, class B, at 16 cents, scow measurement, sand, clay, and boulders.

Amount passed for payment, \$2,058.80; inspection is included with contract 7339.

Work commenced: June 3, 1916; completed, June 13, 1916.

Object of work: To dredge slip No. 2 of the Grand Trunk Pacific Terminal basin.

*Fort William, Ont.*—Under contract No. 7339 with Great Lakes Dredging Co.

Dredges *Empire, No. 5, No. 6, and Dominion*.

Quantity removed: 1,418,319 cubic yards, scow measurement, at 14½ cents to 26½ per cubic yard, according to locality and haul. Class B, clay and sand.

Amount passed for payment, \$251,306.35; inspection, \$3,857.40; total expenditure, \$255,163.75.

Work commenced: June 7, 1916; suspended for season, December 9, 1916.

Object of work: To widen to 500 feet and deepen to 25 feet the Kaminstikwia and Mission rivers from deep water in Thunder bay up to and including the enlarged turning basin at Westfort.

*Grand Lake, N.B.*—Under contract No. 10889 with L. W. Nickerson. Dredge *New Brunswick No. 1*.

Quantity removed: 13542.9 cubic yards, place measurement, at 14½ cents per cubic yard. Class B, mud, clay, and sawdust.

Amount passed for payment, \$1,963.72; inspection, \$52.50; total expenditure, \$2,016.22.

Work commenced: May 31, 1916; completed, June 16, 1916.

Object of work: To provide a channel 150 feet wide and 9 feet deep at the outlet of Grand lake into the Jemseg river.

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*Little Detroit, Ont.*—Under contract No. 10531 with C. S. Boone Dredging and Construction Co., Ltd. Dredge *Kingsford*.

Quantity removed: 1,490.9 cubic yards, place measurement, at \$3 per cubic yard. Class A, rock.

Amount passed for payment, \$4,472.70; removal of wreck, \$100; inspection and survey, \$419.66; total expenditure, \$4,992.36.

Work commenced, October 4, 1916; completed, November 2, 1916.

Object of work: To give a minimum width of 100 feet and depth of 18 feet in Little Detroit channel.

*Lillooet River, B.C.*—Under agreement with I. W. Pyke.

Amount passed for payment, \$1,011; inspection, \$150; total expenditure, \$1,161.

*Maloney's Wharf, Nelson, N.B.*—Under agreement with Peter England. Dredge *Peter England*.

Quantity removed, 13,495 cubic yards, scow measurement, at 35 $\frac{3}{4}$  cents per cubic yard. Class B, mud, clay and gravel.

Amount passed for payment: \$4,824.46; inspection, \$146.56; total expenditure, \$4,971.02.

Work commenced: August 16, 1916; completed, November 3, 1916.

Object: To dredge berth at John Maloney wharf.

*Nigger Island, Ont.*—Under contract No. 9,015, with R. Weddell & Co. Authority of O.C., December 22, 1916.

Quantity removed: 7,067 cubic yards. Class A, rock at \$4.50 per cubic yard, place measurement.

Amount passed for payment, \$34,501.50.

Object of work: To pay for dredging done in 1913 in widening the channel at Nigger Island to 200 feet and 14 feet depth.

*Port Arthur, Ont.*—Under contract No. 9490. Dredge *Kenniquhair*.

Quantity removed: 427,753 cubic yards, scow measurement, at 13 cents per cubic yard. Class B, sand and clay.

Amount passed for payment, \$55,416.93; inspection, \$690; total expenditure, \$56,106.93.

Work commenced: May 16, 1916; suspended for season, December 14, 1916.

Object of work: Dredging main harbour south to 25 feet, provide joint slip 25 feet deep between elevators proposed to be constructed by Saskatchewan Co-operative Elevator Company and Grain Grower's Grain Company, together with channel extending to area already dredged to 25 feet.

*Picnic Island, Ont.*—Under contract No. 7816 with C. S. Boone Dredging and Construction Co., Ltd.

Inspection: \$3,129.88.

Final estimate, 228,798 cubic yards, \$392,946.04.

No payment involved.

Completed, October 17, 1916.

Object of work: Completion of channel 5,000 feet long, 300 feet wide and 22 feet deep through Picnic Island shoals.

*Port Hope, Ont.*—Under contract No. 11028 with Randolph Macdonald Co., Ltd. Dredge *McDonald No. 10*.

Quantity removed: 38,096 cubic yards, place measurement, at 18 cents per cubic yard. Class B, sand and mud.

Amount passed for payment, \$6,857.28; inspection, \$246.61; total expenditure, \$7,103.89. Work commenced: June 14, 1916; completed, August 31, 1916.

Object of work: To clean up to 16 feet below low water inside the harbour and to 18 feet below low water in outer entrance channel.

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*Port Maitland, Ont.*—Under contract No. 11062 with Great Lakes Dredging Co., Ltd.  
Dredges *Shuniah* and *No. 8*.

Quantity removed: 628,703.15 cubic yards, place measurement, at 12 cents per cubic yard. Class B, sand, clay, and gravel.

Amount passed for payment, \$75,444.38; inspection, \$1,518.48; total expenditure, \$76,962.86.

Work commenced: June 29, 1916; suspended for season, November 17, 1916.

Object of work: To dredge entrance channel 325 feet wide to Grand River channel in river 435 feet inside from its mouth to the T. H. and B. ferry slip and turning basin opposite ferry slip, and continue channel up to near Broad creek.

*Palmers Wharf, N.B.*—Under agreement with New Brunswick Construction Co., Ltd.  
Dredge *New Brunswick*.

Quantity removed: 1,674.1 cubic yards, place measurement, at 30 cents per cubic yard. Class B, mud.

Amount passed for payment, \$502.23; inspection, \$12.62; total expenditure, \$514.85.

Work commenced: June 27, 1916; completed, June 30, 1916.

Object of work: To dredge basin 9 feet deep upstream and downstream of low water wharf.

*Penetanguishene, Ont.*—Under agreement with Penetang Dredging Co.

Quantity removed: 1,500 cubic yards, place measurement, at 40 cents per cubic yard.

Amount passed for payment, \$600.

Completed: July 10, 1916.

Object of work: To enlarge the basin 20 feet deep to 500 by 500 feet at Esplanade wharf.

*River St. Maurice, Que. (Middle channel.)*—Under agreement with F. C. Burns.  
Dredge *Capital*.

Quantity removed: 25,448 cubic yards, scow measurement, at 19½ cents per cubic yard. Class B, sand, clay, and slates.

Amount passed for payment, \$4,962.36; inspection, \$197.20; total expenditure, \$5,159.56.

Work commenced: May 4, 1916; completed, July 3, 1916.

Object of work: To clean out the log-floating channel 4 feet deep, and barge channel 8 feet deep, in middle channel of river St. Maurice, at Three Rivers.

*River St. Maurice, Que. (Western outlet.)*—Under contract No. 11117 with La Cie Generale d'Enterprises Publique. Dredge *New Welland*.

Quantity removed: 45,634 cubic yards, scow measurement, at 9 cents per cubic yard. Class B, sand and clay.

Amount passed for payment, \$4,107.06; inspection, \$190.88; total expenditure, \$4,297.94.

Work commenced: November 4, 1916; suspended for season, November 21, 1916.

Object of work: To dredge channel from deep water in St. Lawrence river up Western channel to proposed wharf, 4,200 feet long to 15 feet below L.W. and 80 feet wide.

*Sand Point, N.B. (St. John, N.B.)*—Under agreement with J. S. Gregory. Dredge *Keta*.

Quantity removed: 6,002.5 cubic yards, scow measurement, at 29 cents per cubic yard. Class B, mud.

Amount passed for payment, \$1,800.75; inspection, \$42; total expenditure, \$1,842.75.

Work commenced: October 2, 1916; completed, October 12, 1916.

Object: To clean up Sand Point berths.

*St. John West, N.B., Slip No. 1.*—Under agreement with Maritime Dredging and Construction Co., Ltd. Dredges *Beacon Bar* and *Beaconfield*.

Quantity removed: 12,787 cubic yards, scow measurement, at 37 cents per cubic yard. Mud, clay, gravel and stones.

Amount passed for payment, \$4,859.06; inspection, \$166.80; total expenditure, \$5,025.86.

Work commenced: October 16, 1916; completed, December 20, 1916.

Object of work: To clean out deep water berth at this wharf.

*St. Croix River, N.B.*—Under agreement with Government of the United States. Amount passed for payment, \$19,891.65 (being 10 per cent of total cost); inspection, \$1,090.30; total expenditure, \$20,981.95.

Work commenced: April 24, and completed, October 26, 1916.

*Waubanshene, Ont.*—Under agreement with Penetang Dredging Co. Dredge No. 4. Quantity removed: 18,293 cubic yards, place measurement, at 26 cents per cubic yard. Class B, clay, hardpan, rocks and boulders.

Amount passed for payment, \$4,756.18; inspection, \$336.08; total expenditure, \$5,092.26.

Work commenced: July 31, 1917; completed, November 16, 1917.

Object of work: To provide least width of 100 feet, depth 11 feet, in Sturgeon Bay tug channel, length about 5,640 feet.

*Clementsport, N.S.*—Under direction of District Engineer Dodwell. Day labour, 4,252 cubic yards.

Amount passed for payment, \$1,600.

Object of work: Improvement of channel.

*Cowichan, B.C.*—Under direction of District Engineer Mitchell. Day labour.

Amount passed for payment, \$312.75.

Object of work: To provide small boat channel by removal of boulders from bed of Cowichan river between the lake and the town.

*Cocagne, N.B.*—Under direction of District Engineer Stead. Day labour, 5,858 cubic yards.

Amount passed for payment, \$1,745.80.

Object of work: To continue dredging of channel 30 feet wide, 2½ feet deep, and 8,400 feet long, to provide passage from Cocagne harbour north to fishing grounds in Northumberland strait.

*East River, N.S.*—Under District Engineer Millidge. Day labour.

Amount passed for payment, \$75.

Object of work: Removal of boulder from channel being dredged by P.W.D. No. 5 in East river of Pictou harbour, N.S.

*Grand Anse, N.B.*—Under direction of District Engineer Stead, day labour.

Amount passed for payment, \$709.30.

Object of work: To dredge inside east pier and inside breakwater pierhead.

*Hampstead, N.B.*—Under agreement with L. W. Nickerson.

Amount passed for payment, \$75.

Object of work: Removal of old crib.

*Kouchibouguac River, N.B.*—Under direction of District Engineer Stead. Day labour, 1,782 cubic yards.

Amount passed for payment, \$533.67.

Object of work: To dredge channel to allow scows to carry mussel, mud, gravel, etc., on river.

*Malagawatch, N.S.*—Under direction of District Engineer Bernasconi. Day labour, 974 cubic yards.

Amount passed for payment, \$621.59.

Object of work: To clean out Malagawatch channel.

*Main River, N.B.*—Under direction of District Engineer Stead. Day labour, 580 cubic yards.

Amount passed for payment, \$210.72.



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Object of work: Removal of shoal in passage through swing bridge on Richibucto river at Main river.

*Margaree Harbour, N.S.*—Under agreement with Ernest F. Munro.

Amount passed for payment, \$200.

Object of work: Removal of boulders from channel entrance between piers.

*Point Sapin, N.B.*—Under direction of District Engineer Stead. Day labour.

Amount passed for payment, \$815.96.

Object of work: To dredge channel entrance 100 feet wide, 80 to 200 feet long through obstructing shoal, and to dredge sheltered basin inside pierhead 200 feet by 100 feet for vessels to shelter.

*Parker's Cove, N.S.*—Under direction of District Engineer Dodwell. Day labour, 1,130 cubic yards.

Amount passed for payment, \$990.73.

Object of work: To effect improvement by removal of an accumulation from westward of the breakwater.

*River St. Louis, N.B.*—Under direction of District Engineer Stead. Day labour, 1,169 cubic yards.

Amount passed for payment, \$434.84.

Object of work: To dredge a berth on southeast side of public wharf.

*Shediac Bay, N.B.*—Under direction of District Engineer Stead. Day labour.

Amount passed for payment, \$628.37.

Object of work: Dredging of channel across shoal area to provide passage from Grandigue wharf to Shediac bay.

*St. Charles River, N.B. (Big Aldouane River.)*—Under direction of District Engineer Stead. Day labour, 2,892 cubic yards.

Amount passed for payment, \$889.50.

Object of work: Completion of channel 30 feet wide, and about 1 foot deep at low water, being continuation of past three seasons' work.

*St. John River, N.B.*—Under direction of District Engineer Small. Day labour.

Amount passed for payment, \$1,975.

Object of work: Removal of snags from St. John river and its tributaries between Fredericton and St. John.

*Tabusintac, N.B. (Black Lands.)*—Under direction of District Engineer Stead. Day labour, 1,982 cubic yards.

Amount passed for payment, \$799.95.

Object of work: Deepening of channel to assist passage of rafts of logs.

## DEPARTMENTAL DREDGES, CALENDAR YEAR 1916.

Dredge Number.	Worked, 1916.	Place.	Quantity.	Total.	Cost.	Cost per Yard.
1	Jan. 1-Dec. 23	St. John, N.B. .... Digby, N.S. .... Yarmouth, N.S. ....	123,203 54,150 57,065	234,418	92,559 42	.394
3	July 10-Nov. 15.	Buctouche, N.B. .... Bathurst, N.B. ....	No record 65,917	65,917	27,001 86	.409
5	June 28-Nov. 2.	East River, N.S. .... Pictou, channel	50,001 385,001	435,002	41,102 89	.094
6	Jan. 3-Dec. 31	Canso, N.S. .... Lunenburg, N.S. ....	100 69,515	69,615	46,113 93	.662
7	June 30-Nov. 18.	Liverpool, N.S. ....	48,700	48,700	25,814 17	.530
9	Aug. 7-Nov. 25	Georgetown, P.E.I. .... Panmure Island, .... St. Marys, .... Sturgeon, .... Poplar Point, .... Grand River	3,200 11,240 4,300 6,800 2,000 4,900	32,440	18,416 27	.567
10	May 30-Nov. 21	Charlottetown, P.E.I.— Railway wharf, .... Asylum wharf, .... McAuleys shore, .... Connelley's wharf, .... McConnell's wharf, .... Pownal wharf	7,590 12,475 6,800 6,250 3,725 3,175	39,925	17,789 34	.445
11	July 21-Nov. 1.	Malpeque, P.E.I. .... Rustico, P.E.I. ....	13,275 2,950	16,225	10,650 55	.656
13	June 19-Dec. 6	Buctouche, N.B. ....	58,196	58,196	21,417 00	.368
14	May 27-Nov. 1	Amherst, N.S.	20,250	20,250	6,068 21	.299
15	June 22-Dec. 2.	Oaklands, N.S. .... Lunenburg, N.S. .... Gold River, N.S. .... Eastern Point, .... West Dublin, N.S. ....	7,068 4,510 3,215 971 1,956	17,720	5,439 90	.274
Rock-breaker No. 3	Jan. 1-Dec. 4	Lunenburg, N.S. ....	28,262	28,262	14,207 06	.502
102	June 24-Nov. 11	La Salette, P.Q. .... Poupore, P.Q.	2,123 25,673	27,796	12,722 90	.457
103	May 20-Dec. 9.	Hawke-bury, P.Q. ....	38,134	38,134	11,587 27	.303
106	May 15-Nov. 18	Bariscan, P.Q. .... Riv. du Loup, P.Q. .... Ottawa, Ont. ....	38,215 11,936 409	50,560	11,214 76	.221
109	May 8-Nov. 22.	Owen Sound, Ont. .... Peneranguishene, Ont. .... Collingwood, Ont. ....	35,762 67,915 19,104	122,781	22,858 01	.186
110	May 15-Dec. 7.	Longueuil, P.Q. .... Bagotville, P.Q. ....	24,387 81,032	105,419	28,992 82	.275
112	Oct. 5-Nov. 25.	French River, Ont. ....	1,875	1,875	4,198 33	2.239
114	April 24-Nov. 13.	Port Burwell, Ont. .... Hamilton, Ont. ....	52,966 3,264	56,230	11,919 02	.211
115	May 15-Dec. 9.	Les Eboulements, P.Q. .... Bagotville, P.Q. .... Saguenay river, P.Q. ....	3,389 2,662 67,746	73,797	33,453 00	.453

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DEPARTMENTAL DREDGES, CALENDAR YEAR 1916—Continued.

Dredge Number.	Worked, 1916.	Place.	Quantity.	Total.	Cost.	Cost per Yard.
117	April 17-Dec. 30	Port Burwell, Ont. ....	103,674	185,090	36,367 32	.196
		Hamilton, Ont. ....	59,086			
		Burlington, Ont. ....	22,330			
119	June 8-Nov. 15.	Longueuil, P.Q. ....	2,014	27,856	10,249 68	.367
		Ile Perrot, P.Q. ....	4,979			
		Lachine, P.Q. ....	174			
		Charlemagne, P.Q. ....	14,834			
		River Chicot, P.Q. ....	5,855			
120	May 13-Nov. 18	River Thames, Ont. ....	50,270	61,320	16,449 23	.268
		Chatham, Ont. ....	11,050			
121	May 17-Dec. 2..	Verdun. ....	17,610	17,610	10,423 32	.591
123	May 22-Dec. 5...	Ste. Anne de Bellevue, Que. ....	33,978	33,978	16,889 11	.497
Steam Derrick	June 26-Nov. 17..	St. Alphonse, Que. ....	1,025	3,210	3,554 48	1.107
		Anse St. Jean, Que. ....				
		Chicoutimi, Que. ....	2,135			
		St. Catherine's, Que. ....	50			
201	May 6-Oct. 31	Red River, Man. ....	53,589	177,179	11,158 24	.063
		Selkirk, Man. ....	123,590			
202	July 17-Oct. 31..	Selkirk, Man. ....	34,102	34,383	9,015 81	.262
		Hole River, Man. ....	281			
204	May 13-Oct. 20	Red River, Man. ....	1,534	19,236	11,339 35	.589
		Dauphin River, Man. ....	10,027			
		Big George Island, Man. ....	7,675			
205	May 20-Oct. 31	Red River, Man. ....	3,298	89,874	12,437 70	.139
		Crescent Island, Man. ....	71,676			
		Lockport, Man. ....	14,900			
210	July 6-Sept. 15...	Mossy River, Man. ....	9,208	14,789	4,957 50	.335
		Snake Island, Man. ....	5,581			
301	Jan. 1-Dec. 31	Victoria, B.C. ....	130,626	158,205	58,771 31	.371
		Nanaimo, B.C. ....	13,582			
		Union Bay, B.C. ....	10,399			
		Roys Beach, B.C. ....	3,598			
302	Jan. 1-Dec. 31	Proctor Narrows, B.C. ....	2,160	14,050	6,614 61	.470
		Kootenay Landing, B.C. ....	11,545			
		Cedar Creek, B.C. ....	345			
303	Jan. 1-Dec. 31	Fraser River, B.C. ....	742,400	742,400	58,469 47	.078
304	Jan. 1-Dec. 31	Summerland, B.C. ....	3,347	29,633	9,050 13	.305
		Kelowna, B.C. ....	6,523			
		Penticton, B.C. ....	2,223			
		Okanagan river, B.C. ....	15,559			
		Okanagan Landing, B.C. ....	1,981			
305	Jan. 1-Dec. 31	No Arm Fraser river, B.C. ....	227,425	401,225	54,173 36	.134
		Powell river, B.C. ....	14,515			
		Lulu Island, bridge, B.C. ....	37,300			
		Steveston, B.C. ....	76,315			
		Wallace Shipyard. ....	950			
		Squamish. ....	44,725			
306	Jan. 1-Dec. 31	Vancouver, B.C. ....	680,128	680,128	102,290 24	.150
307	Jan. 1-Dec. 31	Victoria, B.C. ....	103,535	103,535	33,484 76	.323

DEPARTMENTAL DREDGES, CALENDAR YEAR 1916—*Concluded.*

Dredge Number.	Worked, 1916.	Place.	Quantity.	Total.	Cost.	Cost per Yard.
311	Jan. 1-Dec. 31	Two Beacon Bar, B.C. Grahams Landing, B.C. Forest Glen, B.C. Arrowhead, B.C.	15,350 20,600 16,200 28,000	80,150	9,607 25	122
313	Jan. 1-Dec. 31	Victoria, B.C. Esquimalt, B.C. Williams Head, B.C.	24,269 490 2,286	27,045	15,274 81	564
Rock-breaker No. 1	Jan. 1-Dec. 31	Victoria, B.C.	9,666	9,666	29,229 85	3-020
Rock-breaker No. 2	Jan. 1-Dec. 31	Nanaimo, B.C.	5,422	5,422	28,414 68	5-240
Drills Plants Nos. 1 & 2	Jan. 1-Dec. 31	Victoria, B.C.	7,056	7,056	34,911 80	4-940

The following dredges were laid up for the year:—

		Expenses.
2	St. John, N.B.	18,946 33
12	"	5,220 42
Stonelifter, No. 1	"	1,676 76
101	River St. Louis, P.Q.	1,907 35
4	Magdalen Islands, P.Q.	6,500 50
111	Roberval, P.Q.	4,727 09
116	Ottawa, Ont.	28,191 51
118	Haileybury, Ont.	4,401 43
122	Grand Piles, P.Q.	2,645 23
208	Cumberland House, Sask.	6,309 31
930	Chase, B.C.	162 25

## DRY DOCKS.

## LÉVIS DRY DOCK.

During the past fiscal year no important works of repair were executed; the dock and grounds were maintained and kept in good condition to dock and undock vessels as usual. The total expense for management, maintenance and repair was \$22,849.82; the revenue being \$25,588.16.

## LAUZON.

(This work is described in the annual report for 1915.)

During the year 1916-17, the dry dock excavation was carried on for 200 feet in length, on its full width and depth, and for 200 feet in length, on half the width of dock and to full depth. The pump-house excavation was completed early in the summer.

The work on excavation started about April 10 and stopped around November 10, 1916, and was used as backfilling.

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The dredge *King Edward* started work July 8 on the crib foundations and entrance channel, and stopped on September 24, after dredging 10,000 cubic yards of submarine rock.

On September 30 the work was resumed by dredge *No. 6, Harbour Commissioner of Montreal*, and up to November 25 she dredged about 23,000 cubic yards of submarine rock.

During the year six cribs were sunk; four for the eastern guide pier, one for the western guide pier, and one on the return crib from landing wharf. There are two more built, which are ready to be sunk this coming season. The cribwork was started in June and ended in November.

The concrete work started in May and ended in November. The main walls of dock were built from station 11+30 to station 7+00, and the bottom of dock from station 10+97 to station 7+00. The concrete foundations for the pump-house were built complete. The tunnel was also lined in with concrete during the present season.

The work on the rolling and floating caissons was carried on, and 102 tons of steel were erected for the rolling caisson and 710 tons of steel for the floating caisson.

In the power-house the erection of machinery was continued. In the generator room, two generators were installed (750 k.w. and 100 k.w.), and other machinery as condensers, pumps, etc. The switchboard and connections was also completed. In the boiler-room, the erection of the boilers was completed, the coal bunkers and mechanical stokers were partly built.

On March 31, 1917, a considerable amount of materials was on the work.

## ESQUIMAULT GRAVING DOCK.

During the past fiscal year, the staff have been employed in docking and undocking twenty-two ships, besides the usual routine work of keeping the ground clean and the buildings and machinery in repair.

An electrically driven direct-acting 6-inch submerged vertical centrifugal pump has been installed to replace the old steam-driven centrifugal pump.

The old carpenter and blacksmith shop, which was beyond repair, was renewed, a new building 24 by 60 feet, with concrete foundations, being erected.

An electric crane for hauling material to and from the dock floor is still urgently needed.

## LOCKS AND DAMS.

## QUEBEC.

## RIVIÈRE DU LIÈVRE LOCK AND DAM.

At Poupore, in Labelle county, 12 miles above Buckingham, on the Rivière du Lièvre, a lock and dam was built in 1886-92, to overcome Little rapids, for navigation to High Falls, 12 miles upstream. In 1903, an extensive landslide destroyed the dam, which had to be reconstructed, lock gates, etc., repaired and improved and considerable dredging done, before navigation was restored in 1907.

Work during the past year consisted of: Operating the lock, placing and repairing booms, new safety boom bought, renewing a number of stringers and sheeting on apron of dam, and minor repairs made to the lockmaster's residence.

## RIVER ST. CHARLES.

*Locks and Dam.*

(The work and progress already made is described in the annual report for 1915-16.)

8 GEORGE V, A. 1918

Year 1916-17, the work which was commenced on the locks and dam in 1913 has been continued during each working season without interruption. The work performed for the fiscal year is as follows:—

The down-stream wall along the north side of the sluiceway has been completed and back-filled with dredged material.

Pier No. 3 on the north side of the up-stream lock entrance was completed, except the bascule bridge seats.

The concrete mattress above the dam, 400 feet northwards from the Quebec side of the river, was finished.

A concrete section for a part of the mitre sill platform for the south lock entrance was sunk to grade by the open-pocket method for excavation.

The substructure of the guide pier at the lower end of the locks was sunk to grade; it consists of three concrete blocks in line with the centre wall of the lock, sunk by the open-pocket method of excavation; there are three openings between the blocks to be spanned by reinforced concrete beams, for the floor to be continuous over the whole pier.

This structure, when complete, will be 300 feet long, 40 feet wide and 64 feet high, from foundation to coping.

Interlocked steel piles were driven entirely around the space to be occupied by the locks, also to make the connection between those under the dam on the south side of the river and pier No. 5 and the line across the upper end of the locks.

The dredging for the locks, mattress and sluiceway was continued, until the close of the season, by a dipper and suction dredge, the greater part of the material was deposited for making ground along the north side of the Louise embankment and on the Limoilon side of the river.

A portion of the crib-work of the Canadian Northern Railway was removed on the north side of the river to allow the sluiceway piers to be built; temporary steel girders were used to carry the railway over the work.

The construction of the floating caisson for the lower lock entrance which was ordered to be proceeded with under special agreement has been commenced; a workshop, for the purpose of fabrication, has been built, and just enough machinery suitable for that work has been provided; the shop will in future be required for storage and for lock maintenance repairs.

A large quantity of concrete materials and reinforcing metal for the lock floor is on hand for the next season's work. The progress made, after taking into consideration the uncertainty of labour, the limited space for working heavy plant, and delays due to the tides and passing of tugs and scows from one part of the work to the other through the swing bridge and other navigation annoyances, can be considered as fairly good.

#### YAMASKA CRIB DAM.

Owing to the high level of the water, the work of reconstructing a break which occurred in the dam started only on December 27, 1916, was carried on until March 7, 1917, and consisted in building a solid close-faced stone-filled crib, 90 feet long by 16 feet wide and 15 feet high, sheathed on its four faces, and sunk immediately in front of the opening in the dam. It was found better to let the crib settle before building the top so that when completed, some time during the summer of 1917, the crest may remain level.

#### ST. ANDREWS LOCK AND DAM.

The work of regrading the river bank west of and northerly from the lock was proceeded with this year. The freshet in the spring of 1916 badly cut the toe of the slope and fresh slides occurred which carried with them part of the roadway at the crest of slope. To prevent future erosion of this kind, the toe of the slope was this

year rip-rapped up to high water mark. This work extends one-third way up the slope, and is from two to three feet in depth, all hand-packed, composed of limestone from the river bed.

#### *Buildings.*

The shed which was needed for the proper protection of machinery was erected this year and at the same time the old buildings on the property were removed.

#### *Dredging.*

The work of removing the stone which had been used as a colliery dam at St. Andrews was completed this year; this stone seriously interfered with the proper escape of the water from the dam, the current being directed by it across the navigable channel, thus offering a menace to navigation.

Four cuts were necessary on a total length of 1,929 feet to a width of 40 feet in the bottom and of an average depth of 5.82 feet.

It was necessary to tow all of the material a distance of one mile; no filling-in is anticipated.

Operations were carried on between July 31 and September 19 by dredge *No. 205*, the quantity removed being 14,900 cubic yards, scow measurement, of rock, gravel and boulders.

The cost of this work was 27.4 cents per cubic yard.

## SLIDES AND BOOMS.

### OTTAWA RIVER WORKS—ORDINARY REPAIRS.

#### OTTAWA RIVER.

*North Chaudière Station.*—A section of the upper slide, immediately below the bulk-head, 45 feet in length, was rebuilt. The slide was narrowed  $3\frac{1}{2}$  feet at the entrance, and on this account glances had to be built, on each side above the stop-logs, to guide logs and timbers.

#### TRIBUTARIES OF OTTAWA RIVER.

*Gatineau River.*—The main boom was strengthened; defective pieces in the stiff sections of the boom were taken out and replaced by new timbers, and the usual repairs were made.

*Madawaska River.*—At Arnprior, the planking in the bottom of the slide was repaired.

At Springtown station, the pier in the centre of the river, for the support of the retaining boom, was rebuilt from low-water level. The pier is 22 feet square, 10 feet high, and filled with stone.

At High Falls station, the boom at head of slide was taken ashore, straightened and new chains were substituted for the old, and general repairs were made.

*Black River.*—At the retaining boom, a short distance above High Falls' slide, three piers were rebuilt from low-water line to a height of 9 feet; one of the piers is 14 feet square, another 16 feet square, and the third is  $18\frac{1}{2}$  feet by 19 feet. A new pier 18 feet square at base and 16 feet square at top with a height of 20 feet was required as the space between the last pier and the north bank had become too great. Adjacent to the new pier, a glance erib, 45 feet long, 10 feet wide at base, and 8 feet wide at top, was built and carried up to the same level as the tops of the piers.

*Petewawa River.*—At the mouth of the Petewawa, four new piers were built in connection with the retaining boom; they are all 16 feet square, one being 14 feet high, two 10 feet high and the fourth 9 feet high.

At Cedar Lake station, the flat dam to the south of waste gate was replaced by a pier 32 feet long, 10 feet wide and 14 feet high, sheeted in front with 3-inch plank, and gravelled.

In the spring of 1916, the water in the Ottawa river and its tributaries was very much higher than usual. It commenced to rise early in April and reached its highest point on May 8. It then fell a little, but rose again around the 20th of the month, after which it receded steadily. In the fall, it was exceedingly low, but owing to numerous rainfalls at different times during the summer, the season, as a whole, was very favourable for the lumbermen.

#### ST. MAURICE RIVER WORKS.

Log-driving is the most important problem to be considered on the St. Maurice river; during the last season, 11,127,027 logs have been sorted through the different companies' gaps along the river.

Last autumn, after the river was cleared of all logs, an inspection of piers and other construction works was made and the most urgent repairs done. All booms were put in winter quarters to be ready for the spring of 1917.

*Grandes Piles.*—Inspection and maintenance of booms and piers.

*Ste. Flore.*—400 cubic yards of stone placed in piers; raising of 4 wooden piers with concrete super-structure and 500 feet of booms repaired.

*Grand Mère.*—One concrete pier built at Pointe à Paquin, and raising of 7 wooden piers with concrete super-structure.

*Shawinigan Falls.*—Construction of 300 feet of 3-piece booms.

*Trois Rivières.*—Construction of 300 feet of 3-piece booms.

### BRIDGES AND ROADS.

#### OTTAWA.

*Laurier Bridge.*—A wooden guard-fence, 67 feet long, was built at the western end of this bridge, on the northern side. The dry masonry wall north of western abutment was built with cement mortar, and a concrete cap was provided; the wall is 44 feet long and 4 feet high. The rolled steel hand-rail of the bridge had become so corroded that in many places the metal was completely eaten through; the rail on south side of the bridge has been replaced with one of cast-iron. The sandstone pavement on the western approach was raised to grade where the foundation had settled.

The Chaudiere and Union bridge and the roadway between Hull and Ottawa were kept in repair.

#### ONTARIO AND QUEBEC.

*Bryson Bridge.*—The roadway planking on the two truss spans of this bridge had to be laid new, the flooring is laid in one course of pine and hemlock plank, three inches in thickness, with a wheel guard of 6-inch cedar on both sides; the portion re-laid was 384 feet in length with a width of 16½ feet.

*Chapeau Bridge.*—The northern approach to this bridge was improved by building an embankment of stone, gravel and earth, and a retaining wall of concrete was built along the bases of the fill; the wall on the upper side is 140 feet long, and that on the lower side 104 feet; both vary in width from 2 to 3 feet at the base, according to the height, and are drawn in to 1 foot at top, the average height being about 6 feet; the walls are perpendicular in the rear, all the batter being at the front, and each provided with a suitable cap or coping, slanting outward to shed the water. Additional stone was placed in the embankment to fill the space at the back of the walls.



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ALBERTA.

*Bow River Bridge.*

The steel bridge crossing the Bow river in the town of Banff, Rocky Mountain park, Alberta, was found inadequate to carry the heavy tourist and other summer traffic, and it has been found necessary to arrange and design another bridge to occupy this position.

During the months of December, 1914, and January and February, 1915, this bridge was removed to a temporary position some sixty feet down stream from the line occupied.

It was subsequently considered necessary to examine and repair all deficiencies in this structure as the bridge would require to remain on temporary site and take all traffic until such time as new bridge is erected. Floor decking had become worn and irregular, and iron-work was showing signs of weather, therefore the work of re-flooring the roadway and painting the whole structure was proceeded with, and this work was carried out by day labour.

# GOVERNMENT TELEGRAPH SERVICE

By D. H. KEELEY, GENERAL SUPERINTENDENT.

Location of Lines.	Points connected.	Year.	LENGTH OF LINES			Number of Offices.	Messages Sent.	
			Land Lines.	Cables.	Total.			
			Miles Wire.	Kt's.				
Newfoundland.	Port au Basque—Cape Ray.....	1883	14	.....	14	2	21,270	
Nova Scotia	North Sydney—Meat Cove (with loops).	1880-02	168 <sup>3</sup> / <sub>4</sub>	.....	170	25		
	Across Bras d'Or Channel.....	1880	.....	.....				
	St. Ann's Harbour (English-town).	1887	.....	.....				
	Ingouish Harbour.....	1887	.....	.....				
	French River.....	.....	.....	.....				
	Big Bras d'Or—Kempt Head.....	1904	20	.....	20	3		
	Meat Cove—St. Pauls Island.....	1890	.....	20	23	1		
	On St. Pauls Island.....	1890	3	.....	8	4		
	Bay St. Lawrence to Money Point.....	1907	8	.....				
	Mabou—Meat Cove.....	1887-00	116 <sup>1</sup> / <sub>2</sub>	.....	116 <sup>1</sup> / <sub>2</sub>	12		
	Barrington—Cape Sable.....	1883	16	.....	17 <sup>1</sup> / <sub>2</sub>	Leas- ed.		
	Across Bear Point Channel.....	1883	.....	.....				
	Lt. House Channel.....	1883	.....	.....				
	Mabou—Port Hawkesbury.....	1903	41 <sup>3</sup> / <sub>4</sub>	.....	73 <sup>1</sup> / <sub>4</sub>	9		
	Port Hawkesbury—St. Peters.....	1903	32	.....	133 <sup>1</sup> / <sub>2</sub>	19		
	St. Peters—Main-a-Dieu.....	1901	83 <sup>1</sup> / <sub>4</sub>	.....				
	Main-a-Dieu—Scatarie.....	1902-09	1	3 <sup>1</sup> / <sub>2</sub>	133 <sup>1</sup> / <sub>2</sub>	19		
	On Scatarie Island.....	1904	7 <sup>1</sup> / <sub>4</sub>	.....				
	Gabarus—North Sydney.....	1904	38 <sup>1</sup> / <sub>2</sub>	.....	34 <sup>1</sup> / <sub>2</sub>	6		
	Little Bras d'Or—Kempt Head.....	1905	34 <sup>1</sup> / <sub>2</sub>	.....				
	North Sydney—Eskasoni.....	1905	31	.....	31	10		
	Eskasoni—Grand Narrows.....	1908	22	.....	22			
	Grand Narrows—Shenacadie—Beaver Cove	1910	15 <sup>1</sup> / <sub>2</sub>	.....	15 <sup>1</sup> / <sub>2</sub>	3		
	Leitch's Creek—St. Charles Crossing (loop).	1910	28	.....	28	1		
	Baddeck—Little Narrows.....	1910	19 <sup>1</sup> / <sub>2</sub>	.....	19 <sup>1</sup> / <sub>2</sub>	1		
	North Sydney—Little Bras d'Or (second wire).....	1906	6	.....	6	21,270		
	Grand River—Enon.....	1907	19 <sup>1</sup> / <sub>2</sub>	.....	19 <sup>1</sup> / <sub>2</sub>			2
	Enon—Gabarus.....	1909	29	.....	29			3
	Strathlorne—Wycocomagh.....	1909	33 <sup>1</sup> / <sub>2</sub>	.....	33 <sup>1</sup> / <sub>2</sub>		7	
	S. W. Margaree—Whycomomagh—Little Narrows.....	1912	38 <sup>1</sup> / <sub>2</sub>	.....	38 <sup>1</sup> / <sub>2</sub>		8	
	Loch Ban—Scottsville.....	1912	7	.....	7		5	
	Whycomomagh—Orangedale.....	1912	8	.....	8			
	North Sydney—Sydney Mines—Florence	1912	7	.....	7		4	
	Little Narrows—Washabuck Centre.....	1912	12	.....	12			
	Loop, Eskasoni—McAdams Lake.....	1912	5	.....	5		1	
	Baddeck, Nyanza—Big Intervale.....	1913	39 <sup>1</sup> / <sub>2</sub>	.....	39 <sup>1</sup> / <sub>2</sub>		6	
	Brook Village—Glendale.....	1914	32	.....	32		6	
	Washabuck Centre—Grass Pond.....	1916	7 <sup>1</sup> / <sub>2</sub>	.....	7 <sup>1</sup> / <sub>2</sub>		4	
<i>Port Hood, Island Branch.</i>								
(Length of construction in loop.)								
	On mainland at Port Hood.....	1907	1 <sup>1</sup> / <sub>2</sub>	.....	13 <sup>1</sup> / <sub>2</sub>	4		
	Port Hood—Smiths Island.....	1907	.....	2				
	On Smiths or Inner Island.....	1907	4	.....				
	Smiths Island to Henry Island.....	1907	.....	3				
	On Henry or Outer Island.....	1907	4	.....				
New Brunswick.	Chatham—Escuminac—Point Sapin.....	1885	56 <sup>1</sup> / <sub>2</sub>	.....	56 <sup>1</sup> / <sub>2</sub>	22	7,016	
Carried forward.....			1010	31 <sup>1</sup> / <sub>2</sub>	1,041 <sup>1</sup> / <sub>4</sub>	168	28,286	





GOVERNMENT TELEGRAPH SERVICE.—Continued

Location of Lines.	Points connected.	Year.	LENGTH OF LINES.			Number of Offices.	Messages Sent.
			Land Lines.	Cables.	Total.		
			Miles Wire.	Kt's.			
	Brought forward		3,339 <sup>1</sup> / <sub>2</sub>	253 <sup>3</sup> / <sub>4</sub>	3,593 <sup>1</sup> / <sub>2</sub>	395	92,418
	<i>Northwest Lines—</i>						
Saskatchewan.	Qu'Appelle—Onion Lake	1883	402		402	9	27,148
"	Moosejaw—Wood Mountain	1885	107		107	4	
"	Wood Mountain—Willow Bunch	1904	39		39	2	
"	Gravelbourg Loop	1910	38		38	1	
"	Leeville Loop	1912	28		28	1	
"	Saskatoon Loop	1892	28		28	1	
"	Duck Lake—Batoche	1902-10	9		9	2	
"	Duck Lake—Indian Agency	1902	3 <sup>1</sup> / <sub>2</sub>		3 <sup>1</sup> / <sub>2</sub>	3	
"	Lloydminster Loop	1904-09	58		58	1	
"	Lipton Loop	1906	2		2	1	
"	Fort Qu'Appelle—File Hills Agency	1907	28		28	4	
"	Kamsack—Indian Agency	1907	6 <sup>1</sup> / <sub>2</sub>		6 <sup>1</sup> / <sub>2</sub>	2	
"	Kamsack—Indian Agency—Pelly	1910	17 <sup>1</sup> / <sub>2</sub>		17 <sup>1</sup> / <sub>2</sub>	4	
"	Battleford—Isle-à-La-Crosse	1912	27 <sup>1</sup> / <sub>2</sub>		27 <sup>1</sup> / <sub>2</sub>	6	
"	Meota Loop	1912	20		20	1	
"	Sintaluta—Assiniboia Reserve	1913	8		8	1	
Alberta.	Onion Lake—Edmonton	1883	205		205	8	58,861
"	St. Paul—Durlingville	1912	48		48	3	
"	Edmonton—Athabaska	1904	98		98	2	
"	Athabaska—Mirror Landing	1909	70		70	1	
"	Mirror Landing—Peace River	1910	159		199	4	
"	Peace River—Dunvegan	1911	74		74	2	
"	Dunvegan—Lake Saskatoon	1912	76		76	2	
"	Grand Prairie City Loop	1912	16		16	1	
"	Lake Saskatoon—Fort St. John	1914-15	145		145	3	
"	Fort St. John—Hudson Hope	1915	62		62	2	
"	Peace River—Shaftsbury	1911	15		15	4	
"	Athabaska—Fort McMurray	1914-15	245		245	4	
"	Athabaska—Lac la Biche (Plamondon)	1914	58		58	1	
"	Plamondon—Roman Catholic Mission	1915	12		12	1	
"	Edmonton—Indian Agency—Stony Plain	1904	32		32	5	
"	Edmonton—St. Albert	1887	9		9	1	
"	St. Albert—Qui Barre—Alexandre	1902	25		25	3	
"	Andrew Loop	1904	10		10	1	
"	Lamont Loop	1910	7		7	1	
"	Saddle Lake—Industrial School	1900	6 <sup>1</sup> / <sub>2</sub>		6 <sup>1</sup> / <sub>2</sub>	1	
"	Grouard—High Prairie	1912	5		25	12	
"	High Prairie—Prairie River	1913-14	13 <sup>1</sup> / <sub>2</sub>		13 <sup>1</sup> / <sub>2</sub>	2	
	<i>British Columbia Lines—</i>						
British Columbia	Kamloops—Vernon—Penticton	1899-11	467 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	469	57	93,057
"	Kamloops—Mount Olie	1908-10-15	84		84	18	
"	Kamloops—Savonas	1913	27		27	6	
"	Kamloops—Barnhart Vale—Rose Hill	1911	14		14	5	
"	Kamloops—Notch Hill—Revelstoke	1914-15	204 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	206	27	
"	Fairview—Midway	1914	93		93	11	
"	Whitemans Creek—Kelowna	1914	29	1	30	6	
"	Nelson—Trail	1914	61		61	12	
"	Proctor—Sirdar—Creston	1914-16	87 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>4</sub>	90	15	
"	Nakusp—Edgewood	1912	59	1	60	14	
"	Golden—Windermere	1901	90		90	18	
"	Hefley Creek—Upper Louis Creek	1916	29		29	7	
"	Deer Park—Renetz	1916	24 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>4</sub>	25	9	
"	Merritt—Mammette Lake—Camford	1916	30		30	6	
"	Kamloops—Goose Lake	1916	14		14	3	
"	Enderby—Vernon	1916	26		26	2	
	Carried forward		7,197 <sup>1</sup> / <sub>2</sub>	262 <sup>1</sup> / <sub>4</sub>	7,459 <sup>3</sup> / <sub>4</sub>	718	251,284

GOVERNMENT TELEGRAPH SERVICE—*Concluded.*

Location of Lines.	Points connected.	Year.	LENGTH OF LINES.			Number of Officers.	Messages Sent.
			Land Lines.	Cables.	Total.		
			Miles Wire.	Kt's.			
	Brought forward.....		7,197 $\frac{1}{2}$	262 $\frac{1}{2}$	7,459 $\frac{3}{4}$	718	251,284
	<i>British Columbia Lines—Concluded.</i>						
Vancouver Island.....	Victoria—Bantfield.....	1891	169	.....	169	12	
"	Alberni—Banfield.....	1899	53	.....	53	2	
"	Alberni—Clayoquot.....	1902	95 $\frac{1}{2}$	2 $\frac{1}{2}$	97 $\frac{3}{4}$	5	
"	Clayoquot—Nootka.....	1913	62 $\frac{1}{2}$	12 $\frac{1}{2}$	74 $\frac{3}{4}$	8	
"	Clayoquot Branch.....	1913	1	.....	1	2	
"	Toquait—Sechart.....	1907	7 $\frac{1}{2}$	2	9 $\frac{1}{2}$	1	
"	Foino—Mosquito Harbour, Bear River, Clayoquot Sound—Leonard Is. Light.....	1911-14	55	3 $\frac{3}{4}$	58 $\frac{3}{4}$	.....	
"	Nanaimo—Comox—Campbell River.....	1893-08	118	.....	118	8	
"	Parksville—Alberni Branch.....	1895	30	.....	30	1	
"	Comox—Cape Lazo Branch.....	1919	6	.....	6	.....	
"	Union Bay—Dunman & Hernby Islands.....	1907	21	2	23	4	
"	Nanaimo—Gabriola Island.....	1909	16	.....	16	4	
"	Campbell River—Powell River.....	1910	63 $\frac{1}{2}$	13 $\frac{1}{2}$	77 $\frac{1}{2}$	11	82,559
"	Powell River—Vancouver.....	1913	108	12	120	19	
"	Campbell River—Hardy Bay.....	1914	208 $\frac{1}{2}$	4 $\frac{1}{2}$	207 $\frac{3}{4}$	18	
"	Vancouver—Squamish.....	1914	44 $\frac{1}{2}$	1 $\frac{1}{2}$	46	6	
"	Salt Spring Island Line.....	1902-14	88	7 $\frac{1}{2}$	95 $\frac{1}{2}$	19	
"	Sidney—Ganges Line.....	1910	21	2 $\frac{1}{2}$	23 $\frac{1}{2}$	.....	
"	Chemainus—Kuper—Thetis Islands.....	1912	3 $\frac{1}{2}$	4	7 $\frac{1}{2}$	5	
"	Saanichton—James Island.....	1912	3 $\frac{1}{2}$	1	4 $\frac{1}{2}$	2	
"	Sydney and Sydney Island.....	1910	3	3	6	2	
"	Bamberton Works, Keatings Branch.....	1914	.....	1	1	1	
Yukon.....	Ashcroft—Dawson and Boundary.....	1899-12	1,777	.....	1,777	78	
"	Ashcroft—Quesnelle (local wire).....	1878-87	215	.....	215	.....	
"	Ashcroft—Lillooet Branch.....	1896	67	.....	67	12	
"	Lillooet—Pioneer Branch.....	1912	66	.....	66	15	
"	Lillooet—Lytton Branch.....	1913	49 $\frac{1}{2}$	.....	49 $\frac{1}{2}$	12	
"	Ashcroft—Savonas Branch.....	1914	40	.....	40	5	
"	150 Mile House—Quesnelle Forks.....	1902	89	.....	89	5	
"	150 Mile House—Bella Coola Branch.....	1912	329	.....	329	28	
"	Quesnelle—Barkerville Branch.....	1887	61	.....	61	5	78,091
"	Hazleton—Prince Rupert Branch.....	1901-07	218	.....	218	22	
"	Terrace—Stewart Branch.....	1910-11	174	.....	174	8	
"	Queen Charlotte Island Line.....	1913-14	123	.....	123	13	
"	Hootalinqua—Livingstone Creek, Y. T. Branch.....	1907	70	.....	70	2	
"	Ashcroft—Highland Valley.....	1916	36	.....	36	5	
	Total.....		11,680 $\frac{3}{4}$	336	12,016 $\frac{3}{4}$	1,058	411,934

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## TELEGRAPH SYSTEMS OF THE DOMINION.

As a matter of general interest, pursuant to the statement submitted last year, the latest figures to hand showing the extent of telegraph lines in operation in the Dominion are as given hereunder.

Canada.	LENGTH OF LINES IN MILES.				LENGTH OF CONDUCTORS IN MILES.				No. of Offices
	Aerial.	Under-ground.	Sub-marine.	Total.	Aerial.	Under-ground.	Sub-marine.	Total.	
1916-1917.									
Great North Western Telegraph Co .....	10,064	7	13	10,084	31,357	192	78	31,627	
Canadian Pacific Telegraph	14,617	23	95	14,735	106,143	820	227	107,190	1,519
Government Telegraph service .....	11,390½		339	11,726½	11,680½		336	12,016½	1,058
Grand Trunk Pacific Telegraph .....	5,279	1	1	5,279	19,525	18 25	2 19	19,545	279

## REVENUE AND EXPENDITURE.

The revenue and expenditure for each of the Government lines in the several districts hereinbefore mentioned, are given in the following table:—

1916-1917.	Expenditure.	Revenue.
Lower St. Lawrence and Maritime Provinces—		
Anticosti lines .....	\$ 8,333 90	\$ 1,383 13
Bay of Fundy .....	5,709 83	1,361 58
Cape Breton .....	46,429 78	4,637 80
Cape Ray (subsidy) .....	250 00	
Escuminac .....	1,453 91	952 26
Father Point (Agency) .....	500 00	
Ile aux Coudres (subsidy) .....	200 00	
Magdalen Islands .....	6,665 85	2,505 05
North Shore, east of Bersimis .....	28,329 12	6,809 74
North Shore, west of Bersimis .....	20,821 33	1,634 06
Orleans telephone .....	1,860 64	425 84
Quarantine system .....	6,744 79	213 21
Quebec County Lines .....	1,943 60	871 37
Prince Edward Island and Mainland .....	15 50	
Cable ship <i>Tyrian</i> —		
Maintenance .....	60,096 88	
Generally—		
Gulf and Maritime Provinces .....	2,290 29	
Timiskaming District—		
Telephone line .....	3,415 98	255 65
Ontario—		
Peelee Island telephone .....	2,652 25	134 35
North West Lines—		
Saskatchewan .....	48,623 53	7,608 28
Alberta .....	67,782 80	18,851 35
British Columbia—		
Mainland .....	56,035 86	29,143 45
Vancouver Island .....	91,509 47	28,204 56
Yukon—		
Ashcroft—Dawson .....	512,666 15	86,488 67
Telegraphic service generally .....	357 28	
Total .....	674,688 74	191,453 35

## DEPARTMENTAL TELEPHONE SERVICE.

Up to date of this report (April 1, 1917) the telephone connections with the central office of the Bell Telephone Company at Ottawa, listed as chargeable to the special appropriation, numbered 1,090, the annual charge for which amounts to \$47,191.50. The connections are distributed amongst the several departments, as hereunder:—

Department.	NO. OF TELEPHONES.		Total.	Cost per Annum.	
	Offices.	Residences.		\$	cts.
Agriculture.....	36	15	51	2,620	00
Auditor General.....	14	2	16	753	00
Census.....	1		1	80	00
Civil Service Commission.....	4	3	7	342	00
Clerk of Crown in Chancery.....	1	1	2	85	00
Conservation Commission.....	5	1	6	375	00
Customs.....	24	6	30	1,235	00
Dominion Archives.....	2	1	3	160	00
Dominion Police.....	15	5	20	780	00
Economic Development Commission.....	2		2	80	00
Exchequer Court.....	2	1	3	145	00
External Affairs.....	7	2	9	388	00
Finance.....	18	5	23	950	00
Governor General.....	6	6	12	495	00
"    "    Private Line.....				123	00
"    "    P. B. X.....	14		14	1,052	00
House of Commons.....	17		17	720	00
Indian Affairs.....	14	2	16	640	00
Inland Revenue.....	18	4	22	934	00
Interior Department.....	118	9	127	5,552	06
Justice.....	20	15	35	1,476	00
Labour.....	6	3	9	445	00
Library of Parliament.....	3	2	5	185	00
Marine Department.....	20	8	28	1,185	00
Militia and Defence.....	31	13	44	2,142	00
"    "    P. B. X.....	158		158	6,127	00
Military Hospital Commission.....		1	1	40	00
Mines Department.....	18	1	19	807	00
"    "    P. B. X.....	36		36	1,329	00
Mounted Police.....	4	2	6	230	00
National Service Commission.....	3		3	165	00
Naval Service.....	25	6	31	1,316	00
Northwest Territories.....		1	1	35	00
Patriotic Fund Committee.....	1		1	80	00
Post Office.....	42	9	51	2,090	00
Printing and Stationery.....	19	12	31	1,268	00
"    "    P. B. X.....	49		49	1,079	00
Privy Council.....	7	5	12	525	00
Public Works.....	74	19	93	4,321	00
Railways and Canals.....	21	13	34	1,510	00
Secretary of State.....	13	4	17	779	00
Senate.....	16	4	20	837	00
Supreme Court.....	1		1	40	00
Trade and Commerce.....	11	3	14	615	00
War Purchasing Commission, Private Branch Exchange.....	10		10	1,050	00
	906	184	1,090	47,191	50



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## CAPE BRETON LINES.

The revenue was the largest thus far recorded for any similar period, caused by a general revival of trade, the demand for sea products, fish, lobsters, etc., being active at increased prices.

*New Telegraph Offices.*

Munros Point (St. Annes, C.B.), loop from South Gut office; line completed April 30 and office opened on May 1. In charge of Mr. J. McKillop, agent and operator. Remuneration 25 per cent of receipts and checks, guaranteed \$50 a year

Black Brook, C.B., between Hillside and Groves point, on the Boularderie line. Opened February 14, Mr. H. McNeil, agent and operator. Remuneration 25 per cent of receipts and checks, guaranteed \$50 per annum.

*Offices Closed.*

Hillside, C.B., on Boularderie line, closed February 14, in view of opening of new office at Black Rock.

South Gut, C.B., closed December 31; the business is being handled through the office at Englishtown until such time as office is reopened.

*New Telephone Offices.*

Gillies Point, C.B., agent, N. A. McNeil; Gillies Point East, C.B., agent, J. R. Morrison; Grass Pond, C.B., agent, N. M. McNeil; McNeils Vale, C.B., agent, D. S. McNeil.

These offices were opened November 11, and the instruments installed.

East Lake Centre, C.B., agent, Howard McKinnon, opened March 27; Melford, C.B., agent, Mrs. Flora McDonald, opened October 9.

*Changes in Agents.*

Baddeck, C.B., Mr. D. Dunlop, agent and operator, died suddenly on September 23, and Mrs. Christie Dunlop received the appointment as agent; on February 28, Mrs. C. Dunlop resigned and Mr. Gerald Dunlop was appointed; the office up to the end of the fiscal year being in charge of Miss Simpson, instructor.

Craigmore, C.B., Allan Cameron, agent and operator, died February 26; office transferred March 3 to Mary K. Cameron, on same terms and conditions as applied when former agent was in charge.

Pleasant Bay, C.B., Mrs. Geo. P. McIntosh, agent and operator, superseded November 30 and office moved to residence of Miss Amie McLean, new appointee, at same remuneration, 25 per cent of receipts, and checks guaranteed, \$50 per annum.

Grand Anse, C.B., Miss N. A. McPherson resigned November 30 and was succeeded by her sister, Miss Barbara McPherson; no change in remuneration.

Dingwall, C.B., on October 18 office was moved to the residence of Mr. Wm. LaRousie, succeeding Mr. G. W. McPherson; no change in remuneration.

Benacadie Pond, C.B., John H. McNeil, agent and operator, superseded November 1 by James N. McNeil, new appointee; no change in remuneration.

South Ingonish, C.B., Mrs. M. C. Williams, superseded December 27 by Miss Mary A. Young, new appointee; no change in remuneration.

Grand River Falls, C.B., Mrs. E. D. McKillop, agent and operator, succeeded by Mrs. R. J. McLeod, September 1, on same terms and conditions as applied to former incumbent.

Hayes River, C.B., H. R. Beaton, agent and operator, succeeded by Mrs. Florence Beaton on July 31; no change in salary or conditions.

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Grand River, C.B., Miss E. A. Finlayson, agent and operator, resigned June 15 and Mrs. Arch. Finlayson was appointed; no change in conditions.

Eskasoni, C.B., reopened May 8. Miss Rose McAdam appointed agent and operator; no change in remuneration.

Iron Mines, C.B., telephone office transferred October 15 to Mr. Donald D. McDonald; no change in rate of commission.

Orangedale, C.B., telephone office removed July 25 to residence of Mr. N. A. McLean, new appointee; no change in commission.

#### *Change in Repairers.*

Port Hood, C.B., office to Outer Island, C.B., Ambrose Smith superseded by John Eldridge Smith, dating from November 1; no change in remuneration.

Little Bras d'Or, Upper Kemp Head, C.B., Murdock McLeod superseded by John L. McPhee, of Groves Point, C.B., dating from November 4; no change in remuneration.

Pleasant Bay, Barren, C.B., A. D. Moore superseded by Rod Fraser, of Pleasant Bay, C.B., dating from October 5; no change in remuneration.

Grand River, Enon, C.B., Hector Urquhart superseded by Dan. A. McLennan, of Head of Loch Lomond, dating from October 5; no change in remuneration.

#### *Repairers Appointed.*

Middle River bridge north to county line, distance fifteen miles, Allan J. Grant, of Middle River; service dating from March 20; salary \$60 per annum.

Baddeck, Nyanza, Middle River bridge, distance nine miles, Daniel Morrison, of Baddeck; service dating from March 20; salary \$36 per annum.

Strathlorne, Brooks village, distance twenty-one miles, Alex. McMaster, of Brooks village; dating from June 16; salary \$84 per annum.

#### BAY OF FUNDY LINES.

Toward the latter part of June, 1916, the Gannet Rock cable gave out; the *Tyrian* arrived shortly after and repaired it. The Seal Cove-Wood island section gave out on December 16, 1916; on March 31, 1917, the *Tyrian* repaired it; also repaired the White Head cable No. 1, which broke during a storm, December 16, 1916. The Duck Island-Nantucket cable was replaced, as it was too far gone to repair.

On September 14, 1916, the Eastport-Campobello cable No. 1 gave out; was repaired and is working well.

The Flaggs Cove-Campobello cable No. 1 broke during a storm in December, and was replaced by 2,000 feet of new cable.

When reconstruction on the line was commenced, a temporary line was built to Seal Cove, on which telegraph and telephone instruments were installed at the several offices, and the reconstruction is now nearing completion.

#### MAGDALEN ISLANDS LINE.

The Meat Cove cable had been interrupted since December 24, 1914; was put in operation June 22. During the period of interruption all traffic to the mainland was handled by the Marconi wireless station at Grindstone.

On June 17, the Bryon Island cable, which had been interrupted since January 25, was repaired by the *Tyrian*, and is now in fairly good working condition.

#### *New Telephone Stations.*

On October 24, the telephone instrument which was at Grand Entry village was moved to Mr. Charles Doyle's at Muck Cove, halfway between Grand Entry and Old

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Harry; operated on commission. On November 7, an office was opened at Alfred Gallant's, Etang des Caps; a 2½-mile extension was built to connect the office with the main line; office is operated on 25 per cent commission.

*Conditions Generally.*

Our land wires now cover about 100 miles. There are twenty-seven telephone boxes, of which twenty are on salary and commission; Etang des Caps, Muck Cove, Grand Ruisscau, and Grand Entry Point are on commission only.

## ANTICOSTI ISLAND LINES.

No additional mileage built during the past year. Fox Bay office is still closed but in communication by telephone with Heath Point office during the summer.

There has been no change in the staff. The North Shore cable was repaired on July 13 by the cable ship *Tyrian*, and since then has been working well.

## NORTH SHORE ST. LAWRENCE LINES.

*West of Bersimis.*

An extension of five miles was built in the month of July, from Murray Bay to Nairns Falls. The line between Bay St. Paul and St. Agnes was re-poled with cedar, as was also a section of the Periboaka line. On the Port-Neuf-Bersimis section one of the main road bridges and a camp were rebuilt. Outside of damage by fires the general repairs were made with a very small outlay.

The changes were as follows: Lac Charles re-opened May 25, 1916; agent, Mrs. J. Bouliane; Nairns Falls opened July 16, 1916, agent, N. F. Paper & Pulp Co.; Les Eboulements opened as a joint office July 16, 1916, agent, J. A. DesGagne; St. Irenee opened as a joint office July 16, 1916, agent, A. Girard; River au Moulin, opened September 1, 1916, agent, A. T. Villeneuve; Lac Charles, closed October 1, 1916; St. Simeon, agent, Jos. Morin, replaced by J. Tremblay March 12, 1917.

*Quebec County Telephone Lines.*

Some extensions were made, and nine new instruments were installed, against three withdrawn.

*Escuminac Telephone Line.*

A small extension was made in September, and two new stations opened, bringing the total number up to 21. The operation of the line by the New Brunswick Telephone Company has been satisfactory during the year.

*East of Bersimis.*

The lines were kept in good working order throughout the year; very few interruptions which were promptly repaired. During the course of the year, three local telephone lines were erected as accommodation offices; one, a half mile long, was constructed at Natashquan, between the telegraph office and the clergyman's residence, in operation August 4, 1916; a second at Seven Islands, between the telegraph office and the Bishop's palace a distance of one-third of a mile, in operation September 25, but the palace was destroyed by fire December 21, and telephone boxes and apparatus were lost; another line was strung on the telegraph poles, between the Pigou office and the office of the Gulf Pulp & Paper Company, a distance of two miles.

*Change in Agents.*

June, 1916, John Bolger was appointed agent and repairer at West St. Modest, succeeding his father, Mr. James Bolger. February, 1917, Miss Ella Chevalier, appointed as agent at Bonne Esperance in place of Miss M. Chevalier, deceased. An accommodation office was opened at Shelter Bay on May 11, 1916, with Mr. J. P. Boulianne as agent.

## QUARANTINE LINES.

The Crane Island-Montmagny cable which was raised November 12, 1915, was relaid April 21, 1916; again raised November 15, and stored for the winter. The St. Francois-Isle aux Reaux cable was broken by ice March 10, 1916, and repaired in May; 500 feet being replaced near the Isle aux Reaux end. The Isle aux Reaux cable, interrupted May 9, was defective and out of service; was replaced by some new cable and some serviceable cable saved from the abandoned Grosse Isle-Crane Island cable. The Orleans Island-Bellechasse cable, raised November 13, 1915, was relaid April 27, 1916; broken on August 10, not repaired but was raised in November and stored at Quebec. One of the St. Francois-Isle aux Reaux cables was broken by a vessel anchor on October 4 and repaired on October 20; three joints being replaced close to Isle aux Reaux; broken by ice on December 22.

One of the Ange Gardien-St. Pierre telephone cables was broken by ice March 20, 1916, and repaired June 26, but again broken by ice February 5, 1917.

In June, 1916, the Grosse Isle-Crane Island cable was removed from its original location and relaid from Grosse Isle to St. Margaret island, one and a half knots, thence one mile of land line and two and a half knots of cable from St. Margaret island to the west end of Crane island. On December 1 this cable was broken in three places by a gas buoy adrift in the ice; repairs were effected December 12.

A steel wire was strung from Maheux bay to St. Laurent wharf for use of the signal service.

## PELEE ISLAND, ONTARIO, LINES.

After repairing the cable in May, 1916, it has worked most satisfactorily, with the exception of a short interruption in October, 1916, and is still working well.

The Point Pelee branch on the mainland is in need of new wire, as quite a few places in the old wire, in use since 1888, are badly rusted. This section should be made metallic and have a double instead of a single wire service.

## NORTHWEST ALBERTA DISTRICT LINES.

During the year reconstruction of the line between Edmonton and Athabaska was begun and carried through from Edmonton to a point 20 miles from Athabaska.

The High Prairie telephone line was extended to Grouard, a distance of one mile, thence a half mile line was built to the Dominion lands office.

Requests have been received for the extension of the Athabaska-Fort McMurray line to lake Athabaska, a distance of about 100 miles, and another request for a line from Peace River crossing to Vermillion, about 250 miles farther down the river. These extensions would open up new agricultural and mining districts.

## BRITISH COLUMBIA LINES.

During the year 172 miles of new lines were built, 56 ropoled, 86 miles of pole line reset, and there are 217 offices, an increase of 35.

SESSIONAL PAPER No. 19

*Vernon-Kamloops Section.*

This line was overhauled and 900 poles reset; an extra wire was strung from Holmwood to Vernon, giving a metallic circuit, to use the simplex system of telephone and telegraph, and completing the telegraph line from Ashcroft to the boundary line at Oroville.

*Kamloops-Mount Olie-North Thompson Section.*

This section was overhauled last year; several new offices have been opened, and business has been very satisfactory.

*Heffley Creek-Upper Louis Creek Section.*

Built last fall, work starting in September, was completed November 10, and is operated by a switch at Heffley Creek office to the main North Thompson line; seven offices were opened.

*Kamloops-Goose Lake Section.*

Since last year this line has been brought direct into Kamloops office; previously it was a spur from the Nicola line at Kautsford. At Goose lake, connection is made with the Dominion Forestry Branch line to Fish lake, and a public call office opened at that place.

*Kamloops-Revelstoke Section.*

(Via Chase, Notch Hill and Sicamous.)

The line from Malakwa to Revelstoke, 35 miles, was made metallic. The section along the east side of Mara lake will be transferred to the government road, which is now completed.

*Enderby-Vernon Section.*

Built during the past year and opened in December, 1916, connects the telephone system in the northern part of the Okanagan valley with Vernon and the south, also gives the public a service from the Revelstoke district direct to the Vernon district.

*Penticton-Midway Section.*

The switching office at Fairview has been closed, and switching is done at Penticton. The old single line from Fairview to Keremeos has been taken down and the wire will be used elsewhere.

*Merritt-Mammette Lake Section.*

Built during the year, commencing at Merritt, thence via Lower Nicola to Mammette lake. Three offices have been opened.

*Proctor-Creston-Yahk Section.*

This pole line was extended through from Creston to Yahk, 29 miles farther east, where connection will be made with the Kootenay Telephone Company to Cranbrook. The wire line was not completed but will be finished in the spring, when four new offices will be opened. The pole line was completed in October, 1916.

*Nakusp-Edgewood Section.*

Three new offices have been opened. It is important that this line be extended along the Arrow lakes to Renata, 24 miles, to connect the line with the Nelson district.

*Castlegar-Renata Section.*

Last fall this section was built as far as Deer Park, and this spring, 1917, it was completed to Renata; the cable across the lake at Renata was not laid until April. Nine offices have been opened, and business prospects are good.

## YUKON TELEGRAPHS.

The line between Hazelton and Kispiox was re-poled, completing the work of general re-poling between Hazelton and Fifth Cabin first undertaken in 1914. 202 new cedar poles were put in between Hazelton and Kispiox. An extension was built from New Hazelton to the Silver Standard Mines, a distance of four and a half miles, the mining company erecting the pole line at their own expense.

A connection was also made between our office at Nechacco and the town of Vanderhoof, on the Grand Trunk Pacific railway, a distance of approximately four miles. Telephones were installed at Vanderhoof, Nechacco and Fort Fraser.

The pole line between Hazelton and New Hazelton was cross-armed with six-pin cross-arms, and lines terminating at New Hazelton were brought in to Hazelton.

High water during the month of July carried out the pack train bridge over the Naas river near Seventh Cabin, as well as foot bridges near Ninth Cabin and over Owl creek.

The renewal of the pack-train bridge necessitated sending a bridge gang from Hazelton, the centre pier and abutments having been carried away a site further up stream was selected and a one-span truss-bridge put in, doing away with a centre pier. The span is seventy-eight feet in length between abutments.

*Ashcroft Local.*

At Ashcroft, on July 5, at 7 p.m., a fire which started in the Ashcroft hotel completely destroyed the business portion of the town, including our office and a considerable portion of our equipment. Temporary space was obtained in the Canadian Pacific railway depot, and by noon next day all circuits were installed and normal conditions restored.

*Construction Ashcroft-Highland Valley Line.*

Work on the construction of this line (28 miles) was begun September 28 and completed October 27. Four telephones were installed at various points.

*Houston-Oosta Lake.*

This line from Houston to the west end of Oosta Lake (41 miles) was begun on August 25, and the pole line constructed (26 miles) October 30, the work of stringing the wire the above distance was begun March 14 and completed March 24. This leaves 15 miles to be constructed to the objective point at the west end of Oosta Lake.

## VANCOUVER ISLAND LINES.

The line between Sechart and North West bay, a distance of 5 miles, which formerly followed the trail through heavy timber, was re-built along the new wagon road, and the wire transferred to the new poles.

On the Pender Harbour section, a new piece of line was built from the narrows at the head of the harbour to two miles beyond Donnelly's Landing, a total distance of five miles and a short piece of cable laid across the mouth of the harbour to the hotel, and the line continued around the bluffs to the cable box where the cable crosses to Nelson island shortening the line by about five miles.

## SESSIONAL PAPER No. 19

The cable between Quathiaski Cove and Campbell River was again interrupted in May, and the service of the British Columbia Telephone Company's repair outfit secured to pick up, repair and relay cable in a new position. Advantage was taken to make use of old cable on hand to lay a second cable between these points, to avoid interruption to the main line in the event of a future break in the first cable. The extra cable was put into service to connect the branch line between Quathiaski Cove and Heriot Bay with our Campbell River office.

The cable between Sarah Point and Cortez Island also became interrupted in October, and after several attempts by our line foreman to repair the break, with local assistance, the services of the British Columbia Telephone outfit was again secured and the cable repaired and relaid in a new position.

On October 11, the cable between Tofino and Clayoquot was interrupted, and on examination it was found to be broken between Tofino and Round Island, and was repaired the following day.

The Telephone Exchange on Salt Spring islands was thoroughly overhauled and necessary repairs made to the lines and equipment. About two miles of new line was constructed to give connection to four new subscribers at the standard rental.

Construction of line from Fisherman's Bay to Shushartie Bay was begun September 1 and completed December 10; approximate length, 26½ miles. Telephones were installed at Fisherman's Bay, Stramby, Nawitti, Shurshartie Cannery and Shurshartie Bay.

There has been a steady increase in the revenue of the Vancouver Island lines, and indications point to a further increase, as renewed activity is reported in the logging, fishing, and mining industries.

Telephones have been installed in several new logging camps and three new mining camps.

## "SS. TYRIAN."

*Grand Manan Section.*

On April 3, a new cable 1.25 knots, was laid from East Port, Maine, to Owens Head, Campobello.

On 5th, laid a new cable from White Head island to Chaney's island, and on the 6th, laid cables from Chaney's island to Ross island and from Ross island to Grand Harbour. The cable from White Head to Chaney's is three-quarters of a knot, from Chaney's island to Ross island is half a knot, and from Ross island to Grand Harbour one-quarter knot.

On 8th, laid a new cable from Hay island to Kent island, .31 knot.

On 7th, repaired the Gannet Rock cable a short distance from the rock. This cable failed again, and the ship went there in July; removed a leak on August 2, landing it at Hay island instead of Little Wood island, thus saving cable.

August 8, made a repair on the Deer Island-Wilsons Beach cable near Deer Island landing. This cable is badly corroded.

15th, diverted the Gannet Rock cable from Little Wood island to Hay island, length now is 4.71 knots, and built the connecting line on Hay island.

March 31, repaired the Seal Cove-Big Wood Island cable 300 feet from the island shore.

*Prince Edward Island Cables.*

June 6, repaired the Wood Island-Caribou cable off the wharf at Wood islands, putting in 80 feet of new cable.

7th, repaired the same cable one mile off Caribou, Pictou county, N.S.

*Magdalen Island Cable.*

June 5, repaired an ice crush at the Meat Cove landing.

22nd, repaired the same cable five miles off Meat Cove, where it had been broken by a fishing vessel's anchor.

*Long Point-Anticosti Cable.*

June 29, repaired this cable just below high-water mark.

July 11, made repair one mile off Anticosti, and on the 13th made a repair of seven miles off.

*Bryon Island-Grosse Isle Cable.*

July 14, repaired this cable just outside of low-water mark at Grosse Isle, where it had been crushed by ice, and on the 17th made another repair one mile off shore, where cable had corroded.

*Scatari—Main-à-Dieu Cable.*

Repaired this cable on July 21, near the island shore, where it had been crushed by ice.

*St. Peters Canal Cable.*

This cable had been cut by a dredge, on September 21; it was repaired and left coiled on the bank of the canal to be laid across when the dredging would be completed.

*McNutt's Island Cable.*

On August 21, laid a new cable, 1-15 knots, from McNutt's island to the mainland, Shelburne county, N.S.; this cable is to be used by the Barrington Telephone Company.

*Bermuda Cable Company.*

Repaired the Bermuda Cable Company's cable at the Halifax shore end.

*Burgeo-Rameau—Newfoundland.*

September 30, repaired this cable about two miles from Rameau; cable chafed and corroded over bad bottom. On October 2, put in a new shore-end section at the Burgeo end, where it had been chafed by ice.

*St. Paul Island—Bay St. Lawrence Cable.*

On October 13, repaired this cable one-half mile off Bay St. Lawrence, and on November 14 made another repair 5 miles off St. Paul island.

*Seal Island—Woods Harbour, N.S., Cable.*

Made one repair a mile from Seal island on March 17, and another three miles farther out on the 29th.



SESSIONAL PAPER No. 19

Date.	DEEP SEA CABLE.	Knots.	Knots.
1916.			
April 1	Cable on hand from last year		10 08
" 3	Laid East Port—Owens Head, Campobello	1 25	
" 5	" White Head Island—Chaney's Island	75	
" 6	" Chaney's Island—Ross Island	50	
" 6	" Ross Island—Grand Harbour	25	
" 23	" Sent cable to Levis, Que.	3 00	
May 6	Gannet Rock—Picked up		39
" 6	" Laid	30	
" 13	Seal Island—Picked up		58
" 13	" Laid	1 07	
June 17	Magdalen Island—Picked up		5 13
" 22	" Laid	5 27	
July 13	Condemned	16	
" 13	Long Point—Picked up		4 67
" 13	" Laid	5 53	
" 17	Condemned	30	
" 17	Bryon Island—Laid	12	
August 2	Gannet Rock—Picked up		05
" 2	" Laid	13	
" 9	Deer Island—Laid	19	
" 16	Gannet Rock—Picked up		6 93
" 16	" Laid	4 46	
" 21	Condemned	20	
" 21	McNutt's Island—Laid	1 15	
October 13	St. Paul Island—Picked up		39
" 13	" Laid	1 00	
" 31	Took aboard at Halifax		17 25
November 14	St. Paul Island—Picked up		5 85
" 14	" Laid	5 85	
December 5	Condemned	50	
" 5	Sent to British Columbia	7 25	
1917.			
March 29	Seal Island, N.S.—Picked up		58
" 29	" Laid	52	
" 31	Big Wood Island—Laid	02	
" 31	Cable on hand	11 99	
		51 90	51 90
Date.	SHORE END CABLE.	Knots.	Knots.
1916.			
April 1	Cable on hand		1 33
May 8	Gannet Rock—Picked up		05
1917.			
March 31	Cable on hand		1 38
FOUR CORE CABLE.			
March 31	Cable on hand		1 19
TWO CORE CABLE.			
March 31	Cable on hand		1 50

## COLLECTION OF REVENUE

By E. T. SMITH, COLLECTOR OF PUBLIC WORKS REVENUE.

During the year 1916-17, the revenue accrued from public works shows an increase of \$19,452.43, being \$292,316.11, while in the preceding year it was \$272,863.68. The collections show a decrease of \$5,783.47, being \$256,789.57, while in 1915-16 they amounted to \$262,573.04.

The revenue accrued from slides and booms was \$97,196.01, or \$11,031.40 less than for the year ended March 31, 1916. The collections were \$97,142.16, or \$11,085.25 less than for the previous year. The outstanding uncollected revenue from slides and booms was \$53.85 more than in 1915-16.

The graving docks yielded \$64,918.37, or \$9,702.14 more than in 1915-16.

Sales and rents collected amounted to \$94,729.03, being \$4,599.64 more than the previous year.

Having dealt with the revenue in a general way, I now submit the particulars in detail, relative to the several services under their respective heads.

### SLIDES AND BOOMS.

#### OTTAWA DISTRICT.

The tolls charged up amounted to \$16,050.97, or \$15,216.64 less than in 1915-16. The number of saw logs that passed through the works was 2,516,375, or 1,395,529 pieces less than the previous year. Of square timber there was none.

All the revenue accrued during the year was collected but \$38.85 overcharged. Of the dues accrued since July 1, 1889, when this department took over the collection, there remains uncollected \$9,200.46. Of the dues accrued before July 1, 1889, there still remains \$56,805.65, all of which should be written off.

The accounts for the Ottawa district stand thus:—

Dues accrued during the year to March 31, 1917.. . . . .	\$16,050 97
Outstanding, March 31, 1916.. . . . .	9,161 61
	<hr/>
Collected.. . . . .	\$25,212 58
	16,012 12
	<hr/>
Balance outstanding, March 31, 1917.. . . . .	\$ 9,200 46

Being composed of:—

Dues of 1889-90.. . . . .	\$ 6,902 65
“ 1890-91.. . . . .	28 42
“ 1892-93.. . . . .	379 80
“ 1896-97.. . . . .	196 71
“ 1903-04.. . . . .	637 37
“ 1911-12.. . . . .	723 63
“ 1912-13.. . . . .	251 15
“ 1913-14.. . . . .	25 31
“ 1914-15.. . . . .	16 17
“ 1916-17.. . . . .	38 85
	<hr/>
	\$ 9,200 46

Balance of dues outstanding prior to July 1, 1889, when this department took over the collection, \$56,805.65.

## SESSIONAL PAPER No. 19

Herewith are statements in detail regarding the year's business:—

No. 1.—Statement of the number of pieces of square timber, sawlogs, etc., which passed through the Ottawa works during the year ended March 31, 1917.

No. 2.—Statement of dues accrued from each of the slides and works of the Ottawa district during the year ended March 31, 1917.

Apart from two accounts amounting to \$1,044.68, all the revenue from the Ottawa slides and booms, since I took charge in 1889, has been collected, excepting such as should have been written off long ago, or a few items in dispute which I expect will have to be forgiven.

The number of saw logs which passed through the works during the past year was 1,395,529 less than during the previous season, and there were 16,840 cords of pulpwood less than in 1915-16.

The Dumoine works were the only ones of the whole Ottawa River system which gave more revenue than the previous year, and it only amounted to \$176.35. I expected a considerably greater revenue than we had in 1915-16, but the scarcity of labour, lack of water in the streams, and holding back logs made on the tributaries, to enable the operators on the main Ottawa to get their logs down, tended to make the revenue of 1916-17 the smallest on record.

## ST. MAURICE DISTRICT.

The revenue, being the largest ever accrued from this district, was \$80,150.45, being \$5,427.10 more than in 1915-16. The collections amounted to \$80,150.45, or \$5,427.10 more than in 1915-16. With the exception of an item of \$3,709.62, dues of 1909-10, disputed, all the dues accrued in this district since I took it in 1892 have been collected.

The amount outstanding prior to July 1, 1892, remains unchanged, viz., \$14,481.49, and should be written off.

The number of pieces of all kinds of timber that passed through the works was equivalent to 10,845,075 pulp and saw-logs or 1,338,775 more than the previous year.

The St. Maurice boom and slide system was leased to The St. Maurice Boom and Driving Association for a period of three years at a rental of \$1 a year; the company is to levy the rates of toll as authorized by Order in Council, and after deducting cost of operation and repairs authorized by the Minister of Public Works, any surplus of revenue is to be paid over to the Government.

## NEWCASTLE DISTRICT.

The dues accrued from this district amounted to \$498.09, being \$136.45 less than the previous year, all of which have been collected at this date.

The totals outstanding on March 31, 1917, amounted to \$3,556.89, of which \$3,521.19 should be written off in accordance with a judgment in the Exchequer Court. \$35.70 will also have to be forgiven, the debtor being hopelessly insolvent at the time of his decease.

## SAGUENAY DISTRICT.

The dues accrued during the year ended March 31, 1917, amounted to \$496.50, all paid but \$15, of which \$5 is uncollected to date, being \$1,105.41 less than in 1915-16. As the Chicoutimi Pulp Company had no logs coming by the Saguenay river of late years, the revenue has gradually declined, but as soon as the new mill at Bagotville is completed, they will again have large quantities to come through this boom.

## GRAVING DOCKS.

## ESQUIMAULT GRAVING DOCK.

The revenue from this service was \$17,472.08, being \$4,792 less than the previous year. (See statement No. 3). Of the 136 days the dock was occupied during the year, it was used for 80 days by H.M. and C.G. vessels.

The total number of vessels docked was 22, of 72,731 tons.

## LEVIS GRAVING DOCK.

The revenue was \$4,280.52 less than for the year 1915-16, being \$26,215.11. (See statement No. 4.) During the season of navigation the dock was occupied for 239 days by 16 vessels, of 26,168 tons. During the winter of 1916-17, it was occupied by ss. *McVittie*, yacht *Courcellette*, and dredges *Galveston* and *Fruhling*.

## KINGSTON GRAVING DOCK.

On May 1, 1910, the Kingston Shipbuilding Company took possession of this dock under lease, the rental of which, \$10,000 per annum, was payable at the end of each and every year. \$20,000, being two years' rent to May 1, 1916, was collected during the financial year. The rental to May 1, 1917, was also paid, and the rent was reduced to \$5,000 per annum for three years from May 1, 1917.

## SELKIRK REPAIR SLIP.

During the last fiscal year the revenue was \$1,181.19, being \$275.34, less than the preceding year.

The total number of vessels drawn up on the slip was 22 and 4 lock gates. The slip was occupied for 21 days by 8 Government vessels, 849 tons, for two days by 4 lock gates, 280 tons, and 14 other craft of 1,343 tons. (See statement No. 5.)

## HAILEYBURY SHIP WAYS.

The sum of \$50 was received for hauling out the steamer *Meteor*, which remained on the ways for seven days in July, 1916.

## RENTS.

During the year the revenue accrued from government properties has been in 1916-17, sales and interest, \$140,201.72, or \$39,781.69 more than in 1915-16.

The account stands thus:—

Balance from others years. . . . .	\$ 35,026 32
Accrued year ended March 31, 1917. . . . .	140,201 72
	<hr/>
	\$175,228 04
Collected. . . . .	\$ 94,729 03
Written off. . . . .	11,339 81
Balance due March 31, 1917. . . . .	69,159 20
	<hr/>
	\$175,228 04

The amount written off, namely, \$11,339.81, is composed of commission on collection, cost of maintenance, allowed in lieu of repairs or cancelled on account of poverty, etc. Of the amount uncollected, \$69,159.20, more than one-half of which is an account being adjusted by the Department of Justice. I hope to see this reduced substantially this year, although a very considerable portion will have to be forgiven, some of the parties having disappeared, and others being too poor to pay.



8 GEORGE V, A. 1918

Annexed hereto is a comparative table of the public works revenue accrued and collected for the year ending March 31, 1917, compared with that of the fiscal year ending March 31, 1916:—

COMPARATIVE Table of Public Works Revenue accrued during the year ended March 31, 1917, compared with that of the Fiscal Year ended March 31, 1916, and amounts collected on account of same.

	Year ended March 31, 1917.	Year ended March 31, 1916.	Increase, 1917.	Decrease, 1917.
<i>Slides and Booms.</i>				
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Ottawa District.....	16,050 97	31,267 61		15,216 64
St. Maurice District.....	80,150 45	74,723 35	5,427 10	
Newcastle District.....	498 09	634 54		136 45
Saguenay District.....	496 50	1,601 91		1,105 41
Net decrease, \$11,031.40.....	97,196 01	108,227 41	5,427 10	16,458 50
<i>Graving Docks.</i>				
Esquimalt, B.C.....	17,472 08	22,264 08		4,792 00
Kingston, Ont.....	10,000 00	10,000 00		
Lévis, P.Q.....	26,215 11	30,495 63		4,280 52
Selkirk Repair Slip, Man.....	1,181 19	1,456 52		275 34
Haileybury Slip, Ont.....	50 00		50 00	
Decrease, \$9,297.86.....	54,918 38	64,216 24	50 00	9,347 86
<i>Rents and Sales.</i>				
Hydraulic rents.....	3,487 00	3,492 00		5 00
Minor Public Works.....	26 00	26 00		
Other public properties.....	136,688 72	96,902 03	39,786 69	
Net increase, \$39,781.69.....	140,201 72	100,420 03	39,786 69	5 00
<i>Accrued.</i>				
Slide and boom dues.....	97,196 01	108,227 41		11,031 40
Graving docks.....	54,918 38	64,216 24		9,297 86
Rents and sales.....	140,201 72	100,420 03	39,781 69	
Net increase, \$19,452.43.....	292,316 11	272,863 68	39,781 69	20,329 26
<i>Collected.</i>				
Slide and boom dues.....	97,142 16	108,227 41		11,085 25
Graving docks.....	64,918 38	64,216 24	702 14	
Rents and sales.....	94,729 03	90,129 39	4,599 64	
Net decrease, \$5,783.47.....	256,789 57	262,573 04	5,301 78	11,085 25

## SESSIONAL PAPER No. 19

No. 1.—STATEMENT of the number of pieces of Square Timber, Saw Logs, etc., that passed through the Government Slides and Works on the Ottawa river and its tributaries during the fiscal year ended March 31, 1917.

	Pieces.
Square timber. . . . .	None.
Saw logs. . . . .	2,516,375
Boom and dimension timber. . . . .	16,190
Railroad ties. . . . .	90,780
Cedars. . . . .	1,023
Fence posts. . . . .	13,642
	<hr/>
	2,638,010
	<hr/>

Also 34,739.97 cords pulpwood.

The revenue accrued on the above was \$16,050.97.

No. 2.—STATEMENT showing the Dues accrued on the undermentioned works on the Ottawa River and its tributaries during the fiscal year ended March 31, 1917.

River or other improvements—	Amount.
Main Ottawa. . . . .	\$ 1,261 87
Cheneaux Boom. . . . .	2,075 30
River Petewawa. . . . .	3,977 53
River Madawaska. . . . .	110 63
Coulange. . . . .	2,953 77
Dumoine. . . . .	322 22
Black River. . . . .	309 91
Gatineau. . . . .	5,039 74
	<hr/>
	\$16,050 97
	<hr/>





SESSIONAL PAPER No. 19

## THE DRY DOCK AT LEVIS, P.Q.

STATEMENT of Dues and other charges collected during the year ending March 31, 1917.

Name of Vessel Docked.	Tonnage.	Period of Dockage.		Dockage Charges.	Other Charges.	Total.
		From	To			
				\$ cts.	\$ cts.	\$ cts.
S.S. "Cascapedia".....	1849		1915-1916.	800 00		800 00
S.S. "Gaspesian".....	490		Wint ering.	200 00		200 00
Dredge "Fruhling".....			Wint ering.	200 00		200 00
S.S. "Lord Strathcona".....	495	April 19..	April 24..	150 00	50 00	200 00
2 Pontoons.....			Entry fee.	400 00		400 00
S.S. "D. A. Gordon".....			Entry fee.	200 00		200 00
Dredge "Ottawa No. 115".....			Wint ering.	400 00		400 00
2 Pontoons.....		April 19..	April 24..	200 00		200 00
Yacht "Chanticleer".....		May 30..	May 31..	200 00		200 00
D.G.S. "Lady Evelyn".....			Wint ering.	400 00		400 00
New Dry Dock.....			Lab or.		15 81	15 81
Dredge "Ottawa".....			Lab or.		23 68	23 68
S.S. "Huron".....	1945	May 31..	June 5..	525 06	4 50	529 56
S.S. "St. Paul".....	2029	June 5..	June 6..	200 00		200 00
			Entry fee.			
S.S. "Eaton Hall".....	3711	June 10..	June 13..	421 10		421 10
S.S. "Lord Strathcona".....	495	June 19..	June 21..	350 00		350 00
S.S. "Plessis".....			Entry fee.	200 00		200 00
S.S. "Montcalm".....			Entry fee.	200 00		200 00
S.S. "Eureka".....	170	April 19..	April 24..	300 00		300 00
S.S. "Cartier".....	556	April 24..	April 29..	250 00		250 00
S.S. "Plessis".....	559	June 14..	July 1..	800 00		800 00
S.S. "Arachne".....			Entry fee.	200 00		200 00
S.S. "Harry E. Packer".....			Entry fee.	200 00		200 00
Dredge "Beaujeu".....	2049	June 22..	June 29..	895 88		895 88
S.S. "G. R. Crowe".....	2940	July 11..	July 28..	1,723 20	29 75	1,752 95
S.S. "Fremona".....			Entry fee.	200 00		200 00
S.S. "Champlain".....	522	May 31..	June 10..	652 50		652 50
S.S. "Montcalm".....	1432	April 28..	June 30..	2,024 40	24 50	2,048 90
S.S. "Arachne".....	3898	July 28..	Sept. 13..	5,190 44	41 80	5,232 24
S.S. "McVittie".....			Entry fee.	200 00		200 00
Dredge No. 1.....			Entry fee.	200 00		200 00
Dredge No. 2.....			Entry fee.	200 00		200 00
Grain boat.....			Entry fee.	200 00		200 00
S.S. "Femona".....	3028	Sept. 15..	Nov. 29..	7,275 84	66 65	7,342 49
Yacht "Courcellette".....			Entry fee.	200 00		200 00
S.S. "Lord Strathcona".....			Entry fee.	200 00		200 00
				25,958 42	256 69	26,215 11





AMOUNTS EXPENDED BY THE DEPARTMENT OF PUBLIC WORKS OF CANADA DURING THE FISCAL YEAR ENDED MARCH 31, 1917—Continued.

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Rents.	Salaries of and Supplies for Caretakers.	Heating.	Lighting.	Water.	Power.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>PUBLIC BUILDINGS—Continued.</b>									
<i>Nova Scotia—Concluded.</i>									
Liverpool post office, etc.		97 19		413 44	274 75	243 37	18 00		1,046 75
Lunenburg post office.	588 87	2 00		437 71	341 61	581 36	59 00		2,010 55
Napan experimental farm.	2,474 22					295 68			2,769 90
New Glasgow post office, etc.		467 33		498 96	336 10	587 74	100 00		1,990 13
North Sydney immigration building.					10 11	7 00			117 11
“ “ post office.		389 83		484 45	337 72	629 95	32 00		1,873 95
“ “ public works office (engineer)			605 25			1 00			624 25
Parrishero post office.		53 70	30 00	466 96	343 50	268 90	52 00	7 00	1,222 06
Pictou custom house, etc.		136 90		300 00	646 53	9 48	25 00		1,117 91
“ “ post office.	1,356 66	583 65		306 15	214 00	55 31	25 00		2,540 80
Shelburne post office, etc.	615 20			445 76	381 78	295 08			1,737 82
Springhill post office, etc.		296 51		568 22	289 00	294 06	30 00		1,477 79
Stewiacke post office.	8 95	27 25							8 95
Sydney immigration building.									27 25
“ “ post office building (Marine and Fisheries).			540 00						540 00
“ “ post office, etc.	1,086 99	31 41		672 00	333 08	675 59	58 00		2,867 16
Sydney Mines post office, etc.		59 49		427 50	308 25	397 05	30 00		1,222 29
Truro post office.		20 71		525 60	372 25	425 64	30 00		1,374 20
“ “ new public building.	442 34								442 34
Westville post office.		186 65		433 90	179 85	231 01	21 00		1,052 41
Weymouth post office.			100 00						100 00
“ “ post office.		7 57	56 25			12 69			76 51
Windsor immigration office.		178 36		584 81	323 74	775 20	50 00		1,912 11
“ “ post office, etc.		164 61		437 80	373 90	198 00	38 00		1,212 31
Wolfville post office.		216 85		486 30	552 94	712 21	72 00		2,750 90
Yarmouth post office, etc.	710 60	158 37							158 37
Minor offices throughout the province.									
Totals, Nova Scotia.	14,001 96	8,450 83	12,455 21	27,092 80	14,612 13	14,613 29	2,834 61	756 57	94,817 40
<i>Prince Edward Island.</i>									
Charlottetown experimental farm.	221 34				534 38	122 00			877 72
“ “ custom house, etc.	547 21	183 52	70 00	673 19	747 13	12 71	34 00		2,247 76
“ “ immigration office.			160 38			2 34			162 72
“ “ post office, etc.	3,735 21	245 40	14 58	2,695 27	1,052 04	1,228 95	225 00		9,196 45

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" Public Works office (clerk of works res.)	29 00	24 00	137 40	405 03	44 46	4 50	53 00
Georgetown post office, etc.	197 74		432 86	473 45	470 13		789 13
Montague post office, etc.	55 80		491 16	424 82	646 20		1,676 08
Souris post office, etc.	520 40	45 00	316 75	530 05	301 09		1,439 74
Summerside post office, etc.	295 22	90 00	413 89	340 25	96 76		90 00
Tignish post office	355 98	0 67	472 25	573 75	131 42		992 06
Totals, Prince Edward Island	1,883 06	269 63	5,098 16	4,977 17	2,554 51	308 50	19,394 79
<i>New Brunswick.</i>							
Bathurst post office, etc.	418 65		432 86	473 45	470 13	5 50	1,800 59
Campbellton post office, etc.	62 20		491 16	424 82	646 20	52 00	1,676 08
Chatham post office, etc.	226 85	45 00	316 75	530 05	301 09	20 00	1,439 74
Clair immigration office.		90 00	413 89	340 25	96 76	26 00	90 00
Dalhousie post office, etc.	55 16	156 00	479 75	349 50	116 01	18 00	1,136 01
Edmundston immigration office.	110 70	40 00	479 75	349 50	116 01	22 05	1,56 00
Fairville post office.	5,835 52		584 65	375 53	185 87	81 00	6,211 05
Fredericton experimental farm	4,479 06		651 26	1,075 75	1,150 34	48 41	3,570 94
" " (new)	463 46		396 72	358 79	92 97	32 00	1,097 31
Grand Falls post office.	216 83		512 42	417 28	17 00	30 00	1,164 80
Hartland post office, etc.	188 10		431 30	125 74	134 73		807 59
Hillsborough post office, etc.	115 73		161 15	306 71	49 35	80 00	632 16
Marysville post office	34 95		423 52	252 60	334 61	14 50	1,171 08
Milltown post office, etc.	95 85		612 22	588 76	440 91	135 25	3,487 98
Moncton post office.	487 11		597 07	457 50	650 10	35 00	2,093 50
Newcastle post office, etc.	353 83	25 00	464 10	326 63	42 50		1,135 02
Ossakeag (Hampton) post office.	276 79		449 06	512 00	46 84		1,208 05
Richibucto post office.	200 15	100 00	720 00		1 16		148 06
St. John Bank of Commerce building (Marine agency)	46 90		4,582 93	2,988 05	717 67	2,118 29	3,044 38
" quarantine station	206 09	225 00	43 15	4,517 59	1,262 48	1,932 00	11,964 09
" custom house, etc.	1,294 29		120 00	2,543 67	308 49	24 84	915 87
" savings bank	82 69		2,543 67	1,026 47	1,262 48	537 96	6,744 80
" immigration building	844 73	52 00	5,522 09	2,986 55	2,746 69	321 18	7,689 54
" post office, etc. (old)	925 20	5 00	461 86	1,026 47	172 50	10 50	93,105 91
" " (new)	643 92		576 41	30 70	298 40	12 69	850 46
" West post office.	52 70	150 40		277 50	10 80	81 48	387 20
St. Stephen immigration office.	193 41		411 01	528 00	148 23		1,233 79
" " post office, etc.			1,022 66	2,453 53	43 68		10 80
" Bridge post office, etc.			500 22	338 69	456 91		1 60
Sackville post office	1 60					58 00	1,498 14
Sussex post office, etc.	289 03					34 00	5,382 50
Tracadie lazaretto.	58 67						1,459 60
Tracadie lazaretto.	1,862 63						1,363 16
Woodstock post office.	129 78						
Minor offices throughout the province.	363 16						
Totals, New Brunswick	96,466 19	888 40	23,921 97	23,154 37	11,154 68	5,708 60	170,488 44





AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Rents.	Salaries of and Supplies for Caretakers.	Heating.	Lighting.	Water.	Power.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Public Buildings—Continued.									
Quebec—Continued.									
Montreal postal station Ste. Cécile.			1,750 00	32 85	217 88	149 45	66 94		1,750 00
" St. Henri.	719 98	15 88							1,202 98
" Windsor station mail room.		213 50	213 00						426 50
" Mount Royal East postal station.		73 25	280 00				5 82		359 07
" Prud'homme block (Pub. Works D., etc.)			888 35						888 35
" Slaughteressy building (Marine, etc.)		107 33	12,014 00			61 52	267 68		12,450 53
" supervising engineer's office (D.P.W.)			590 36			1 88	12 50		604 74
" 41-45 Union street, valuation of property	200 00								
" Generally.				117,581 91	38 00	1,633 48			200 00
Murray Bay post office, etc.	4,981 13	41 58		405 33	560 00	220 02			119,233 39
Nicolet post office, etc.		168 65		529 81	242 98	121 22	70 80		6,208 06
Nonington immigration building.		13 03	1 00	300 00	178 50	13 20			1,133 46
Peribonka immigration building.		83 60	20 00	199 92	142 50	6 35			505 73
Pierreville post office.	374 25	8 80		177 90	72 25	65 79	15 00		452 37
Plessisville post office.		127 65		144 35	145 00	299 07	55 90		713 99
Quebec archives office.			360 00	330 00		8 40			771 97
" Candiac post office.			125 00						698 40
" Citadel (Gov. Gen's quarters).		1,081 10	34 00	570 00	779 25	83 53			125 00
" custom house, etc.		379 48	92 00	3,541 43	1,665 63	913 20	800 00	525 00	2,547 88
" engineer's office, D.P.W. (Meager building)			1,005 00	3,000 38	1,078 75	312 44	450 00		7,916 74
" examining warehouse.		570 73						675 00	1,005 00
" immigration buildings (Louise unemployment bankment).		258 72			276 48	1,046 19		1,023 75	6,057 30
" imm. detention hospital (medical superintendent's res.)	7,802 70		600 00						10,407 84
" imm. detention hospital (Savard park)					1,043 77	299 60	2,104 69		600 00
									3,448 06

This sum indicates the total wages of caretakers, firemen, elevator-men and cleaners for all buildings in Montreal. Owing to system of organization of these staffs it has not been practicable to assign proper share to each building.



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immigration office (103 St. Jean).....	15 60	337 50	384 37	357 12	750 00	710 22
marine agency (King's wharf).....	56 85	27 09	.....	.....	.....	1,134 37
observatory.....	287 89	.....	.....	64 01	50 00	84 04
aviation quarters (R. & O. Bldg.).....	8 00	70 00	.....	.....	.....	401 90
post office, etc. (main).....	1,522 75	210 50	2,683 04	1,220 89	810 00	78 00
post office, case examiner's office.....	.....	240 00	.....	.....	.....	82,576 44
postal station "B".....	.....	3,000 00	.....	90 23	.....	240 00
seeds office.....	.....	3,000 00	.....	.....	.....	3,090 23
St. Roch post office.....	1,279 20	.....	.....	.....	400 00	300 00
St. Sauveur post office.....	77 56	.....	296 83	358 64	.....	3,231 24
war tax office, 76 St. Peter st.....	148 15	200 00	266 00	211 23	183 75	1,166 15
weights and measures office.....	.....	.....	.....	4 20	.....	352 33
Generally.....	.....	.....	150 24	9 12	.....	159 36
Richmond post office, etc.....	145 40	.....	4,409 67	165 00	.....	4,574 67
Rigaud post office, etc.....	38 60	.....	501 70	318 25	.....	1,319 16
Rimouski post office, etc.....	59 65	.....	300 00	161 24	.....	838 99
Roberval immigration building.....	197 82	.....	361 59	101 64	150 00	685 88
post office, etc.....	120 85	25 00	183 26	16 00	58 33	917 91
Rock Island post office, etc.....	90 85	.....	437 50	400 33	25 00	1,253 47
Shawinigan Falls post office.....	167 01	.....	514 19	208 36	28 50	1,132 51
Shawville post office.....	12 75	.....	408 76	131 80	19 58	1,195 70
Sherbrooke engineer's office (D.P.W.).....	.....	1,450 25	443 56	131 80	.....	7,822 56
post office, etc.....	866 91	16 75	248 30	285 21	.....	1,450 25
inspector's office.....	8 95	996 00	829 74	455 65	60 41	2,860 90
Sorel post office, etc.....	532 85	.....	619 57	26 73	.....	1,031 68
Stanhope immigration office.....	25 00	.....	733 73	465 72	256 00	2,607 97
Stc. Agathe des Monts post office.....	112 63	.....	.....	.....	.....	25 00
Stc. Anne de Bellevue post office.....	.....	270 83	331 17	320 68	28 00	5,163 36
Stc. Anne de la Pocatiere exp. farm.....	.....	.....	197 04	25 20	.....	324 03
St. Eustache post office.....	.....	300 00	.....	.....	.....	2,456 62
St. Felix de Valois post office.....	441 15	65 25	.....	30 22	.....	330 22
St. Gabriel de Brandon post office.....	41 24	200 00	483 48	188 80	75 00	65 25
St. George de Beauce post office.....	445 40	.....	389 88	17 30	100 00	200 00
St. Hyacinthe inland rev. building.....	285 80	.....	646 44	271 40	150 00	767 25
post office, etc.....	93 50	.....	372 62	29 30	60 00	1,755 46
St. Jean custom house.....	.....	22 91	.....	158 80	50 00	881 50
post office.....	681 67	112 57	435 71	91 97	56 82	857 81
St. Jean de Malta post office.....	720 76	.....	.....	19 99	9 00	92 91
St. Jerome post office, etc.....	292 90	162 00	511 96	119 73	26 52	1,561 03
St. Joseph de Beauce post office.....	.....	50 00	162 90	.....	.....	1,674 89
St. Lambert post office.....	84 90	.....	.....	.....	.....	1,541 88
St. Romuald d'Archevin post office.....	.....	.....	290 00	209 65	62 50	162 00
Stc. Rose post office.....	243 45	.....	.....	.....	.....	1,610 26
Stc. Therese post office, etc.....	.....	.....	.....	.....	.....	50 00
St. Yre post office.....	55 85	.....	330 63	118 18	17 00	684 86
Terrebonne post office, etc.....	78 83	220 00	179 05	243 55	15 00	812 81
Theford Mines post office, etc.....	.....	420 00	.....	.....	.....	220 00
Trois Rivieres paymaster's office.....	34 52	.....	107 50	8 12	.....	570 14
post office inspector's office.....	.....	.....	.....	.....	.....	4,102 54
post office, etc. (new).....	4,102 54	.....	.....	.....	.....	.....





AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Rents.	Salaries of and Supplies for Caretakers.	Heating.	Lighting.	Water.	Power.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
PUBLIC BUILDINGS.									
<i>Ontario.</i>									
Acton post office, etc.		164 34		473 36	310 65	119 01			1,067 36
Alexandria post office, etc.		341 70		510 67	278 93	222 70	7 50		1,361 50
Almonte post office, etc.		256 63		478 16	358 76	177 17	75 00		1,345 72
Amherstburg post office, etc.		62 49		425 80	225 00	101 24	35 00		849 53
Arnprior post office, etc.	1,024 94	73 55		437 62	222 79	107 43	32 41		1,868 74
Aurora post office, etc.		318 33		85 80	321 70	120 85			846 68
Aurora post office, etc.		291 17		466 48	225 98	33 36	22 00		1,038 99
Aylmer post office, etc.		191 86		600 79	366 30	236 82	37 84		1,433 61
Barrie post office, etc.		256 77		498 49	435 73	378 94	50 00		1,619 93
Belleville post office, etc.		275 55		740 87	1,064 52	616 27	83 25		2,780 46
Blenheim post office.			200 00						200 00
Bowmanville post office, etc.		106 76		488 25	189 65	204 51	28 85		1,018 02
Bracebridge post office, etc.		65 66		475 92	351 63	108 30	10 59		1,012 30
Brampton post office, etc.		937 48		482 76	281 50	95 31	20 27		1,817 32
Brautford drill hall (old).		250 00							250 00
" " post office, etc. (new).	2,999 79	291 03		5,429 37	1,223 53	383 73	86 76	321 25	11,235 46
Bridgeburg immigration office.		29 81							29 81
" " post office, etc.		60 61		401 01	205 50	157 63	20 00		844 75
Brighton post office, etc.			57 34						57 34
Brockville post office, etc.	567 43	243 65		831 76	501 00	625 03	170 00		2,438 87
Brussels post office, etc.		32 00							32 00
Burford post office, etc.	2,622 13			436 68	376 25	51 80			3,486 86
Cardinal post office.	3,651 96		108 33						3,760 29
Carleton Place post office, etc.		132 20		417 71	104 50	249 29	31 52		1,025 13
Cayuga post office.		116 21		317 10	67 34	70 06			1,570 71
Chatham post office, etc.	169 34	180 67		629 27	202 52	169 06	17 14		1,368 00
Chesley post office, etc.		56 90		454 91	186 75	210 99	25 00		934 55
Clinton post office, etc.		380 49		224 49	206 49	142 48	14 54		968 49
Cobalt post office.		2 83	2,000 00						2,002 83
Cobourg immigration building.			85 00		21 35	6 00			112 35
" " post office, etc.		95 67		650 03	265 67	346 85	50 76		1,438 98
Collingwood post office, etc.	3,792 55			1,586 12	502 30	159 85	28 42		6,069 44
Cornwall post office, etc.	1,974 36	1,754 52		535 83	355 31	260 00	75 00		4,953 02
Doscoeno post office, etc.		144 45		579 12	324 00	326 30	39 00		1,412 87
Dresden post office.		62 00		426 31	272 78	175 56	39 36		976 01

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Dundas post office.....	1,223 57	76 78	498 59	303 31	204 13	33 40	1,116 21
Dunville post office.....	1,223 57	196 86	482 86	252 03	223 72	34 00	1,223 57
Eganville post office, etc.....	1,358 80	22 00	498 53	296 10	123 33	6 75	1,189 47
Elmira post office, etc.....		73 52	461 81	267 85	79 13	6 00	1,323 69
Elora post office.....		26 49	520 54	203 50	170 86	12 50	900 76
Essex post office, etc.....		193 23	455 26	1,159 50	27 23	59 40	931 51
Fergus post office.....	9,990 10	157 85	1,633 71	720 50	283 57	90 00	6 00
Fort William Dist. Engineer's office.....	2,326 42	52 37	641 66	309 90	143 45	70 40	1,040 89
“ examining warehouse, etc.....		77 61	577 07	187 10	51 88	10 17	943 26
Galt post office, etc.....		24 16	404 50	227 15	216 80	31 35	13,230 92
Gananoque custom house.....		60 75	404 50	296 00	127 29	2 00	4,114 62
“ post office.....		39 80	484 31	284 67	191 40	120 00	1,178 43
Glencoe post office, etc.....		948 33	484 31	211 00	79 43	10 46	273 31
Godereh post office, etc.....		84 63	457 26	211 00	79 43	10 46	919 89
Grimsby post office, etc.....		387 80	584 07	443 37	972 13	68 68	911 51
Guelph post office, etc.....	28,162 55	749 43	8,418 88	474 74	18 25	1,231 50	2,028 71
Hamilton post office, etc. (enlargement).....	7 40	1 20	1,200 00	496 51	158 85	34 00	1,919 06
“ postal station “B”.....	1,139 89	131 87	608 87	297 00	253 44	35 62	41,188 10
Hanover post office, etc.....		102 00	453 98	104 00	145 53	35 62	1,231 59
Harriston post office, etc.....			459 38				2,404 12
Hawkesbury post office, etc.....							1,170 29
Hespeler post office, etc.....							846 53
Ingersoll post office, etc.....	11 12	134 13	589 57	578 17	267 77	54 47	11 12
Kemptville post office, etc.....	15 00	185 38	304 40	262 69	285 90	20 00	1,639 11
Kenora post office, etc.....	1,500 00	434 25	486 61	688 50	159 83	72 11	2,558 37
Kincardine post office.....		93 10	280 18	382 22	284 70	20 00	1,841 30
Kingsville post office.....	2 99	243 68	720 00	414 00	119 70	59 25	1,060 20
“ custom house.....		49 38	720 74	24 00	7 50	26 80	1,556 63
“ immigration office.....				391 50	89 22		211 50
“ inland revenue office, etc.....							3,599 95
“ military hospital.....	12 25						12 25
“ Militia and Defence (Bank bldg.).....							120 00
“ ordnance stores.....							1,000 00
“ post office, etc.....		547 56	746 75	742 80	593 98	59 50	28,124 58
“ R.M.C. covered drill hall.....	28,124 58	0 95		70 00	6 19	4 52	28,124 58
Kitchener examining warehouse.....							741 66
“ G.T.R. station mail room.....							100 00
“ post office, etc.....	2,847 65	74 30	510 21	273 57	188 55	35 24	3,929 52
Lakefield post office.....		291 37	421 41	207 23	303 00		1,223 01
Lansdowne post office.....							61 67
“ post office.....							1,399 92
Lansdowne post office, etc.....		517 17	445 80	255 00	158 70	23 25	3,188 14
Lindsay post office, etc.....	1,817 77	118 77	470 15	462 00	283 72	29 61	1,231 21
Listowel post office, etc.....		732 37	434 38	342 45	282 66	52 95	2,715 82
London custom house, etc.....		95 80	1,147 90	296 43	400 02	139 10	96 65
“ immigration office.....	761 79	720 93	2,036 06	2,224 98	688 68	121 38	6,553 82
“ post office, etc.....	187 43		19 50	0 99	0 99		366 44
“ war tax office.....							125 00
L'Original post office.....		272 54	569 50	118 54	62 40	2 00	1,024 98
Markham post office.....							

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Rents.	Salaries of and Supplies for Carpenters.	Heating.	Lighting.	Water.	Power.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Public Buildings—Continued.									
Ontario—Continued.									
Matheson post office.....	222 99		200 00	571 33	475 35	84 48	23 45		222 99
Merrickville post office.....		218 95		63 80	38 24				200 00
Midland post office, etc.....		17 08		421 15	174 58	148 06	24 00		1,373 56
Midway post office, etc.....		131 00		616 47	201 00	99 08			808 79
Milton post office.....	2,035 93	78 30		485 88	231 60	75 23	96 00		3,061 38
Milverton post office, etc.....		286 32		365 13	298 30	173 76	12 00		1,475 03
Mitchell post office.....	101 45	135 41							1,086 25
Mount Forest post office.....	7,335 20			513 01	352 90	311 14	72 41		7,335 20
Napanee drill hall.....		22 25		791 61	175 00	81 12	11 22		1,333 86
“ “ post office, etc.....						2 38			1,081 23
Newmarket post office, etc.....		128 93		630 41	460 75	140 82	54 98		1,415 90
Niagara Falls custom house (Bridge No. 2). “ “ post office, etc.....		336 30	12 00	762 65	619 46	287 47	65 00		2,080 88
North Bay post office, etc.....		57 75		443 01	250 90	153 31			929 97
North York post office, etc.....		11 50		605 85	138 91	94 59	20 00		870 85
Orangeville post office, etc.....		155 82		498 56	699 79	282 27	22 10	15 15	1,673 72
Orillia post office, etc.....		687 55		561 41	314 73	200 49	30 16		1,806 34
Oshawa post office, etc.....		92 25		545 65	556 31	181 80	72 44		1,448 45
Owen Sound post office, etc.....	14,215 21				40 00				14,255 21
Pahnerston post office, etc.....		212 80		474 76	285 85	96 34	45 60		1,115 35
Paris post office.....		5 70		195 42	255 10	73 86	4 46		534 54
Parkhill post office, etc.....	36 00	292 44		423 03	434 83	349 27	40 00		1,575 57
Pembroke post office, etc.....	73 55								73 55
Perth post office.....		134 53		431 19	299 70	91 81	50 00		1,004 23
Peterboro custom house. “ “ new public building (Custom and “ “ Inland Rev.).....	102 33			739 26	430 62	235 80	75 00		1,790 71
“ “ post office, etc.....		61 30	50 00						111 30
“ “ weights and measures office. Petrolia post office, etc.....	980 00	46 65		431 50	299 67	179 35	47 76		1,984 93
Pretton post office, etc.....		80 65		398 33	293 75	128 02	33 75		934 50
Port Arthur examining warehouse, etc.....	11,860 22	87 93		4,500 75	1,799 87	210 53		656 36	19,225 35
“ “ immigration building.....		1 10					5 50		6 60
“ “ post office, etc.....		167 52		563 21	533 00	300 96	101 93		1,666 62
Port Colborne post office.....		93 43		403 08	129 00	112 75	20 00		758 26

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Port Hope post office, etc.	881 32	15 03		425 90	404 45	438 60	41 46	2,206 76
Port Perry post office.		54 21		420 55	211 00	184 44	44 44	914 64
Prescott custom house.		3 63		81 97	163 75	19 13	60 00	328 48
" post office.		46 82		738 44	282 00	146 99	60 00	1,284 25
Preston post office, etc.		111 60		548 65	347 06	281 30	135 14	1,424 35
Renfrew post office, etc.	2,109 10		375 00	472 90	400 47	624 54	27 00	3,634 01
Ridgectown post office.								375 00
Sandwich post office, etc.		18 25		359 76	256 80	46 18		680 99
Sarnia post office, etc.		312 80		523 03	324 43	187 68	40 00	1,387 94
Sault Ste. Marie post office, etc.		759 91	113 50	1,842 80	1,002 25	549 08	157 45	4,884 74
Seaforth post office.		491 84		388 98	280 94	113 69	14 00	1,289 45
Shelborne post office, etc.		480 58		454 15	366 38	152 29	31 00	1,484 40
Simcoe post office, etc.		103 90		493 43	106 68	353 82	20 00	1,077 83
Smith's Falls post office, etc.	1,417 27	64 11		403 78	216 65	520 00	109 25	2,731 06
St. Catharines post office, etc.	66 64	207 89		479 68	471 33	179 29	242 41	1,647 24
St. Mary's post office, etc.		81 55		399 55	341 75	143 80	39 90	1,006 55
St. Thomas post office.		52 49		449 90	371 25	135 67	21 50	1,030 81
Steele post office.		176 60		409 25	188 47	113 24	28 50	916 06
Stratford post office, etc.		285 40		572 85	557 32	317 49	56 20	1,789 26
Strathroy post office, etc.		380 50		433 67	266 30	92 63	23 40	1,196 50
Sturgeon Falls post office.			650 00					650 00
Sudbury post office, etc.	1,066 20	422 37		548 16	1,470 44	801 45	42 36	3,284 78
Sydenham post office.		40 56		436 78	212 90	138 48		1,066 20
Tilbury post office, etc.	175 89	334 55		404 73	199 75	171 71	132 32	1,828 72
Tillsonburg post office, etc.	930 58							1,418 95
Toronto customs building (new).		461 07		923 35	607 34	814 02	79 86	930 58
" customs express office.		821 23		5,799 15	1,198 64	485 20	45 81	3,016 07
" custom house (old).			1,058 95			19 44		8,463 88
" engineer's office (D.P.W.).		23 63		9,604 48	2,590 12	372 13	145 15	1,078 39
" examining warehouse.		47 00		4 25				14,177 07
" Foy building (Mar. and Fish, D.)		113 95						51 25
" immigration building, Simcoe st.		27 60						113 95
" office, old G.T.R. str.		348 48						1,027 60
" inland revenue building.				1,056 93	492 12	190 52	10 53	2,110 72
" military buildings (barracks).	280 00							280 00
" post office, etc. (and additions)	4,481 26	2,837 17	301 94	21,487 36	6,038 27	3,932 18	347 23	39,789 53
" repairs to buildings on this site of addition still occupied by private tenants.								
" "A," new C.T.R. str.		3,280 59						3,280 59
" "A," old C.T.R. str.	311 650 61	818 11	2,550 00	2,373 99	24 05	396 63		311 650 61
" "A," temporary.		900 31		2,094 81	843 75	325 48	240 93	6,403 71
" "B,"		6 64	2,959 24	17 20	12 00	163 29		23,638 02
" "C,"		133 93		723 05	365 12	200 61	6 18	3,104 55
" "D,"		138 00		751 82	384 44	155 89	14 49	1,437 20
" "E,"	9 84	83 24	1,440 00	46 13	13 51	136 93	46 35	1,437 24
" "F," etc.		233 89	52 00	1,618 00	531 96	156 20	28 39	1,776 00
" "G," new.		141 27		986 27	620 36	246 24	44 90	2,620 44
" "G," old.			200 00					200 00
" "H,"		8 45	900 00	22 82	1 33	43 79		976 39
" "K,"		75 24		630 39	395 39	61 47	17 10	1,179 59





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" post office, etc.	269 68	700 80	503 79	211 17	32 76	1,685 44
Neepawa post office, etc.	93 83	741 50	460 13	82 50	460 13	1,410 72
Portage la Prairie armoury, etc.	12 16	464 20	615 25	162 85	151 40	1,405 86
" examining warehouse.		420 00		12 00	23 75	455 75
" post office.	102 73	632 96	587 90	605 29	37 50	1,966 38
Reston post office.		112 00				112 00
Robin forestry office.	32 75	647 45	478 44	80 75	25 31	330 00
Selkirk post office.		180 00				1,264 70
Shoal Lake post office.	77 13	573 65	480 09	143 29	150 35	180 00
Souris post office, etc.	55 89	639 65	105 97	46 70	18 37	1,424 51
St. Boniface post office.						866 58
St. James drill hall.	468 26					468 26
Stonewall post office.	232 78	402 02	182 00	40 26		857 06
Swan River immigration office.						230 00
Transcona post office.						650 00
Virden immigration building.						310 35
" post office, etc.	454 70	621 48	649 65			2,045 83
Winnipeg-Boyd building (Archives, Railway Commission, etc.)	7 00	2,239 33		27 49		2,273 82
" Chamber of Commerce building (Int. Dept., etc.)						4,027 97
" custom house, etc. (old post office)	1,369 41	7,676 00	2,363 01	82 97	26 21	12,311 52
" engineer's office (D.P.W.)	4 55			719 34	153 00	1,652 25
" examining warehouse.	958 20	6,772 45	4,090 65	337 22	299 04	12,616 53
" grain warehouse.						47 88
" immigration buildings.	2,993 12	1,925 00	5,945 78	703 31	1,222 61	15,739 60
" immigration building (new)						436 48
" North, drill hall.						1,716 26
" post office, etc.	4,813 26					30,619 61
" postal station "A"	71 75	13,221 92	8,130 83	3,192 87	840 42	1,716 26
" "B"	321 97					3,812 57
" "C"	6 17	2,389 00	846 24	275 36	90 12	3,943 60
" "D"	154 56	276 00	5 52	77 00		1,804 69
" Union station mail room and immigration office.		314 35	305 32	51 16	20 13	2,508 10
" war tax office (Union Bank building) generally.	18 90					2,434 90
" generally.	140 00	5,715 00		4 97		621 22
Minor offices throughout the province.	1 44			35 95		5,750 95
Totals, Manitoba.	8,389 43	47,047 31	30,232 49	9,029 21	3,237 85	142,931 06
<i>Saskatchewan.</i>						
Battleford immigration building.			50 00	8 00		58 00
" post office, etc.	1,336 30	582 65	822 67	511 59	36 93	3,290 14
Big River forestry office.						90 00
Biggar immigration building.	25 45					25 45
Estevan post office, etc.	100 44	531 97	197 98	161 42	17 95	1,009 76
Gravelbourg immigration building.						10 50
" post office, etc.	161 60	155 00	273 75	37 25		627 60

Amounts expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Rents.	Salaries of and Supplies for Caretakers.	Heating.	Lighting.	Water.	Power.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Prince Edward Island—Continued.</i>									
<i>Saskatchewan—Concluded.</i>									
Hudson Bay Junction forestry office.			141 20	667 95	751 30	275 17	41 97		141 20
Humbolt post office, etc.		613 35			587 50	292 69	309 30		2,350 74
Indian Head experimental farm.	4,396 25								5,585 74
" Fisheries office.			208 00						208 00
" forest nursery station.		62 75							1,178 47
" forestry office.	200 40	4 50	516 00				122 05		731 43
Kerrobert immigration building.		6 95	1 00						168 50
Lloydminster immigration building.		131 63							217 80
" post office, etc.				567 66	182 50	28 35			1,641 80
Maple Creek forestry office.			90 00		516 10	426 11			90 00
" land office, etc.			1,230 00						1,433 53
" post office, etc.		123 26		215 96	154 98	19 75	28 80		953 68
Melfort post office, etc.		776 57		676 22	387 01	194 65	32 80		2,772 92
Moosjaw immigration building.		15 10	200 00		1,026 45	245 68	48 00		412 76
Moosjaw post office, etc.		746 05	175 00		102 17	49 59	15 60		12,465 98
North Battleford immigration building.	2,655 68		2 00	3,419 05	3,639 13	1,199 47	230 30	401 30	149 45
" immigration and lands office.		109 13			16 95	21 37			56 10
" " post office, etc.		414 63	50 00			4 60	1 50		3,261 38
North Portal immigration building.	722 39			602 05	929 00	332 01	261 30		83 30
Prince Albert engineer's office (D.P.W.).			1 00		82 20				1,122 25
" forestry office.			125 00			11 00			125 00
" immigration building.									202 45
" post office, etc.	2,458 51		100 00	2,040 25	1,465 40	783 64	8 20	109 20	6,957 00
Regina, accommodation for Asst. Rec. Gen'l's office.	22,064 77								22,064 77
" examining warehouse.		40 16		574 25	557 10	58 98	26 80		1,257 29
" immigration building.		67 10				29 18	32 40		128 68
" inland revenue office.			360 00			6 88			366 88
" post office, etc.	3,729 48		40 77	2,824 68	2,174 49	1,229 49	325 20	335 07	10,659 18
" public buildings, local improvements, taxes.	4,618 26								4,618 26
" weights and measures office.		143 50	1,200 00			14 00			1,357 50
Rosthern experimental farm.									3,082 31
Saskatoon, Canada building (Int. Rev., etc.)	2,736 56	311 50	1,411 95		345 75	37 44			1,760 89



AMOUNTS EXPENDED BY THE DEPARTMENT OF PUBLIC WORKS OF CANADA DURING THE FISCAL YEAR ENDED MARCH 31, 1917—Continued.

Name of Work.	Construction and Improvements.		Repairs and Furniture.		Rents.		Salaries of and Supplies for Caretakers.		Heating.		Lighting.		Water.		Power.		Total.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
PUBLIC BUILDINGS—Continued.																			
Alberta—Concluded.																			
Edmonton immigration building.....			842	55	3	00	341	59	118	46	265	59					1,571	19	
" land office.....			216	11	6,600	00			252	52							7,381	48	
" national service offices.....					175	00			6	00							181	00	
" new drill hall.....																	160	99	
" post office, etc.....			1,617	48	192	10	1,064	87	1,501	82	195	10	324	77			11,471	20	
" weights and measures office.....			184	35			6,575	06									184	35	
Edmonton South (Strathcona) immigration building.....			67	42			992	35									81	17	
" post office, etc.....			146	50	600	00			536	05			10	70			3,453	17	
Edson immigration building.....			600	00					146	53			48	46			746	53	
Entwistle immigration building.....			145	75					128	31							247	28	
Grande Prairie immigration building.....			5	00	780	00	3	00	98	53							913	31	
" land office.....			28	00	240	00	300	00									268	00	
Ground immigration building.....					480	00			300	00							600	00	
" land office.....			64	48			6	65									480	00	
High River land office.....			1,158	77					215	48							526	61	
Lacombe experimental farm.....			695	50					585	50			274	99			2,019	06	
Lethbridge experimental farm.....									561	04			72	14			1,328	68	
" immigration building.....									229	65			44	40	100	00	437	30	
" land office and custom house.....									478	35			30	50			1,137	03	
" post office, etc.....			2,447	43			4,586	32	937	60	206	30	545	40	322	65	9,152	09	
Macleod custom house.....					106	30			108	85			59	21			190	57	
Medicine Hat examining warehouse.....					5	00											5	00	
" immigration building.....																	343	00	
" post office, etc.....			976	64	660	00	1,625	97	182	01	124	30	850	91			3,759	83	
Peace River (Crossing land office.....			35	93					150	00							845	93	
" post office.....					235	00			136	03							371	03	
Pinecher Creek forestry office.....					375	48											375	48	
Red Deer land office.....			3	40			740	72	266	02			49	90	39	00	1,099	04	
Rocky Mountain forestry office.....			136	03	300	00			29	45							465	48	
Vermilion immigration building.....			6	74	2	00	1	40	122	63							182	77	
Viking immigration building.....					1	00			154	88			2	00			157	88	
Wainwright immigration building.....					1	00			58	27							59	27	
Wetaskiwin post office.....			279	41			598	80	325	00			225	55	61	54	1,490	30	
Minor offices throughout the province.....			65	75					259	45							325	20	
Totals, Alberta.....			7,577	87	48,400	59	20,623	79	10,001	03	7,011	12	1,439	82	1,791	50	126,361	29	



AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Name of Work.	Construction and Improvements.	Repairs and Furniture.	Rents.	Salaries of and Supplies for Caretakers.	Heating.	Lighting.	Water.	Power.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>PUBLIC BUILDINGS—Concluded.</b>									
<i>British Columbia—Concluded.</i>									
Vancouver fisheries inspector's office, 519 Pender.....	17,623 48		110 00						110 00
" immigration detention bldg. (new)		1,157 91		793 02	1,176 76	977 10	140 55	297 00	4,442 34
" " (old)	4,781 85	532 46	60 50	13,761 72	1,992 77	3,453 03	147 00	453 55	25,182 88
" new post office, etc.		1,126 11		1,814 15	662 15	137 07	77 45		3,816 93
" old post office (Assay office)			3,079 28						3,860 23
" postal station "A" (C.P.R.)	185 00	280 95	7,200 00	1,979 00	478 11	318 29	81 05		10,492 00
" " "P".....		250 55		1,655 91	567 09	177 21	36 60		5,945 23
" " "C" (new).....	2,876 65	231 77	90 00						90 00
" " "C" (rented)		84 69	142 00			1 00			227 69
" war tax office (Winch building)		97 20		937 82	528 20	338 38	48 75		1,950 35
Vernon post office, etc.								74 54	
Victoria astronomical observatory (Little Saanich mountain)	30,011 10	432 25	300 00		105 10	28 11			30,651 10
" Belmont building (D.P.W., P.O.D.)		245 48		873 35	271 83	185 74	21 43		300 00
" custom house (old) (Marine office)								239 58	1,597 83
" examining warehouse (Ames-Holden B.)		107 06	5,400 00	973 60	80 71	87 09	15 44		6,903 48
" fumigating plant (C.P.R. wharf)		398 05	27 50						27 50
" immigration building.....	1,540 22				369 46	191 50	86 43		2,585 66
" meteorological observatory				952 65	116 01	176 43	19 08		1,264 17
" new drill hall.....	28,783 50								28,783 50
" new post office, etc.	4,387 69		136 00	11,717 24	2,013 54	1,804 55	111 51	750 75	20,921 28
" old post office, etc.		180 00		296 45	95 23	137 16	151 23		862 87
William's Head quarantine station	280 81	432 09	126 00		3,636 04				4,096 85
Minor offices throughout the province						12 72			12 72
Totals, British Columbia.....	113,354 52	13,980 62	32,932 68	60,051 60	21,154 22	15,522 96	1,850 89	2,798 42	261,045 91

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Name of Work.	Construction and Improvements	Repairs.	Staff and Maintenance.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
PUBLIC BUILDINGS.				
Yukon Territory.				
Heating, lighting, water, etc., for all public buildings in Yukon Territory.....			49,467 62	49,467 62
Total, Yukon Territory.....			49,467 62	49,467 62
<i>Generally.</i>				
Advertising coal tenders—Dominion buildings.....			2,881 44	2,881 44
Post office fittings and supplies—stock taken at Toronto for distribution throughout the provinces.....	6,101 38			6,101 38
Flags for Dominion public buildings.....			5,097 34	5,097 34
Printing, stationery, instruments, travelling, etc.....			20,368 11	20,368 11
Salaries of resident clerks of works, etc.....			50,964 61	50,964 61
Totals—Generally.....	6,101 38		79,311 50	85,412 88

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Nova Scotia.</i>					
Advocate wharf, improvements.....		11 09			11 09
Amherst harbour.....	6,442 78				6,442 78
Anderson's Cove, removal of gravel.....		299 65			299 65
Arichat wharf.....			16 18		16 18
Arisaig wharf extension.....		123 54			123 54
Baker's Point (East Jeddore) wharf.....			64 67		64 67
Barachois—Training pier.....		1,649 97			1,649 97
Barrington Head, wharf.....			824 10		824 10
Bass River wharf.....			798 87		798 87
Battery Point North, breakwater.....			399 88		399 88
Bear Cove (Halifax Co.), boat skid.....		86 40			86 40
Belliveau's Cove, North breakwater.....			500 00		500 00
Black Point, breakwater.....			249 00		249 00
Black Rock, Ferry landing.....		239 90			239 90
Blanche breakwater.....			203 68		203 68
Boularderie Centre wharf.....			179 67		179 67
Bridgeport, see Lingan Beach.					
Broad Cove Marsh, wharf.....			1,015 25		1,015 25
Burlington wharf.....			73 31		73 31
Caldwell's Cove, breakwater.....		499 96			499 96
Canso wharf extension.....		447 32			447 32
Caribou Island, raising causeway, etc....		2,397 33			2,397 33
Catalone Gut (Cape Breton), protection work.....		339 32			339 32
Centreville (Digby Co.), old breakwater.....			499 94		499 94
Centreville (Shelburne), wharf.....			249 95		249 95
Chebogue, beach protection.....			149 66		149 66
Chegoggin, breakwater.....			99 57		99 57
Clements Port.....	1,600 00				1,600 00
Comeau's Cove breakwater.....			263 30		263 30
Cottage Cove, breakwater.....		1,498 94			1,498 94
Cow Bay (Port Morien), breakwater.....			2,199 85		2,199 85
Devil's Island breakwater.....			518 48		518 48
Digby.....	\$15,121 32				
Less, work done for private firms.....	750 00				
	14,371 32				14,371 32
Digby, pier renewals.....			783 52		783 52
Digby (Racquet).....	7,011 90				7,011 90
East Chezzetcook (Red Island), breakwater.....			1,201 06		1,201 06
East Jordan, wharf.....			4 50		4 50
Eastern Points (Co. Lunenburg).....	324 68				324 68
East River (Pictou Co.), impts.....	6,361 40	150,291 86			150,653 26
Eatonville breakwater.....			799 95		799 95
Ecum Secum (Halifax Co.) wharf.....		149 52			149 52
Eel Brook, channel piers.....		1,442 16			1,442 16
Englishtown (Victoria Co.), wharf.....		2 00			2 00
Finlay Point, breakwater.....			599 69		599 69
Fox Island breakwater approach.....			1,011 12		1,011 12
French River, extension of breakwater pier.....		50 15			50 15
Fruids Point wharf.....			3 50		3 50
Gabarus Hr., beach protection.....		259 87			259 87
" breakwater.....			121 21		121 21
Georgeville wharf.....			111 12		111 12
Glace Bay, protection works.....			389 00		389 00
Gold River (Lunenburg Co.).....	897 94				897 94
Grand Etang wharf.....			25 16		25 16
Hall's Harbour, breakwater.....			1,323 05		1,323 05
Hampton, breakwater extension.....		934 67	1,248 67		2,183 34
Herring Cove, wharf.....			952 23		952 23
Inverness, harbour impts.....		351 00			351 00
Irish Cove, wharf.....		757 70			757 70



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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.		Construction and Improvements.		Repairs.		Staff and Maintenance		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
<i>Nova Scotia—Continued.</i>										
Jamesville, breakwater.....			1,029	68					1,029	68
Jeddore, Oyster Pond, wharf.....					73	89			73	89
Johnson's Harbour, wharf.....					290	00			290	00
Kelly's Cove, breakwater.....					631	24			631	24
"    old wharf.....					294	93			294	93
Kraut Point, wharf.....			447	13					447	13
L'Ardoise, beach protection.....			200	08					200	08
"    breakwater.....					499	52			499	52
Lingan Beach (Bridgeport, Cape Breton) protection works.....			781	03					781	03
Little Anse (Richmond), breakwater.....					488	75			488	75
Little Bass river improvements.....			10	00					10	00
Little Bras d'Or, wharf.....					650	75			650	75
Little Harbour (Pictou Co.), wharf.....			213	40					213	40
"    (Sheburne), b'kwater.....					700	10			700	10
Liverpool.....	24,649	30							24,649	30
Livingstone's Cove, wharf.....					217	30			217	30
Long Cove (Queen's Co.), breakwater.....					299	40			299	40
Low Point (Gabarous), removal of boulders.....				120	00				120	00
Lunenburg, harbour.....	51,764	03							51,764	03
"    back harbour.....	1,386	28							1,386	28
Mabou Harbour, jetties.....					350	75			350	75
Main-a-Dieu, breakwater.....					246	54			246	54
Malagawatch.....	621	59							621	59
Malignant Cove, breakwater.....			121	40					121	40
Marble Mountain, wharf.....					451	06			451	06
Margaree Harbour,.....	200	00							200	00
"    breakwater.....					665	63			665	63
"    wharf.....					486	21			486	21
"    Island, breakwater.....					258	13			258	13
Margaretville, breakwater.....					699	68			699	68
McKay's Point (Judique), breakwater.....					192	75			192	75
Meat Cove, boat harbour.....			656	36					656	36
Meteghan, breakwater.....			999	99					999	99
Meteghan River, breakwater.....					199	97			199	97
Middle River (Lower), closing channel.....			194	04					194	04
"    (Lower), shear dams.....					500	50			500	50
"    (Upper), shear dams.....					499	90			499	90
Mill Cove, breakwater extension.....			471	09					471	09
Morden, breakwater.....					775	41			775	41
Mosher's Bay, breakwater.....			3,697	61					3,697	61
Mulgrave, purchase of site for wharf.....			200	00					200	00
Murphy's Pond (Port Hood), Boat harbour.....			16	25					16	25
Necum Teuch, wharf.....					1,314	71			1,314	71
Neil's Harbour, breakwater.....					599	12			599	12
New Campbellton, wharf.....					200	62			200	62
Newelton, wharf.....					186	95			186	95
North River (St. Ann's), wharf.....					299	57			299	57
North Sydney, ballast wharf.....					27	50			27	50
North West Cove (See Tancook Isl'd.). Nyanza, wharf.....					99	91			99	91
Oakland (Lunenburg Co.).....	2,688	39							2,688	39
Parker's Cove, breakwater.....	990	73			1,099	99			2,090	72
Path End (Victoria Co.), boat landing.....					200	13			200	13
Phinney's Cove, breakwater.....					75	95			75	95
Pictou Harbour, channel.....	35,323	52							35,323	52
"    Island, wharf.....					700	00			700	00
Pleasant Bay, wharf.....					158	28			158	28
Port Clyde, wharf.....			54	30					54	30

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.		Construction and Improvements.		Repairs.		Staff and Maintenance		Total.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
<i>Nova Scotia—Continued.</i>											
Porter's Lake, boat channel to Three Fathom harbour.....			560	35						560	35
Port George (Annapolis Co.), breakwaters.....						1,358	40			1,358	40
Port Hastings, wharf.....						35	41			35	41
Port Hood, wharf.....			450	02						450	02
Port Lorne, breakwater.....						630	74			630	74
Port Maitland, breakwater.....						2,944	00			2,944	00
Port Wade, pier.....			1,524	24						1,524	24
Portuguese Cove, breakwater.....						1,160	37			1,160	37
Poulamond, approach to wharf.....						509	83			509	83
River Hebert, wharf.....						390	20			390	20
River John, wharf.....						990	00			990	00
Rose Bay (Lunenburg Co.), breakwater.....			50	41						50	41
Salmon River (Digby Co.), breakwater.....						500	60			500	60
Sandy Cove, breakwater.....						523	34			523	34
Saulnierville, breakwater.....			1,442	03						1,442	03
Seaforth, breakwater.....			1,684	90						1,684	90
Seal Island (Shelburne), breakwater.....						565	01			565	01
Seaside (Inverness), wharf.....						203	61			203	61
Selma (Hants Co.), wharf.....						897	68			897	68
Shad Bay, wharf extension.....			83	70						83	70
Short Beach, breakwater.....						63	60			63	60
Skinner's Cove, channel piers.....						2,929	41			2,929	41
South Cove (Victoria), wharf approach.....						50	55			50	55
South Gut, St. Ann's (Victoria Co.), wharf.....						302	87			302	87
South Side (Donald's Head), breakwater.....						778	14			778	14
South Wallace, wharf.....						1,795	43			1,795	43
Spry Bay, wharf.....			271	38						271	38
Spry Bay (Josie's), wharf.....						190	42			190	42
Stoney Island, wharf.....						350	63			350	63
St. Joseph (Inverness Co.), breakwater.....						150	00			150	00
St. Peter's Narrows.....	101	50								101	50
Summerside, wharf.....			225	14						225	14
Swim's Point, wharf.....						84	25			84	25
Sydney Harbour, South Bar (cribwork).....						762	64			762	64
Tancook Island, breakwater at Northwest Cove.....			4,918	87						4,918	87
Terence Bay, wharf.....			450	48						450	48
Three Fathom Harbour, beach protection works, etc.....						600	04			600	04
The Wharves (Lunenburg Co.), breakwater.....						76	40			76	40
Trout Cove (see Centreville).....											
Turner's Island, wharf.....						599	84			599	84
Upper Washabuck, wharf.....						247	61			247	61
Upper Woods Hr. wharf, causeway.....			2,540	20						2,540	20
Washabuck Centre, wharf.....						59	96			59	96
Wedge Point (Yarmouth Co.), breakwater.....						808	72			808	72
West Arichat, breakwater.....			355	35						355	35
West Chezzetcook, breakwater.....						599	96			599	96
West Dublin.....	654	43								654	43
Western Head (Queens), breakwater.....						309	45			309	45
West Pubnico, breakwater.....						595	62			595	62
White Point, breakwater.....			294	51						294	51
Whitewaters, wharf.....						495	27			495	27
Whycoomagh, wharf.....			1,471	64						1,471	64
Windsor harbour, boat landing.....						178	43			178	43
Wolfville, wharf approach.....						105	14			105	14

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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Harbours and Rivers.	Dredging.		Construction and Improvements.		Repairs.		Staff and Maintenance		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
<i>Nova Scotia—Concluded.</i>										
Yarmouth harbour.....	24,902	81								
Less work done for private firms.....	477	00								
	24,425	81			4,408	18			28,833	99
Young's Cove, breakwater approach.....			72	00						72
Generally.....	3,691	98					3,810	66	7,502	64
Totals, Nova Scotia.....	183,507	58	188,875	34	57,040	62	3,810	66	433,234	20
<i>Prince Edward Island.</i>										
Bay Fortune, breakwater extension.....			35	11						35
Belfast, wharf approach.....					943	07				943
Brae, breakwater.....					302	25				302
Brudenell, wharf reconstruction.....			175	64						175
Chapel pier, approach.....					1,080	76				1,080
Charlottetown, Asylum wharf.....	5,177	20								5,177
"    Connelly's wharf.....	2,869	65								2,869
"    harbour warehouse.....					49	79				49
"    railway wharf.....	3,609	24								3,609
China Point, wharf (shed).....			268	88						268
Cove Head, Shear dam.....					748	96				748
Cranberry, pier.....					746	53				746
Georgetown.....	1,409	28								1,409
Graham's Pond, Murray Hr. North, breakwaters.....					991	10				991
Grand River North, pier.....	2,375	39			2,297	30				4,672
Hickey's wharf.....					669	00				669
Hurd's Point, wharf.....					17	25				17
Lennox Island, wharf.....					75	12				75
Little Sands, wharf.....					271	65				271
Malpeque.....	9,030	66								9,030
McAulay's, shore.....	2,672	42								2,672
McConnel's, wharf.....	1,489	06								1,489
Murray Harbour, south wharf (slip).....			18	18						18
Naufrage Hr., breakwaters.....					198	25				198
New London, beach protection.....					948	57				948
North Lake, boat harbour.....			10	10						10
Panmure Island, wharf.....	6,877	99								6,877
Point Prim Island, wharf.....					24	65				24
Poplar Point (Prince Co.).....	1,559	96								1,559
Port Hill, Cooper's Shore, wharf.....					74	90				74
Pownal, wharf.....	1,775	04			1,003	90				2,778
Rocky Point, wharf.....	10	50								10
Rustico, breakwater.....	1,718	62								1,718
Souris Harbour, breakwater extension.....			12	00						12
St. Mary's Bay, wharf.....	2,020	85								2,020
St. Peter's Bay (Head), wharf.....					18	60				18
Sturgeon, wharf.....	2,233	58								2,233
Summerside, breakwater.....					41	62				41
Tignish, breakwater.....			20	00						20
Generally.....	1,842	79					1,591	36	3,434	15
Totals, Prince Edward Island.....	46,672	23	539	91	10,503	27	1,591	36	59,306	77

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>New Brunswick.</i>					
Albert, berth for vessels .....		203 17			203 17
Anderson's Hollow, wharf.....			12 50		12 50
Baie du Vin, wharf.....			113 04		113 04
Barker's wharf (Riv. St. John).....			40 94		40 94
Bass River, wharf.....		106 02			106 02
Bathurst, harbour..... \$106,846.90					
Less, work done for private firms..... 1,132.00					
	105,714 90				105,714 90
Bayswater ferry landing (Riv. St. John).....		1,757 55			1,757 55
Black's Harbour (Charlotte Co.), wharf.....			482 53		482 53
Black River (Kent Co.).....	2,561 02				2,561 02
Brundage Point.....	760 84				760 84
Buctouche Beach, breakwater.....			67 25		67 25
Buctouche..... \$22,818.81					
Less, work done for private firms..... 2,202.67					
	20,616 14				20,616 14
Burnt Church, wharf.....			46 28		46 28
Campbellton, deep water wharf.....			2,036 48		2,036 48
Cape Bald, breakwater pier.....			10 50		10 50
Chockish, breakwater.....			229 50		229 50
Church River.....	2,285 02				2,285 02
Cocagne.....	1,745 80				1,745 80
Cole's Point wharf (Charlotte Co.).....			6 00		6 00
Dorchester, wharf.....		2,851 36			2,851 36
Durham wharf (Restigouche Co.).....		20 00			20 00
Dykeman's Shoal (Spoon Island).....	100 00				100 00
Earle's wharf (Riv. St. John).....		264 07			264 07
Edgett's Landing, wharf.....			297 98		297 98
Fairhaven (Deer Island), wharf.....			5 00		5 00
Gagetown, wharf.....		150 84			150 84
Gautreau Village, wharf (Riv. St. John).....			495 09		495 09
Grand An-c, breakwater.....	710 12	1,097 93			1,808 05
Grand Lake (Queens Co.).....	2,794 79				2,794 79
Hampstead (Queens Co.).....	75 00				75 00
Hatfield's Point, wharf (Riv. St. John).....			35 44		35 44
Hopewell Cape, wharf.....			95 55		95 55
Iroquois River (Victoria Co.).....		24 75			24 75
Kenebecasis Island, ferry landing (Riv. St. John).....		1,815 55			1,815 55
Lanegue, wharf.....			301 75		301 75
Leonardville, wharf.....			98 16		98 16
Loggieville, wharf.....			99 78		99 78
Long Point (King's Co.), wharf.....			54 61		54 61
McGowan's wharf (Riv. St. John).....			275 28		275 28
Main River (Kent Co.).....	210 72				210 72
Martin's Head, breastworks.....		1,981 30			1,981 30
Maugerville, wharf (Riv. St. John).....			373 32		373 32
Mill's Point, wharf.....			9 50		9 50
Neguae, wharf.....			1,714 95		1,714 95
Nelson, Maloney's wharf.....	4,971 02				4,971 02
North Head, breakwater wharf.....			1,477 38		1,477 38
Oak Point, wharf.....			32 85		32 85
Oromocto, wharf.....			50 50		50 50
Palmer's wharf.....	514 85				514 85
Petit Rocher, breakwater, etc.....			219 55		219 55
Point Sapin.....	815 96				815 96
Portage River, channel impts.....		217 45			217 45
Quaco (St. Martin's), Eastern breakwater.....		15 65	198 93		214 58
Quaco (St. Martin's), Exchequer Court award re site for wharf.....		3,796 14			3,796 14
Renforth wharf (Riv. St. John).....		70 00			70 00

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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>New Brunswick—Concluded.</i>					
Richardson, wharf.....			2,228 90		2,228 90
Richibucto Beach, extension of breakwaters.....		772 89			772 89
Richibucto Cape, breakwater.....		1,998 36			1,998 36
River Kouchibouguac.....	533 67				533 67
River St. Charles.....	889 68				889 68
River St. Croix.....	20,982 25				20,982 25
River St. John, removal of snags.....		1,973 00			1,973 00
River St. Louis.....	434 84				434 84
St. Andrews wharf.....			305 18		305 18
St. John Harbour Improvements:—					
Channel.....	9,142 69				9,142 69
Courtenay Bay.....	150,000 00	599,692 43			749,692 43
Negro Point, breakwater extension.....		730 00			730 00
Partridge Island, quarantine station, deep-water wharf.....		1,240 08			1,240 08
West, retaining wall and reclamation.....		78,661 36			78,661 36
" Piers, sheds, etc.....		156,860 05	4,002 72		160,862 77
" Deepening slips and berths.....	23,500 00				23,500 00
St. Nicholas River (South Branch), re site.....		63 50			63 50
Sackville, wharf.....			402 10		402 10
Scotchtown, wharf.....			67 91		67 91
Shediac Bay.....	628 37				628 37
Shippegan Gully, breakwater.....		3,945 64			3,945 64
Stonehaven, breakwater.....			677 82		677 82
Tabucintac, beach and blacklands.....	799 95				799 95
Thomas Creek, breakwater (St. John Co.).....		91 06			91 06
Upper Jemseg (Riv. St. John).....			14 13		14 13
Welshpool (Campobello), wharf.....		10 91			10 91
Wilson's Beach (Campobello), wharf.....			341 92		341 92
Generally.....	3,685 58			4,073 79	7,759 37
Totals, New Brunswick.....	354,473 21	860,441 06	16,921 32	4,073 79	1,235,909 38
<i>Quebec.</i>					
Amherst Wharf, Magdalen Islands.....		1,569 09			1,569 09
Point Shea, Madgalen Islands, landing pier.....			225 64		225 64
Angers, wharf.....		59 19			59 19
Anse à Beauvils, breakwater.....			1,402 91		1,402 91
Anse à Fougère, removing boulders.....		50 00			50 00
Anse à la Grosse Roche, wharf.....			28 90		28 90
Anse à L'Eau (Tadoussac), wharf.....			1,631 43		1,631 43
Anse aux Gascons, wharf.....			450 07		450 07
Anse aux Griffons, removal of boulders.....		225 25			225 25
Anse St. Jean, wharf extension.....		2,979 38			2,979 38
Ayer's Cliff (Stanstead Co.), wharf.....			11 80		11 80
Aylmer (Lake Deschenes), wharf.....			125 58		125 58
Baie des Ha Ha.....	922 19				922 19
Baie St. Paul (Cap aux Corbeaux), wharf.....		6,444 44			6,444 44
Barachois de Malbaie, training pier.....			1,346 58		1,346 58
Beloel, protection work.....		1,503 00		206 18	1,709 18
Berthierville, wharf.....			664 47		664 47
Bic Harbour, wharf at Pointe à Cote.....		1,004 95			1,004 95
Bic, wharf.....			985 13		985 13
Brewer's Creek (Labelle), landing float.....			34 50		34 50
Bryant's Landing, wharf.....			25 00		25 00
Buckingham (Labelle), landing float.....			47 40		47 40
Cacouna, wharf.....				5 00	5 00
Cannes de Roches, wharf.....			155 70		155 70





AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Quebec—Continued.</i>					
Riviere aux Vases (Chicoutimi Co.), wharf.....			498 00		498 00
“ Batiscan.....	9,687 01				9,687 01
“ Bonaventure, training pier.....		426 42			426 42
Riviere Chicot (L'Assomption Co.).....	1,759 24				1,759 24
Riviere du Lievre, lock.....				3,082 45	3,082 45
Riv. du Loup (Fraserville), wharf impmts.....		472 92			472 92
Riv. du Loup (Louiseville), wharf.....	3,037 35				3,037 35
Riv. du Moulin (Saguenay), bank protection.....		1,981 32			1,981 32
Riv. Gatineau, bank protection.....			362 90		362 90
Riv. Noire (St. Zenon), bank protection.....		684 68			684 68
Riv. Ouelle, wharf.....		4,789 39			4,789 39
Riv. St. Maurice, middle channel.....	5,210 25				5,210 25
Riv. St. Maurice, western channel.....	4,341 02				4,341 02
Riv. Saguenay.....	1,841 09				1,841 09
Riv. Verte, dyke.....			1,500 00		1,500 00
Ruisseau à Loutre, removal of boulders.....		200 05			200 05
Ruisseau à Patates, removal of boulders.....		32 00			32 00
St. Alphonse de Bagotville.....	28,784 46	76 67			28,861 13
St. Andrews (Argenteuil), wharf.....			-346 45		346 45
St. Anicet, wharf.....			772 52		772 52
St. Anne de Beaupre, wharf.....				301 50	301 50
St. Anne de Bellevue.....	16,860 42				16,860 42
St. Anne de la Pocatiere, wharf.....			1,495 26		1,495 26
St. Anne des Monts, landing pier, etc.....		35,003 75			35,003 75
St. Anne du Saguenay, wharf.....		10,629 50			10,629 50
St. Antoine Station (Pte Dansereau), wharf.....			282 25		282 25
St. Barthélemi (Berthier Co.), dyke.....		668 40			668 40
St. Charles Borromée (Chicoutimi Co.), wharf.....			149 64		149 64
St. Charles de Caplan, wharf.....			100 08		100 08
St. Eloi (Témiscouata), wharf (shed).....		296 79			296 79
St. Emélie (Leclercville), wharf.....			895 79		895 79
St. Famille (Ile d'Orleans), wharf.....			31 50		31 50
St. Felicien (Riv. Ashouapmouchouan), dykes.....		37 90			37 90
St. Félicité, wharf.....			609 14		609 14
St. Fidèle (Charlevoix), wharf.....			10 40		10 40
St. François (Ile d'Orleans, south side), wharf.....			35 00	21 00	56 00
St. François du Lac, wharf.....	6 00		64 50		70 50
St. Fulgence, wharf.....			2,053 21		2,053 21
St. Gédéon, removal of boulders.....		555 00			555 00
Ste. Geneviève de Batiscan, protection wall.....		615 33			615 33
Ste. Geneviève (Ile Bizard), approaches.....			583 78		583 78
St. George de Malbaie, breakwater.....				30 00	30 00
St. Godfroi, wharf.....			300 62		300 62
St. Gregoire de Montmorency, wharf.....		1,933 80			1,933 80
St. Ignace de Loyola, dykes.....			1,332 87		1,332 87
St. Irénée les Bains, wharf.....			64 51		64 51
St. Jean des Chaillons, wharf.....			40 27	26 25	66 52
St. Jean (Ile d'Orleans), wharf.....				6 00	6 00
St. John's, ice breaker.....		474 03		50 05	524 08
St. Joseph de Sorel, ferry approach.....		796 75			796 75
St. Laurent, (Ile d'Orleans), wharf.....			166 36	89 25	255 61
St. Mathias, wharf.....			1,951 34		1,951 34
St. Michel de Bellechasse, wharf.....			199 56		199 56
St. Omer, wharf.....			597 24		597 24
St. Ours, wharf.....			113 95		113 95
St. Paul, Ile aux Noix, wharf.....			707 85		707 85



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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Quebec—Concluded.</i>					
St. Roch de Richelieu, wharf.....		1,059 82			1,059 82
St. Siméon, wharf.....			178 40	15 70	194 10
St. Valier, extension to wharf.....		199 69			199 69
Seven Islands wharf (freight shed.).....		310 44			310 44
Sorel, deep water wharf.....			541 43		541 43
Squateck (Lake Temiscouata), landing pier.....			399 81		399 81
Terrebonne wharf, approach.....		1,144 97			1,144 97
Three Rivers, wharf.....			10,517 07	100 00	10,617 07
Vaudreuil, wharf.....			48 88		48 88
Verchères, wharf.....			366 67	67 47	434 14
Verdun, Grand Trunk Boat Club.....	2,809 60				2,809 60
“ la Tortue.....	7,827 23				7,827 23
“ wharf.....			1,364 51		1,364 51
Ville Marie, wharf (Timiskaming).....			729 97		729 97
Woburn, wharf.....			53 70		53 70
Woodman's Beach, breakwater.....			206 50		206 50
Yamachiche, landing.....			40 00		40 00
Yamaska, lock and dam.....		4,093 32		1,588 33	5,681 65
Generally.....				36,139 58	36,139 58
<b>Totals, Quebec.....</b>	<b>151,827 17</b>	<b>1,771,750 89</b>	<b>75,958 08</b>	<b>281,411 90</b>	<b>2,280,948 04</b>
<i>Ontario.</i>					
Allandale, wharf.....			918 46		918 46
Arnprior, wharf.....				22 50	22 50
Barrie (Bayfield St.), wharf.....			24 00		24 00
Bayfield, north pier.....		1,700 00			1,700 00
Beumaris, wharf.....			10 30		10 30
Belleville, wharf.....		4,832 10		128 40	4,960 50
Black River, dam.....				70 96	70 96
Bobcaygeon, floating wharf.....		573 40			573 40
Bracebridge, wharf.....			3,556 64		3,556 64
Brighton, wharf.....			496 62		496 62
Bruce Mines, wharf, etc.....		12,509 79			12,509 79
Burleigh Falls, wharf.....			234 57		234 57
Burlington.....	5,805 16				5,805 16
Burlington Beach, old Elsinore wharf.....		3,079 25			3,079 25
Burlington Channel and bridge.....				3,006 34	3,006 34
Burlington, revetment wall.....		12,970 30			12,970 30
Charlton (Nipissing), wharf.....			427 08		427 08
Cobourg, east pier.....			12,875 89		12,875 89
“ harbour.....	4,660 94				4,660 94
Collingwood, graving dock No. 1.....				15,000 00	15,000 00
“ “ No. 2.....				9,208 96	9,208 96
“ harbour improvements.....	7,282 63				7,282 63
Crow's Landing, wharf.....			235 69		235 69
Cumberland, wharf.....			98 37		98 37
Dyer's Bay, wharf.....			195 01		195 01
Fort William, harbour impts.....	453,551 07	54,385 00			507,936 07
Freddy Channel (Georgian Bay).....	1,858 20				1,858 20
French River, dam.....	2,578 01			2,829 83	5,407 84
“ waterways impts.....		45,083 95			45,083 95
Gananoque, wharf.....		78 00			78 00
Goderich, harbour improvements—					
Southwest breakwater.....		82,268 60			82,268 60
Removing check wall.....		2,582 75			2,582 75
Repairs to piers.....			1,930 03		1,930 03
River breakwater.....		2,561 55			2,561 55
Grand Bend, piers, etc.....			1,021 95		1,021 95
Griffith's Island, wharf.....			815 99		815 99

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.		Construc- tion and Improve- ments.		Repairs.		Staff and Maintenance		Total.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
<i>Ontario—Continued.</i>											
Hamilton, grading adjacent to south en- trance pier.....			450	00						450	00
“ harbour improvements.....	10,931	32	7,845	22						18,776	54
Hawkesbury.....	7,898	50								7,898	50
Juniper Island (Stoney Lake), wharf.....					64	50				64	50
Kenora, wharf approach.....			679	07			150	00		829	07
Kensington, wharf and warehouse.....			360	40						360	40
Kincardine, breakwater.....					9	75				9	75
Kingston Harbour, improvements.....			119,901	24						119,901	24
Kingsville, piers.....					295	86				295	86
Leamington, wharf.....					1,596	48				1,596	48
Little Castor River, improvements.....			4,166	32						4,166	32
Little Detroit river.....	5,800	06								5,800	06
Meaford, removal of stone.....			62	95						62	95
“ revetment wall.....			6	80						6	80
McCracken's Landing (Peterborough) wharf.....			408	00						408	00
Midland, wharf.....					6	00				6	00
Minaki wharf, temporary walk.....			155	21						155	21
Montreal River (Latchford dam).....			344	08			2,678	73		3,022	81
Oliphant, wharf.....					800	00				800	00
Ottawa River, Victoria Island, channel.....	698	37								698	37
Owen Sound, harbour improvements.....	7,311	43								7,311	43
Parry Sound, wharf.....			1,500	00						1,500	00
Pelee Island, docks.....					694	06				694	06
Pembroke, wharf.....					599	41				599	41
Penetanguishene.....	11,674	59								11,674	59
Peterborough, George street wharf.....							72	01		72	01
Picnic Islands, impts. (Georgian Bay).....	3,129	88								3,129	88
Point Edward.....	1,025	75								1,025	75
Porecupine, wharf.....					340	35				340	35
Port Arthur, dry dock.....							35,641	50		35,641	50
“ harbour improvements.....	55,985	90	626	20						56,612	10
Port Bruce, piers.....					903	30				903	30
Port Burwell.....	26,561	09			8,119	11				34,680	20
Port Dover, harbour improvements.....			306	06						306	06
Port Hope, harbour improvements.....	7,384	09	1	97						7,386	06
Port Maitland.....	70,326	85								70,326	85
Port Rowan, pier.....					30	00				30	00
Port Stanley, reconstruction of piers.....			4,164	79						4,164	79
“ warehouse on wharf.....			301	25						301	25
Rainy River, maintenance of gauges.....							934	45		934	45
River Thames at mouth.....	11,075	58								11,075	58
River Thames, at Chatham.....	2,090	75	38	00						2,128	75
Robin's Landing, wharf.....							25	00		25	00
Rondeau Harbour, piers, etc.....					998	68				998	68
Rosseau wharf.....					1,000	00				1,000	00
St. John creek stop log dam.....							79	00		79	00
St. Joseph Island, wharf K line.....					200	00				200	00
St. Williams (Lake Erie), piers.....					311	66				311	66
Sand Point, wharf (Renfrew).....					108	73				108	73
Sandy Point (Peterboro), removal of wharf.....			83	50						83	50
Sault St. Marie, wharf.....	28	00			5,056	65				5,084	65
“ custom house on wharf.....			758	26						758	26
Severn River at Washago, dam.....			503	50						503	50
Silver Centre, wharf.....					64	13		248	00	248	13
Southampton, breakwater.....					497	20				497	20
“ piers.....					2,995	50				2,995	50
Stanley Island, wharf.....					808	83				808	83
Sturgeon Falls, wharf.....					270	89				270	89
Telegraph and Nigger islands.....	34,616	90								34,616	90
Thornbury, wharf.....					212	85				212	85
Tobermory glance booms.....							25	00		25	00

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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Ontario—Concluded.</i>					
Toronto Harbour Improvements:—					
Canadian Stewart contract.....		536,472 54			536,472 54
Diving scow re inspection of Canadian Stewart contract.....		8,775 00			8,775 00
Eastern pier.....			9 35		9 35
Fisherman's island (new building).....		1,226 88			1,226 88
New western entrance.....		5 44			5 44
Queen's wharf.....				100 00	100 00
Vail's Point, wharf.....			6 40		6 40
Waubauskene.....	5,149 95				5,149 95
Wendover, wharf.....			927 40		927 40
Wheatley, wharf.....			786 00		786 00
Warton, wharf.....			207 19		207 19
Windsor, dock.....	591 58			1,200 00	1,791 58
Generally.....				14,911 16	14,911 16
Totals, Ontario.....	738,016 60	961,767 37	50,760 88	86,331 84	1,836,876 69
<i>Manitoba.</i>					
Assiniboine River (High Bluff), dykes..			2,274 45		2,274 45
Big George island..... 5,129 06					
Less work done for private firms..... 50 00					
	5,079 06				5,079 06
Dauphin river.....	5,296 64				5,296 64
Gimli (Lake Winnipeg), shore protection		1,272 69			1,272 69
Hnausa (Lake Winnipeg).....			1,480 09		1,480 09
Hole River, dam.....	348 42	2,361 48			2,709 90
Le Pas, wharf.....		151 22			151 22
Lockport.....	4,102 79				4,102 79
Mossy River, channel.....	2,878 49				2,878 49
Red River, at mouth, dredging, etc.....	4,875 49		9,196 14		14,071 63
" Crescent island.....	8,060 15				8,060 15
St. Andrews Rapids, lock and dam.....		2,471 44		17,050 46	19,521 90
Selkirk marine railway.....				4,365 55	4,365 55
" middle ground.....	7,839 85				7,839 85
" slough.....	7,439 10				7,439 10
Snake Island (Lake Winnipegosis).....	1,602 91				1,602 91
Winnipeg City, wharfs.....		607 73	154 97		762 70
Generally.....				2,791 57	2,791 57
Totals, Manitoba.....	47,522 90	6,864 56	13,105 65	24,207 58	91,700 69
<i>Saskatchewan and Alberta.</i>					
Saskatchewan river, improvements.....		590 17			590 17
Generally.....				3,044 71	3,044 71
Totals, Saskatchewan and Alberta.....		590 17		3,044 71	3,634 88
<i>British Columbia.</i>					
Arrow Head.....	2,815 21				2,815 21
Arrow Lake, Lower improvements.....		137 14			137 14
" Upper improvements.....		165 42			165 42
Bindlay's Landing, float.....			310 00		310 00
Bishop's Bay, landing float.....		689 12			689 12
Birdwood Bay, float.....		65 00			65 00
Bold Point, float.....			117 67		117 67

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>British Columbia—Continued.</i>					
Burton protection work.....		8,722 46			8,722 46
Cadboro Bay, dolphins.....		350 00			350 00
Campbell river, wharf.....			247 10		247 10
Christiana Creek, fish screen.....		1,447 85			1,447 85
Church House, float.....			222 81		222 81
Clayoquot, wharf.....			19 40		19 40
Columbia river, improvements.....		532 75			532 75
Comox, wharf.....			250 00		250 00
Cottonwood Point.....	2,918 40				2,918 40
Cowan's Cove, wharf.....			746 82		746 82
Cowichan river.....	323 41				323 41
Cracroft Island, float.....		1,975 80			1,975 80
Crofton, wharf.....			729 41		729 41
Digby Island Quarantine stn., wharf.....			13 20		13 20
Dignan's Bay, float.....			88 44		88 44
Esquimalt (Rod Hill wharf).....	267 61				267 61
"    new dry dock.....		21,006 97			21,006 97
"    old dry dock.....				20,477 70	20,477 70
Fanny Bay, float.....			126 81		126 81
Forest Glen.....	3,138 21				3,138 21
Fraser River, improvements:—					
Chilliwack, removal of snags.....		994 02			994 02
Eburne (bank protection).....		2,454 09			2,454 09
Nicomen slough (bank protection).....		443 32			443 32
Nicomen, McDonald's Bar.....	5,137 96				5,137 96
North Arm.....		139,718 96			139,718 96
"    South Fork.....	18,459 30				18,459 30
"    1,400 ft. below Lulu island bridge.....	12,422 13				12,422 13
Snagboat <i>Samson</i> .....				18,004 18	18,004 18
Steveston jetty.....		360,005 40			360,005 40
"    sandheads.....	72,198 17				72,198 17
Westham Island, wing dams.....		6,619 12	196 45		6,815 57
Fulford, landing float.....			293 17		293 17
Gillies Bay (Shelter Point), float.....			398 28		398 28
Glen Valley, wharf.....			299 27		299 27
Gower Point, float.....			175 10		175 10
Grace Harbour, float.....			150 00		150 00
Graham's Landing.....	2,105 21				2,105 21
Granite Bay, float.....			140 87		140 87
Grantham's Landing, wharf.....			99 76		99 76
Heriot Bay, wharf.....		196 36			196 36
Holberg, wharf.....			14 00		14 00
Hope Point, float.....		921 22			921 22
Jedediah Island, float.....		742 06			742 06
Kelowna.....	1,697 68				1,697 68
"    saw mill.....	332 13				332 13
Kincolith, wharf.....			498 55		498 55
Kitimat, landing float.....		2,499 11			2,499 11
Kootenay Lake, improvements.....		3,515 51			3,515 51
Kootenay Landing.....	9,509 99				9,509 99
Lilloet river.....	1,171 21				1,171 21
Little River (Cape Lazo), wharf.....		4,002 00			4,002 00
Lloyd's Point, float.....		994 56			994 56
Lund, wharf.....			100 00		100 00
Maples (Gabriola), wharf.....			180 00		180 00
Mary Island, wharf.....			90 48		90 48
Masset, wharf.....			13 40		13 40
Metchosin, wharf.....			700 76		700 76
Naas river.....	4,974 77				4,974 77
Nanaimo harbour, improvements.....	34,761 65		1,209 89		35,971 54
New Brighton, float.....		1,577 97			1,577 97
Nootka Island, wharf.....			535 89		535 89

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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>British Columbia—Concluded.</i>					
Okanagan Landing.....	532 05				532 05
Okanagan, river improvements.....	4,860 56	902 95			5,763 51
“ river control dam.....	413 44				413 44
Pender Harbour, float.....			168 31		168 31
Penticton (Mill Pond).....	704 82				704 82
Pitt River, wharf.....			492 47		492 47
Port Clements (Queenston), wharf.....			8,498 21		8,498 21
Powell River, breakwater.....	3,131 74	2,500 00			5,631 74
Prince Rupert graving dock (inspection). Quatsino, wharf.....				2,700 00	2,700 00
Refuge Bay, wharf.....			255 75		255 75
Robert's Bay, float.....			4,611 41		4,611 41
Robert Creek, wharf.....		1,682 50	303 25		303 25
Roy, float.....			247 98		247 98
Royston (Roy's Beach), wharf.....	932 18		2,000 00		2,932 18
Saanichton, float.....			230 00		230 00
Saginaw Lake, removal of debris.....		298 47			298 47
Salmon Arm City, wharf.....			25 97		25 97
Sand Spit Point, wharf.....			20 40		20 40
Savary Island, wharf.....			497 12		497 12
Sea Otter Cove, float.....		550 00			550 00
Seaside Park, float.....			150 00		150 00
Shoal Bay, wharf.....			240 00		240 00
Shushartie Bay, wharf.....			155 00		155 00
Sidney Island, wharf.....			900 00		900 00
Sidney, wharf.....			2,100 00		2,100 00
Skeena river.....	11,870 61				11,870 61
Smith's Landing (Cortez island), float..... “ (Howe sound), wharf.....		1,590 20	2,496 31		1,590 20
Sorrento, wharf.....			5 94		5 94
Squamish, retaining wall.....	20,335 46	4,443 42			24,778 88
Stapelby, landing float.....		724 78			724 78
Stag Bay, float.....		65 00			65 00
Stewart (Portland Canal), wharf.....			1,697 12		1,697 12
Stickine river improvements.....		4,697 13			4,697 13
Summerland.....	535 41				535 41
Surge Narrows, float.....		1,087 56			1,087 56
Tofino, wharf.....			1,396 60		1,396 60
Tucker Bay, wharf.....			1,224 68		1,224 68
Ucluet, wharf.....			5 00		5 00
Union Bay, wharf.....	6,605 02		800 00		7,405 02
Van Anda, wharf.....			91 15		91 15
Vancouver, False Creek.....	281,693 09				281,693 09
“ First Narrows.....	96,524 42				96,524 42
“ harbour improvements.....		63,015 26			63,015 26
Yargas Island, wharf.....			576 31		576 31
Victoria Harbour, improvements.....	161,789 61	999,990 51	750 00		1,162,530 12
Welcome Harbour, float.....		696 77			696 77
Whaletown, wharf.....			37 92		37 92
White Rock, wharf.....		821 30			821 30
William's Head, quarantine station.....	919 68	2,996 58			3,916 26
Winter harbour, float.....			250 01		250 01
Wolfsen's Bay, float.....			246 40		246 40
Wyatt Bay, floats.....			142 60		142 60
Yellow Point, float.....		129 00			129 00
Generally.....				8,385 22	8,385 22
Totals, British Columbia.....	763,081 13	1,645,967 64	38,583 44	49,567 10	2,497,199 31

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Harbours and Rivers.	Dredging.	Construction and Improvements.	Repairs:	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	£ cts.	\$ cts.	\$ cts.
<i>Yukon Territory.</i>					
Yukon River, impts. to navigation.....		3,394 82			3,394 82
Totals, Yukon Territory.....		3,394 82			3,394 82
<i>Generally.</i>					
General expenses of staff, etc.....				10,377 85	10,377 85
Salaries of district engineers, assistants, etc.....				371,627 85	371,627 85
Test borings for sundry projected works.....		9,458 52			9,458 52
Totals, Harbours and Rivers generally.....		9,458 52		382,005 70	391,464 22
<hr/>					
		Construction and Improvements.	Repairs.	Staff and Maintenance	Total.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Dredging Plant.</i>					
Maritime Provinces.....			38,325 79		38,325 79
Ontario and Quebec.....	17,005 93		64,677 39		81,683 32
Saskatchewan and Alberta.....			5,003 31		5,003 31
British Columbia.....		300 00			300 00
Totals, Dredging Plant.....	17,305 93		108,006 49		125,312 42
<i>Slides and Booms.</i>					
River Richelieu at Beloeil.....			521 89		521 89
River Saguenay.....				8,249 16	8,249 16
River St. Maurice.....	13,250 86			38,710 33	51,961 19
Ottawa District:—					
Black River.....			3,610 00		3,610 00
Coulange River.....			3,631 06		3,631 06
Dumoine river.....			197 85		197 85
Gatineau river.....			153 78	600 00	753 78
Madawaska river.....			5,454 62		5,454 62
Ottawa river.....			378 88	27,999 18	28,378 06
Petewawa river.....			4,270 21		4,270 21
Trent and Newcastle district.....			117 68	202 63	320 31
Collection of slide and boom dues.....				4,528 27	4,528 27
Totals, Slides and Booms.....	13,250 86		18,335 97	80,289 57	111,876 40

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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

	Construc- tion and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<b>ROADS AND BRIDGES.</b>				
<i>Maritime Provinces.</i>				
International bridge—St. Leonard, N.B. and Van- Buren, Maine.....		2,136 87		2,136 87
<i>Quebec and Ontario.</i>				
Bryson bridge.....		900 00		900 00
Chapeau bridge.....	848 53			848 53
Des Joachims bridge.....	1,995 00			1,995 00
Interprovincial bridge at Hawkesbury.....	50 00			50 00
Matapedia road.....	1,133 81			1,133 81
Pond Creek bridge (Wright Co.).....		599 52		599 52
Portage du Fort bridge.....		99 50		99 50
Sauvé bridge (River St. Louis).....	189 52			189 52
Ottawa City bridges and streets maintained by Gov- ernment:—				
Chaudiere bridge.....		4,162 50		4,162 50
Connaught Place and Wellington street.....			19,300 62	19,300 62
Lighting all above.....			1,491 82	1,491 82
York bridge (Grand river).....		186 66		186 66
<i>Manitoba, Saskatchewan, and Alberta.</i>				
Banff, old bridge (Alta.)....		4,471 81		4,471 81
Netley Cut bridge (Red river).....	699 35			699 35
Totals, Roads and Bridges.....	4,916 21	12,556 86	20,792 44	38,265 51

AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Continued.*

Telegraph Lines.	Construc- tion.	Repairs.	Staff and Maintenance	Total.
<i>Newfoundland.</i>	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Cape Ray (subsidy).....			250 00	250 00
<i>Maritime Provinces.</i>				
Bay of Fundy Lines.....			5,709 83	5,709 83
Cape Breton Lines.....			46,429 78	46,429 78
Escuminac Line.....			1,453 91	1,453 91
Prince Edward Island Cable and Mainland.....			15 50	15 50
<i>Quebec Mainland.</i>				
North Shore, East of Bersimis.....			28,329 12	28,329 12
“ West of Bersimis.....			20,821 33	20,821 33
Quebec County lines.....			1,943 60	1,943 60
Timiskaming lines.....			3,415 98	3,415 98
<i>Quebec Islands.</i>				
Anticosti system.....			8,333 90	8,333 90
Cable ship <i>Tyrian</i> .....			60,096 88	60,096 88
Grosse Isle-Isle aux Coudres & Is. of Orleans system.....			8,805 43	8,805 43
Magdalen Islands system.....			6,665 85	6,665 85
Maritime Provinces and Gulf generally.....			2,290 29	2,290 29
<i>Ontario.</i>				
Pelee Island cable.....			2,652 25	2,652 25
<i>Saskatchewan Lines.</i>	3,682 49		48,623 53	52,306 02
<i>Alberta Lines.</i>	12,604 51		67,782 80	80,387 31
<i>British Columbia and Yukon.</i>				
Ashcroft-Dawson system.....	18,853 83		212,666 15	231,524 98
British Columbia-Mainland system.....	46,490 94		56,035 86	102,526 80
British Columbia-Vancouver Is. system.....	19,514 15		91,509 47	111,023 62
Telegraph Service generally.....			357 28	357 28
Totals, Telegraph Lines.....	101,150 92		674,188 74	775,339 66



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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—Continued.

Miscellaneous.	Construc- tion and Improvements.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Surveys—				
Maritime Provinces.....			20,210 82	
Quebec.....			23,981 48	
Ontario.....			16,722 12	
Manitoba.....			1,655 53	
Saskatchewan and Alberta.....			2,947 52	
British Columbia.....			8,823 01	
Generally.....			1,625 95	75,966 43
Upper Ottawa Storage dams—				
Kippewa dam.....	60 00			
Latulippe township (survey).....	1,694 62			
Mattawa (survey).....	100 00			
Metering flow.....	28,287 79			
New Liskeard.....	40 10			
Quinze dam.....	17,274 52			
Timiskaming dam.....	\$ 33,850 98			
" Kirby & Stewart's claim.....	140,205 06			
Generally.....	174,056 04			
	33,744 66			255,257 73
Accounts Branch—Salaries and travelling expenses of agents, clerks, etc. of outside service.....			20,168 98	20,168 98
Georgian Bay Ship Canal Royal Commission.....			17,794 82	17,794 82
Gratuities to widows or other representatives of 39 deceased employees, under Civil Service Amendment Act, Section 41.....			9,827 10	9,827 10
Legal services <i>re</i> cases before International Joint Commission.....			5,883 88	5,883 88
Monument to His late Majesty King Edward VII....	1,350 00			1,350 00
Operation and maintenance of inspection boats.....			44,180 48	44,180 48
River gaugings and meterings.....			25,174 75	25,174 75
War Appropriation—Salaries in connection with military service.....			104,078 76	104,078 76
Totals, miscellaneous.....	256,607 73		303,075 20	559,682 93

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AMOUNTS expended by the Department of Public Works of Canada during the fiscal year ended March 31, 1917—*Concluded*.

RECAPITULATION.	Dredging.		Construction and Improvem'ts.		Repairs.		Staff and Maintenance.		Totals.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Totals, Public Buildings—										
Nova Scotia.....			14,001	96	8,450	83	72,364	61	94,817	40
Prince Edward Island.....			4,503	76	1,883	06	13,007	97	19,394	79
New Brunswick.....			96,466	19	8,096	52	65,925	73	170,488	44
Quebec.....			301,921	23	35,915	31	342,575	47	680,412	01
Ottawa buildings.....			1,955,385	66	360,673	36	838,653	72	3,154,712	74
Ontario (excluding Ottawa).....			503,680	60	37,675	46	264,642	83	805,998	89
Manitoba.....			21,314	45	8,380	43	113,236	18	142,931	06
Saskatchewan.....			53,066	55	7,562	74	65,177	96	125,807	25
Alberta.....			28,915	57	7,577	87	89,867	85	126,361	29
British Columbia.....			113,354	52	13,980	62	134,310	77	261,645	91
Yukon Territory.....							49,467	62	49,467	62
Public Buildings, generally.....			6,101	38			79,311	50	85,412	88
Totals, Harbours & Rivers—										
Nova Scotia.....	183,507	58	188,875	34	57,040	62	3,810	66	433,234	20
Prince Edward Island.....	46,672	23	539	91	10,503	27	1,591	36	59,306	77
New Brunswick.....	354,473	21	860,441	06	16,921	32	4,073	79	1,235,909	38
Quebec.....	151,827	17	1,771,750	89	75,958	08	281,411	90	2,280,948	04
Ontario.....	738,016	60	961,767	37	50,760	88	86,321	84	1,836,876	69
Manitoba.....	47,522	90	6,864	56	13,105	65	24,207	58	91,700	69
Saskatchewan and Alberta.....			590	17			3,044	71	3,634	88
British Columbia.....	763,081	13	1,645,967	64	38,583	44	49,567	10	2,497,199	31
Yukon Territory.....			3,394	82					3,394	82
Harbours and Rivers generally.....			9,458	52			382,005	70	391,464	22
Totals, Dredging plant.....			17,305	93	108,006	49			125,312	42
" Slides and booms.....			13,250	86	18,335	97	80,289	57	111,876	40
" Roads and bridges.....			4,916	21	12,556	86	20,792	44	38,265	51
" Telegraph Lines.....			101,150	92			674,188	74	775,339	66
" Miscellaneous.....			256,607	73			303,075	20	559,682	93
Grand totals of expenditure.....	2,285,160	82	8,941,593	80	891,968	78	4,042,932	80	16,161,596	20

MISCELLANEOUS REPORTS, CONTRACTS, Etc.

By J. A. CHASSE.

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917.

Works.	Names of Contractors.	Date of Contract.	Amount.
<i>Nova Scotia.</i>			
<i>PUBLIC BUILDINGS.</i>			
Amherst.....	W. A. Fillmore.....		4 90
Annapolis.....	Intercolonial Coal Mining Co.....		5 95
Antigonish.....	Edward Hailey.....		5 20
Arsicat.....	C. P. Terrio.....		11 00
Baddeck.....	A. G. McDonald.....		5 50
Bridgewater.....	Intercolonial Coal Mining Co.....		5 60
Canso.....	A. N. Whitman & Son.....		9 50
Dartmouth.....	A. N. Whitman & Son.....		6 50
".....	Dartmouth C. & S. Company.....		6 00
".....	Dartmouth C. & S. Company.....		6 00
Digby.....	W. E. Van Blarcom.....		6 50
Glace Bay.....	Dominion Coal Co.....		4 70
Guysborough.....	Lewis Hart & Company.....		6 00
Halifax.....	S. Cunard & Company.....		5 45
".....	H. D. Mackenzie Company.....		9 75
".....	H. D. Mackenzie Company.....		10 00
Inverness.....	H. D. Mackenzie Company.....		9 75
Kentville.....	Inverness Coal Company.....		4 50
".....	C. L. Dodge.....		9 60
".....	C. L. Dodge.....		9 75
Liverpool.....	Acadia Coal Company.....		6 00
Lunenburg.....	Intercolonial Coal Mining Co.....		5 75
".....	A. H. Anderson.....		9 45
New Glasgow.....	A. H. Anderson.....		9 45
North Sydney.....	Acadia Coal Company.....		5 00
".....	H. G. Campbell.....		4 00
Parrsboro.....	H. G. Campbell.....		4 00
Pictou.....	W. J. Berry.....		5 35
".....	Intercolonial Coal Mining Co.....		5 00
Shelburne.....	Intercolonial Coal Mining Co.....		5 00
Springhill.....	Estate Joseph McGill.....		12 90
Sydney.....	G. W. McKnight.....		4 50
Sydney Mines.....	Dominion Coal Company.....		4 10
".....	H. G. Campbell.....		4 00

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
<b>PUBLIC BUILDINGS—Continued.</b>			
<i>Nova Scotia—Concluded.</i>			
Truro.....	Post Office.....	Coal per ton—Bit.	
Westville.....	"	Bit.	5 40
Windsor.....	"	Bit.	4 50
Wolfville.....	"	Anth., egg.	5 10
"	"	Bit.	8 50
Yarmouth.....	"	Anth., nut.	6 25
"	"	Anth., furn.	8 30
"	"	"	8 30
<i>Prince Edward Island.</i>			
Charlottetown.....	Dominion Building.....	Bit.	5 95
"	Old Bank Building.....	Anth., egg.	10 35
"	"	Anth., stove.	10 35
"	"	Bit.	6 60
"	Experimental Farm.....	Anth., egg.	10 60
"	"	Anth., nut.	10 60
"	"	Bit.	6 50
"	Public Building.....	A. Picard & Company	
Georgetown.....	Post Office.....	Electric wiring and fittings.	2,673 00
"	"	Coal per ton—Bit.	7 25
"	"	Anth., furn.	11 20
"	"	Anth., nut.	11 25
"	"	Anth., egg.	11 25
"	"	Bit.	6 25
"	"	Anth., egg.	11 25
"	"	Anth., nut.	11 40
"	"	Bit.	6 90
Summerside.....	"	Anth., egg.	9 95
"	"	Bit.	5 70
Tignish.....	"	Bit.	6 60
"	"	Anth., egg.	10 85
<i>New Brunswick.</i>			
Bathurst.....	Post Office.....	Coal per ton—Anth., egg.	11 50
"	"	Bit.	6 50
Campbellton.....	"	Bit.	6 00
Chatham.....	"	Bit.	6 00





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L'Assomption	"	"	Anth., nut	Demers & Metc.	8 00
Lennoxville	"	"	Anth., furn	Chas. Rho.	8 25
"	Experimental Farm	"	Anth., egg	La Cie Coderre et Fils.	9 25
"	"	"	Anth., egg	Clarke & Stewart.	7 75
Levis	Dairy Cattle Barn	Construction of	"	Pondrivoir & Boullet	9,474 00
Longueuil	Post Office	Electric wiring and fittings	Anth., nut	J. A. Cloquette & Company	297 00
Louiseville	"	Coal per ton—	Anth., egg	Labrecque & Carrette.	7 30
Magog	"	"	Anth., nut	Thomas Millette.	7 50
Mariéville	"	"	Anth., egg	L. A. Plante	7 50
"	"	"	Anth., egg	J. H. Percy & Son	7 95
"	"	"	Anth., nut	W. E. Poulin	8 15
"	"	"	Anth., egg	W. E. Poulin	7 90
Matane	"	"	Anth., egg	J. A. Boulay	11 90
Mégantic	"	"	Anth., egg	A. H. Evans	9 45
Montagny	"	"	Anth., egg	Canadian Import Company	9 45
Montreal	Custom House	"	Anth., furn	Evans Bros.	7 86
"	Customs Canal Office	"	Anth., stove	Evans Bros.	6 68
"	Examining Warehouse	"	Bit	A. Baile	6 93
"	New Examining Warehouse	"	Anth., furn	Evans Bros.	4 45
"	P.O. Station "A"	"	Anth., egg	Evans Bros.	6 68
"	" "P"	"	Anth., egg	Evans Bros.	6 93
"	" "C"	"	Anth., egg	Evans Bros.	6 93
"	" "D"	"	Anth., egg	Evans Bros.	6 93
"	" "E"	"	Anth., egg	Evans Bros.	6 93
"	" "F"	"	Anth., egg	Evans Bros.	6 93
"	" "G"	"	Anth., egg	Evans Bros.	6 93
"	" "H"	"	Anth., furn	Evans Bros.	6 68
"	" "M"	"	Anth., egg	Evans Bros.	6 93
"	" "N"	"	Anth., egg	Evans Bros.	6 93
"	" "S"	"	Anth., egg	Evans Bros.	6 93
"	Herald building	"	Anth., furn	Evans Bros.	6 68
"	Revenue Building	"	Anth., egg	Evans Bros.	6 93
"	Forestry Branch	"	Anth., egg	Evans Bros.	6 93
"	Detention Hospital	"	Anth., nut	Evans Bros.	6 93
"	"	"	Anth., egg	Evans Bros.	6 93
"	"	"	Anth., furn	Evans Bros.	6 93
"	Central Post Office	Alterations to Heating Plant	Anth., stove	Evans Bros.	6 93
"	Postal Station "A"	Freight Elevator	Anth., furn	Thomas O'Connell	10,527 00
"	" "A"	Shed and Passage	Anth., egg	The Turnbull Elevator Mfg. Co. Ltd.	5,983 00
"	Examining Warehouse	Alter. and additions to fittings	Anth., nut	E. T. Verbanise.	7,490 00
Murray Bay	Post Office	Coal per ton—	Anth., egg	Henry Morgan & Co., Ltd.	3,324 00
"	"	"	Anth., nut	Canadian Import Company	9 75
"	"	"	Anth., egg	Canadian Import Company	9 50
Nicolet	"	"	Anth., stove	Jacques Courteau	9 50
Pierreville	Public Building	Wiring and fittings	Anth., stove	Shoener & Company	9 50
Plessisville	Post Office	Coal per ton—	Anth., egg	The Solex Company Limited	275 00
Quebec	Custom House	"	Anth., furn	La Fonderie de Plessisville	10 25
"	Marine Agency	"	Anth., furn	Canadian Import Company	7 34
"	Examining Warehouse	"	Anth., furn	Labrecque & Carrette	7 40
"	Immigration Hospital	"	Anth., egg	Canadian Import Company	7 34
"	"	"	Anth., stove	Canadian Import Company	7 95
"	"	"	"	Canadian Import Company	7 95

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
<b>PUBLIC BUILDINGS—Continued.</b>			
<b>Quebec—Concluded.</b>			
Quebec	Post Office.....		7 44
"	Governor General's Quarters.....		7 89
"	Weights and Measures.....		8 14
"	Post Office.....		7 40
Richmond	Fittings.....	Dec. 20, 1916	6,215 00
Rigaud	Coal per ton—Anth., furn.....		7 40
"	Anth., furn.....		9 00
"	Anth., stove.....		9 50
Rimouski	Anth., nut.....		8 53
"	Anth., egg.....		9 10
"	Anth., egg.....		8 80
Roberval	Anth., egg.....		1,850 00
Rock Island	Drainage system.....	Dec. 1, 1916	8 50
"	Coal per ton—Anth., furn.....		8 73
"	Anth., nut.....		8 75
Shawinigan	Anth., egg.....		8 50
Shawville	Anth., egg.....		8 25
Sherbrooke	Anth., egg.....		8 40
Sorel	Anth., furn.....		8 75
Ste. Agathe	Anth., furn.....		10
Ste. Anne de la Pocatiere	Anth., egg.....		8 22
"	Anth., stove.....		6 93
St. Henri	Anth., egg.....		7 73
St. Hyacinthe	Anth., egg.....		7 43
"	Inland Revenue.....		7 25
St. Jerome	Post Office.....		6 50
St. Johns	Custom House.....		6 50
"	Post Office.....		7 70
St. Lambert	Anth., nut.....		7 70
"	Anth., nut.....		6 93
St. Laurent	Anth., egg.....		7 48
St. Roch	Anth., furn.....		7 60
St. Saureur	Anth., egg.....		7 90
Ste. Therese	Anth., stove.....		7 90
"	Anth., egg.....		8 00
Terrebonne	Anth., egg.....		



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Thetford Mines.....	"	"	Anth., egg.....	A. Blais.....	8 30
Three Rivers.....	"	"	Anth., egg.....	L. Marchand & Son.....	7 50
Valleyfield.....	Public Building.....	Construction of.....	Anth., egg.....	Jos. Bourque.....	87,500 00
Victoriaville.....	Post Office.....	Coal per ton—	Anth., egg.....	A. Langevin.....	7 50
Westmount.....	"	"	Anth., egg.....	J. E. C. Giroux.....	8 50
				Evans Bros.....	6 93
<i>Ontario.</i>					
Acton.....	Post Office.....	Coal per ton—	Anth., stove.....	J. C. Hill.....	7 35
Alexandria.....	"	"	Anth., nut.....	J. C. Hill.....	7 60
Almonte.....	"	"	Anth., egg.....	Morris Bros.....	7 75
Anhersburg.....	"	"	Anth., egg.....	Taylor Bros.....	7 50
Arnprior.....	"	"	Anth., nut.....	Taylor Bros.....	7 75
Athens.....	"	"	Anth., furn.....	Falls-Karron Co.....	7 50
Aurora.....	"	"	Anth., egg.....	J. S. Morr.....	8 25
Aylmer.....	"	"	Anth., egg.....	R. S. Drysdale.....	8 25
Barrie.....	"	"	Anth., furn.....	E. J. Purcell.....	8 65
Belleville.....	"	"	Anth., egg.....	B. F. Davis.....	7 17
Berlin.....	"	"	Anth., nut.....	A. Butcher.....	7 25
"	"	"	Anth., egg.....	Frank Bros.....	7 50
Bowmanville.....	"	"	Anth., egg.....	The Sargeant Company.....	7 35
Braacebridge.....	"	"	Anth., nut.....	B. Parker.....	7 50
Brampton.....	"	"	Anth., stove.....	Downey Coal Company.....	7 95
"	"	"	Anth., egg.....	Geo. Braam.....	7 50
"	"	"	Anth., egg.....	A. A. Pipe.....	7 50
"	"	"	Anth., stove.....	Kloepfer & Company.....	7 50
"	"	"	Anth., nut.....	E. W. Loscombe.....	7 75
"	"	"	Anth., stove.....	E. W. Loscombe.....	7 75
"	"	"	Anth., stove.....	Geo. W. Eccleston.....	8 25
"	"	"	Anth., nut.....	Brampton Coal Company.....	7 75
"	Public Building.....	Electric wiring and fittings.....	Anth., nut.....	Brampton Coal Company.....	7 75
Brantford.....	Post Office.....	Coal per ton—	Anth., egg.....	W. K. Young.....	87 95
Bridgeburg.....	"	"	Anth., egg.....	Gibson Coal Company.....	6 50
Brockville.....	"	"	Anth., egg.....	E. Benner & Sons.....	6 85
"	"	"	Anth., stove.....	Brockville Lumber Company.....	8 00
Burford.....	"	"	Anth., stove.....	Brockville Lumber Company.....	8 00
Cardinal.....	"	"	Anth., egg.....	Burford C. & G. Company.....	7 50
"	"	"	Painting and decorating of.....	Geo. Todd.....	239 80
"	"	"	Hot air heating apparatus for.....	C. A. Ranson.....	564 00
"	"	"	Fittings.....	The J. T. Schell Company.....	928 00
"	"	"	Electric wiring and fittings.....	C. A. Ranson.....	487 00
Carleton Place.....	Post Office.....	Coal per ton—	Anth., egg.....	Taylor Bros.....	7 78
Chatham.....	"	"	Anth., furn.....	A. R. Crow.....	6 80
Chesley.....	"	"	Anth., egg.....	Patchell Bros.....	7 15
Clinton.....	"	"	Anth., egg.....	M. & M. Forbes.....	8 25
"	"	"	Anth., nut.....	M. & M. Forbes.....	8 50
Colbourg.....	"	"	Anth., egg.....	Geo. Plunkett.....	7 20
"	Immigration Office.....	"	Anth., nut.....	Thompson Macdonald Company.....	7 25
Collingwood.....	Post Office.....	"	Anth., furn.....	Toner & Gregory.....	7 50
"	"	"	Anth., nut.....	Toner & Gregory.....	7 75

Feb. 22, 1917.

Jan. 2, 1917.  
Jan. 2, 1917.  
Jan. 9, 1917.  
Mar. 1, 1917.

Oct. 24, 1916.

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
<i>Public Buildings—Continued.</i>			
Collingwood.....	Customs fittings		\$ 930 00
Cornwall.....	Coal per ton—Anth., egg.....	May 9, 1916.	7 20
"	Anth., nut.....		7 20
Deseronto.....	Fittings.....	Aug. 25, 1916.	1,687 00
Dresden.....	Coal per ton—Anth., furn.....		7 20
"	Anth., egg.....		7 75
"	Anth., nut.....		8 00
Dundas.....	Anth., furn.....		7 10
Eganville.....	Anth., egg.....		8 25
Elmira.....	Anth., egg.....		8 00
"	Anth., nut.....		8 00
Elora.....	Anth., egg.....		7 25
"	Anth., nut.....		7 25
Fergus.....	Anth., stove.....		7 85
"	Anth., nut.....		8 10
Fort William.....	Anth., egg.....		9 00
Galt.....	Bit.....		5 25
Gananoque.....	Anth., egg.....		7 25
"	Anth., nut.....		7 40
"	Anth., egg.....		7 40
"	Anth., nut.....		7 40
Glencoe.....	Bit.....		4 75
"	Anth., furn.....		6 65
"	Anth., nut.....		7 20
Godrich.....	Anth., egg.....		7 75
"	Anth., nut.....		8 00
Grimsby.....	Anth., stove.....		6 75
"	Anth., nut.....		7 00
Guelph.....	Anth., egg.....		7 20
Hamilton.....	Kloepfer Coal Company.....		6 40
Hamilton.....	Thos. Myles & Sons.....		6 40
Hanover.....	Weights and Measures.....		7 75
"	Post Office.....		8 00
Harrison.....	Anth., nut.....		7 50
"	John Howes.....		7 50
Hawkesbury.....	Anth., nut.....		8 00
"	Anth., egg.....		8 00
"	W. Wilson.....		8 00

*Public Buildings—Continued.*

*Ontario—Continued.*

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Ingersoll.....	"	"	Anth., egg.....	Scott & Daniels.....	6 85
"	"	"	Anth., nut.....	Scott & Daniels.....	8 10
"	"	"	Bit.....	Scott & Daniels.....	7 60
Kemptville.....	"	"	Anth., stove.....	C. Patterson.....	8 00
"	"	"	Anth., nut.....	"	8 00
Kenora.....	"	"	Anth., egg.....	Murphy Bros.....	10 00
"	Public Building.....	Electric wiring.....	"	"	900 00
Kincardine.....	Post Office.....	Coal per ton—	Anth., furn.....	W. J. McLaughlin.....	8 00
"	"	"	Anth., nut.....	J. W. Wilson.....	8 00
Kingston.....	Custom House.....	"	Anth., egg.....	S. Anglin & Company.....	8 09
"	"	"	Anth., nut.....	S. Anglin & Company.....	8 00
"	Post Office.....	"	Anth., egg.....	S. Anglin & Company.....	8 00
"	"	"	Anth., nut.....	S. Anglin & Company.....	8 00
"	Inland Revenue.....	"	Anth., egg.....	S. Anglin & Company.....	8 00
"	"	"	Anth., nut.....	S. Anglin & Company.....	8 00
"	Royal Military College.....	Building for Riding School—	"	"	8 00
"	"	struction of.....	"	"	29,000 00
Lakefield.....	Post Office.....	Coal per ton—	Anth., egg.....	Kingston Construction Company, Limited.....	7 70
"	"	"	Anth., nut.....	W. J. Charlton.....	7 95
Leamington.....	"	"	Anth., egg.....	D. Smith.....	7 50
"	"	"	Anth., nut.....	"	7 50
Lindsay.....	"	"	Anth., egg.....	Flavelles, Ltd.....	8 00
"	"	"	Anth., nut.....	Flavelles, Ltd.....	8 25
Listowell.....	"	"	Anth., egg.....	R. Oliver.....	7 00
"	"	"	Anth., nut.....	R. T. Kemp & Son.....	7 15
London.....	Custom House.....	"	Anth., egg.....	Chantler Bros.....	6 86
"	Post Office.....	"	Anth., nut.....	Chantler Bros.....	6 86
Markham.....	"	"	Anth., egg.....	R. Welsh.....	7 90
Midland.....	"	"	Anth., stove.....	"	7 50
"	"	"	Anth., egg.....	The Sargeant Co.....	7 50
"	"	"	Anth., nut.....	The Sargeant Co.....	7 75
Mildmay.....	"	"	Anth., nut.....	Alex. Kramer.....	7 75
Milton.....	"	"	Anth., egg.....	Blain & Hannant.....	7 25
"	"	"	Anth., nut.....	Blain & Hannant.....	7 50
Milverton.....	"	"	Anth., egg.....	J. G. Hamilton.....	7 50
Mitchell.....	"	"	Anth., furn.....	R. J. Cook.....	7 15
"	"	"	Anth., nut.....	R. J. Cook.....	7 35
Mount Forest.....	Post Office.....	"	Anth., furn.....	G. G. Brebber.....	7 50
"	"	"	Anth., nut.....	"	7 75
Napanee.....	"	"	Anth., stove.....	F. E. Vanluyven.....	8 00
"	"	"	Anth., nut.....	"	8 25
"	Drill Hall.....	Waterproofing basement wall of.....	"	Geo. Lewis.....	1,350 00
"	"	Fencing property of.....	"	Geo. A. Cliff.....	790 00
"	"	Grading, paving, etc.....	"	Geo. Lewis.....	4,650 00
Newmarket.....	Post Office.....	Coal per ton—	Anth., furn.....	Oliver Dike.....	7 00
Niagara Falls.....	"	"	Anth., egg.....	W. E. Thomas.....	6 35
"	"	"	Anth., nut.....	"	6 60
North Bay.....	"	"	Anth., furn.....	North Bay Fuel Company.....	7 60
Norwich.....	"	"	Anth., furn.....	C. Wilcox.....	6 55
"	"	"	Anth., stove.....	"	6 55
Ontario.....	Public Buildings generally.....	Supply of 200 Four cap drawer Cabinets.....	"	Office Specialty Mfg Company, Ltd.....	8,630 00

Feb. 14, 1917.

July 24, 1916.

July 18, 1916.  
Aug. 15, 1916.  
Aug. 15, 1916.

Sept. 5, 1916.



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"	Parliament Buildings.....	Supply of 5,000 barrels of Portland Cement.....	Alfred Rogers, Ltd.....	Sept. 11, 1916.	1 85 p. brl.
"	"	of 3,550½ tons of crushed stone.....	Howard Rock.....	Sept. 11, 1916.	1 60 p. ton.
"	"	Supply of 2,000 tons of Nepean sand stone.....	"	Sept. 11, 1916.	3 70 p. ton.
"	"	Supply of 5,000 barrels of Portland Cement.....	Canada Cement Co., Ltd.....	Sept. 13, 1916.	1 85 p. brl.
"	Departmental Buildings.....	Supply of Tungsten Lamps.....	The Canadian Tungsten Lamp Co., Ltd.....	Sept. 19, 1916.	4,752 50
"	Experimental Farm.....	Coal per ton—Anth., furn.....	Leclaire & Company.....		7 35
"	"	Anth., egg.....	"		7 50
"	"	Anth., nut.....	"		7 75
"	"	Anth., stove.....	"		7 50
"	Militia & Defence Dept. (Wood Building).....	Metallie fittings.....	Office Specialty Manufacturing Co., Ltd.....	Sept. 29, 1916	12,997 00
"	Parliament Buildings.....	Reconstruction of.....	P. Lyall & Sons Cons. Co., Ltd.....	Sept. 29, 1916	8½ up to \$4,000- 1000 & 7% for further mil- lion and no commission above \$5,000,- 000 00
"	"	Supply of 4,000 tons of Nepean sand stone.....	Foran & Thibault.....	Sept. 29, 1916.	3 70 p. ton.
"	Experimental Farm (Flax Building).....	Construction of.....	F. H. Cathcart & E. Webster.....	Oct. 19, 1916	9,895 00
"	Government Buildings.....	Supply of electric current for lighting power to all.....	The Ottawa Electric Company.....	Dec. 9, 1916	Sched. of rates.
"	Interior Department.....	Filing cases.....	The Steel Equipment Co., Ltd.....	Dec. 20, 1916	398 00
"	Militia & Defence.....	Steel sections.....	Office Specialty Mfg Co., Ltd.....	Jan. 2, 1917	4,195 00
"	Interior Dept.—(School lands branch).....	Filing cases.....	The Steel Equipment Company, Ltd.....	Jan. 11, 1917	1,475 00
"	Post Office Dept.....	Metallie vault fittings.....	Office Specialty Mfg Co., Ltd.....	Jan. 11, 1917.	1,195 00
"	Parliament Buildings.....	Supply and erection of 1,800 tons of steel.....	The Dominion Bridge Co., Ltd.....	Jan. 29, 1917.	106 00 p. ton.
"	"	Supply of 1,000 tons of Nepean sand stone.....	Nepean Sand Stone Quarries, Ltd.....	Mar. 12, 1917.	
"	"	Supply of 1,000 tons of Nepean sand stone.....	Campbell McKee & Williams.....	Mar. 13, 1917.	
"	Interior Dept.—(Immigration Branch).....	Steel cases.....	The Steel Equipment Company, Ltd.....	Mar. 22, 1917.	415 00
"	Departmental Buildings.....	Supply of Tungsten Lamps.....	Garrioch Godard & Company.....	Mar. 23, 1917.	3,639 90
Owen Sound	Post Office.....	Coal per ton—Anth., egg.....	Davis-Smith-Malone Company.....		7 15
Palmerston	"	Anth., egg.....	E. B. Warren.....		8 00
"	"	Anth., nut.....	"		8 25
"	"	Fittings.....	The Berlin Interior Hardwood Co., Ltd.....	Nov. 23, 1916.	1,228 00
Paris	"	Coal per ton—Anth., furn.....	Paris C. & L. Company.....		7 25
"	"	Anth., nut.....	"		7 50
Parkehill	"	Anth., stove.....	Wm. Leary.....		7 50
"	"	Anth., nut.....	"		7 50
Pembroke	"	Anth., egg.....	Dunlop & Company.....		8 25

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
PUBLIC BUILDINGS—Continued.			
Ontario—Continued.			
Pembroke.....	Post Office.....	Anth., nut.....	8 50
Peterborough.....	".....	Anth., egg.....	7 60
Picton.....	Custom House.....	Anth., stove.....	7 60
".....	Post Office.....	Anth., egg.....	7 75
Port Arthur.....	Examining Warehouse.....	Anth., nut.....	8 00
".....	".....	Anth., stove.....	9 00
".....	".....	Anth., nut.....	9 00
".....	Post Office.....	Bit.....	6 25
".....	".....	".....	9 00
Port Colborne.....	".....	Anth., egg.....	9 00
Port Hope.....	".....	Anth., egg.....	7 90
".....	".....	Anth., nut.....	7 90
Port Perry.....	".....	Anth., egg.....	7 75
".....	".....	Anth., nut.....	8 00
Prescott.....	Custom House.....	Anth., egg.....	8 00
".....	Post Office.....	Anth., egg.....	8 00
".....	".....	Anth., nut.....	8 00
Preston.....	".....	Anth., stove.....	7 25
".....	".....	Anth., nut.....	7 50
Renfrew.....	".....	Anth., stove.....	8 25
".....	".....	Anth., nut.....	8 50
Sandwich.....	".....	Alterations & Additions to.....	1,125 00
Sarnia.....	".....	Anth., egg.....	7 70
".....	".....	Anth., egg.....	7 20
Sault Ste. Marie.....	".....	Anth., nut.....	7 20
".....	".....	Anth., egg.....	8 25
".....	".....	Grate.....	8 00
Seaford.....	".....	Anth., egg.....	7 50
Shelburne.....	".....	Anth., egg.....	8 50
".....	".....	Anth., nut.....	8 50
Smiths Falls.....	".....	Anth., egg.....	7 65
".....	".....	Anth., egg.....	7 65
".....	".....	Anth., nut.....	7 90
".....	".....	Anth., nut.....	7 90
Stedron.....	".....	Anth., egg.....	8 25



STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
<b>PUBLIC BUILDINGS—Continued.</b>			
<b>Ontario—Concluded.</b>			
Whitby.....	E. R. Blow.....		7 75
Wingham.....	J. A. McLean.....		7 45
".....	".....		7 70
Woodstock.....	B. Blair Company.....		7 45
<b>Manitoba.</b>			
Brandon.....	North American Collieries.....		12 00
".....	".....		8 85
".....	Bardley & O'Hara.....		11 60
".....	North American Collieries.....		8 85
".....	Bardley & O'Hara.....		4 55
Carman.....	Western Coal Co.....		11 75
Dauphin.....	".....		10 70
Deloraine.....	E. M. Chalmers.....		11 15
".....	".....		13 25
Emerson.....	Bit.....		10 00
".....	Western Coal Co.....		10 05
".....	Estate Chas. Whitman.....		9 00
Le Pas.....	Western Coal Co.....		10 05
Minnedosa.....	Vogel.....		13 00
Morden.....	Western Coal Co.....		11 20
".....	".....		10 60
Neepawa.....	North American Collieries.....		9 45
".....	Western Coal Co.....		11 10
Portage la Prairie.....	".....		11 10
".....	".....		11 10
".....	".....		10 70
".....	North American Collieries.....		9 15
".....	Western Coal Co.....		10 70
Seakirk.....	North American Collieries.....		9 15
".....	Western Coal Co.....		9 15
Souris.....	Thos. Reid.....		11 15
".....	North American Collieries.....		8 85
Stonewall.....	T. H. Patrek.....		12 15
".....	W. Seed.....		11 50
St. Boniface.....	North American Collieries.....		11 00



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Virde	"	Anth., egg.	Western Coal Co.	11 80
"	"	Bit.	North American Collieries	8 65
Winnipeg	Immigration Hall No. 1.	Anth., egg.	Standard Supply & Fuel Co.	11 25
"	"	Anth., egg.	"	11 25
"	"	Anth., egg.	J. G. Hargrave & Co.	11 25
"	Post Office (new)	Anth., egg.	Western Coal Co.	11 25
"	"	Anth., egg.	"	11 25
"	"	Bit.	"	7 60
"	New Examining Warehouse.	Anth., egg.	J. G. Hargrave & Co.	11 25
"	Postal Station "B"	Anth., stove.	"	11 25
"	Postal Station "D"	"	"	"
<i>Alberta.</i>				
Athabaska Landing.	Immigration Office.	Coal per ton—Bit.	Athabaska Feed Co.	4 50
"	"	Bit—Can.	"	4 00
Bassano.	Public Building.	Anth., egg.	Atlas Lumber Company	9 50
"	"	Anth., nut.	"	9 00
Calgary	Immigration shed.	Anth., egg.	F. W. Mapson & Co.	8 50
"	"	Bit—Can.	"	5 50
"	Examining Warehouse.	"	"	5 10
"	Drill Hall	Construction of	North American Collieries	5 10
Castor.	Immigration Office.	Bit—Can.	A. G. Creelman & Co.	282,051 45
Edmonton.	Immigration Building.	Coal per ton—Bit—Can.	A. D. McCormack	3 00
"	Post Office.	Lignite.	Crown Coal Co.	2 95
Edson.	Immigration Office.	Bit.	"	2 95
Entwistle.	"	Anth., stove.	North American Collieries	5 70
Grande Prairie.	"	Bit.	"	4 20
Laconibe.	Experimental Farm.	Anth., furn.	C. H. Dunlop.	6 50
"	"	Bit.	H. A. Day.	7 25
"	"	Anth., egg.	"	4 50
Lethbridge.	Post Office.	Bit—Can.	City Cartage Company	7 25
"	Public Building (new).	Calc.	"	4 50
"	Experimental Farm.	Bit.	"	4 50
"	Custom House.	Parcel Hoist.	North American Collieries	4 85
Red Deer.	Public Building.	Coal per ton—Bit—Can.	J. & W. Marnock	1,675 00
Strathcona.	Immigration Building.	Bit—Can.	D. A. McGill.	4 35
"	Post Office.	Bit.	North American Collieries	5 00
Vermillion.	Immigration Office.	Anth., stove.	"	5 00
"	Post Office.	Anth., stove.	"	14 00
Viking.	Immigration Office.	Bit—Can.	Steve Jones.	14 00
Wainwright.	Immigration Office.	Bit—Can.	North American Collieries	4 75
Wetaskwin.	Public Building.	Bit.	Geo. H. Bayless.	6 05
"	"	"	"	5 00
<i>Saskatchewan.</i>				
Battleford.	Post Office.	Coal per ton—Anth., egg.	North American Collieries.	13 50
"	"	Bit.	"	6 55
"	"	Anth., egg.	North Battleford Manufacturing Co.	12 55
"	"	Bit.	"	6 00
Biggar.	Immigration Office.	Bit.	North American Collieries.	6 55
Estevan.	Post Office.	Lignite.	T. D. Munro.	2 05

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
Public Buildings—Concluded.			
Saskatchewan—Concluded.			
Gravelbourg.....Post Office.....	Anth., stove.....		13 30
".....".....	Bit.....		9 25
Humboldt.....".....	Anth., egg.....		12 60
".....".....	Anth., mt.....		12 75
Indian Head.....Experimental Farm.....	Anth., egg.....		11 50
".....".....	Bit.....		8 50
".....".....	Anth., furn.....		11 50
".....".....	Bit.....		8 50
".....".....	Anth., stove.....		11 50
Kerobert.....Immigration Office.....	Galt.....		8 15
Lloydminster.....".....	Bit. Can.....		5 25
".....".....	Bit.....		5 25
Maple Creek.....Post Office.....	Anth., furn.....		13 00
".....".....	Bit.....		7 00
Melfort.....".....	Anth., egg.....		13 30
Moose Jaw.....".....	Anth., egg.....		10 45
".....".....	Anth., stove.....		10 45
".....".....	Bit. Can.....		7 25
North Portal.....Immigration Building.....	Bit.....		3 75
".....".....	Anth., egg.....		11 25
Regina.....Post Office.....	Bit. Can.....		7 65
".....".....	Anth., egg.....		11 25
".....".....	Anth., egg.....		14 15
Rosheron.....Experimental Farm.....	Anth., mt.....		14 40
".....".....	Bit.....		8 50
Saskatoon.....Post Office.....	Anth., egg.....		13 25
".....".....	Immigration Building.....		7 00
Scott.....Experimental Farm.....	Anth., stove.....		13 25
".....".....	Anth., egg.....		13 50
Sutherland.....Boarding House and forest nursery.....	Bit.....		7 00
Unity.....Immigration Building.....	Construction of.....	June 24, 1916.	3,665 00
Yorkton.....Post Office.....	Coal per ton—Bit.....		6 50
".....".....	Anth., egg.....		12 50
".....".....	Bit.....		7 95
Wadena.....Immigration Building.....	Bit.....		8 25

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Weyburn.....	Post Office.....	"	Bit.....	North American Collieries.....		7 45
Wilkie.....	Immigration Building.....	"	Bit.....	Reliance L. Co.....		8 50
"	"	"	Anth., nut.....	"		14 00
<i>British Columbia.</i>						
Ashcroft.....	Public Building.....	Construction of.....		Edw. Hunt.....	Oct. 30, 1916.	9,757 00
Little Saanich (Victoria).....	Observatory Bl'd'g.....	Painting of dome.....		The Melrose Company Limited.....	June 19, 1916.	855 00
Little Saanich (Victoria).....	"	(new).....	Steel fittings.....	The Steel Equipment Co. Ltd.....	Aug. 9, 1916.	300 00
Vancouver.....	Removal of houses and cabin (Gore Ave.).....			A. Campbell & W. Crawford.....	May 6, 1916.	185 00
The following item was received too late for insertion in last year's annual report (1915-1916).						
Ottawa.....	Irrigation Branch.....	Steel Cabinets.....		The Office Specialty M'f'g. Co., Ltd.....	Nov. 30, 1916.	125 00
<b>HARBOURS AND RIVERS.</b>						
<i>Nova Scotia.</i>						
East River.....	Lock gates, etc.....	Construction of.....		Roger Miller & Sons, Ltd.....	June 14, 1916.	Schedule of prices 0 28
St. Peter's Narrows.....	Dredging.....	Class "B" per cubic yard.....		The Coastal Dredging & Cons. Co. Ltd.....	Nov. 29, 1916.	
<i>New Brunswick.</i>						
Bathurst.....	Dredging.....	Class "B" per cubic yard.....		The Northern Dredging & Cons. Co. Ltd.....	June 22, 1916.	0 30
St. John (West).....	Back filling and retaining wall.....	"		"	Oct. 27, 1916.	0 30
"	"	Shifting of filling.....		"	July 15, 1916.	Schedule of prices.
"	"	Wooden shed on pier No. 1—Berth 16.....	Construction of.....	"	Nov. 14, 1916.	Cost plus 10%
"	"	Stone filling under shed to pier 1—Berth 16.....		D. C. Clark.....	Nov. 27, 1916.	Schedule of prices.
<i>Québec.</i>						
Grand'Mere Falls.....	Construction and Maintenance of log slides, etc.....			J. E. Kane & W. T. Ring.....	Dec. 22, 1916.	"
Laprairie.....	Construction of protection works and completion of dyke.....			The Laurentide Co., Ltd.....	Dec. 28, 1916.	
Launzon.....	Additional works to Dry Dock.....	Construction of.....		Carlton Construction Co., Ltd.....	Nov. 8, 1916.	Schedule of prices.
St. Maurice River.....	Dredging.....	Class "B" per cubic yard.....		M. P. & J. T. Davis.....	Aug. 2, 1916.	51,500 00
				La Cie Generale d'Entreprise Publiques.....	Sept. 27, 1916.	0 09

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—*Continued.*

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
<b>HARBOUR AND RIVERS—Continued.</b>			
<i>Ontario.</i>			
Port William (Mission River).....	The Thunder Bay Contracting Co. Ltd.	July 13, 1916.	1 30
Port William.....	"	Oct. 5, 1916.	approximate price
Grand River.....	The Great Lakes Dredging Company Ltd.	July 20, 1916.	\$16,188.49
Port Hope.....	The Randolph Macdonald Co. Ltd.	May 29, 1916.	0 12
Port Maitland.....	Confederation Const. Co. Ltd.	June 10, 1916.	0 18
"	The Great Lakes Dredging Co. Ltd.	Nov. 23, 1916.	0 12
Port Stanley.....	M. J. Hogan.....	Nov. 2, 1916.	Schedule of prices.
<i>British Columbia.</i>			
False Creek.....	The Pacific Dredging Co. Ltd.	July 8, 1916.	0 25
Steveston (Fraser River).....	Marsh-Hutton Powers Co. Ltd.	Aug. 15, 1916.	Schedule of prices.
Vancouver.....	Snyder Bros & Brethour Ltd.	May 2, 1916.	44,994 00
<b>VESSELS, DREDGES AND PLANTS.</b>			
Supply of brooms and brushes for departmental dredging plant for Ontario & Quebec for 1916-17.....	R. E. Boyd and Company	May 1, 1916.	Schedule of prices.
Supply of hardware for departmental dredging plant for Ontario & Quebec for 1916-1917.....	Builders Sales Ltd.	" 1, 1916.	"
Supply of hose for departmental dredging plant for Ontario & Quebec for 1916-1917.....	Dunlop Tire & Rubber Goods Co., Ltd.	" 1, 1916.	"
Supply of hose for departmental dredging plant for Ontario & Quebec for 1916-1917.....	Goodyear Tire & Rubber Goods Co. of Canada, Ltd.	" 1, 1916.	"
Supply of hose for departmental dredging plant for Ontario & Quebec for 1916-1917.....	Canadian Consolidated Rubber Co., Ltd.	" 1, 1916.	"
Supply of hose for departmental dredging plant for Ontario & Quebec for 1916-1917.....	Canadian Fairbanks Morse Co., Ltd.	" 1, 1916.	"
Supply of packing for departmental dredging plant for Ontario & Quebec for 1916-1917.....	The Garlock Packing Co.	" 1, 1916.	"
Supply of Paints and Paint Oils for departmental dredging plant for Ontario & Quebec for 1916-1917.....	The Ottawa Paint Works Limited.	" 1, 1916.	"

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Supply of steamships, valves & fittings for departmental dredging plant for Ontario & Quebec for 1916-1917.	Samuel Fisher Registered.	"	1, 1916.	"
Supply of hose for departmental dredging plant for New Brunswick and Nova Scotia for 1916-1917.	Dunlop Tire & Rubber Goods Co., Ltd.	"	1, 1916	"
Supply of hose for departmental dredging plant for New Brunswick and Nova Scotia for 1916-1917.	Goodyear Tire & Rubber Co. of Can., Ltd.	"	1, 1916.	"
Supply of hose for departmental dredging plant for New Brunswick and Nova Scotia for 1916-1917.	Canadian Consolidated Rubber Co., Ltd.	"	1, 1916	"
Supply of packing for departmental dredging plant for New Brunswick and Nova Scotia for 1916-1917.	Canadian Fairbanks Morse Co., Ltd.	"	1, 1916.	"
Supply of Paints and paint oils for departmental dredging plant for New Brunswick and Nova Scotia for 1916-1917.	The Garlock Packing Company.	"	1, 1916.	"
Supply of brooms and brushes for departmental dredging plant for Prince Edward Island for 1916-1917.	The Standard Paint Co. of Canada, Ltd.	May 1,	1916.	Schedule of prices.
Supply of hardware for departmental dredging plant for Prince Edward Island for 1916-1917.	The Crabtree Hardware Co., Ltd.	"	1, 1916	"
Supply of hose for departmental dredging plant for Prince Edward Island for 1916-1917.	The Rogers Hardware Co., Ltd.	"	1, 1916.	"
Supply of hose for departmental dredging plant for Prince Edward Island for 1916-1917.	Goodyear Tire & Rubber Co. of Can., Ltd.	"	1, 1916.	"
Supply of hose for departmental dredging plant for Prince Edward Island for 1916-1917.	Dunlop Tire and Rubber Goods Co., Ltd.	"	1, 1916.	"
Supply of hose for departmental dredging plant for Prince Edward Island for 1916-1917.	Canadian Consolidated Rubber Co., Ltd.	"	1, 1916.	"
Supply of packing for departmental dredging plant for Prince Edward Island for 1916-1917.	Canadian Fairbanks Morse Co., Ltd.	"	1, 1916.	"
Supply of Paints and paint oils for departmental dredging plant for Prince Edward Island for 1916-1917.	The Garlock Packing Co.	"	1, 1916.	"
Supply of wire rope for departmental dredging plant for Prince Edward Island for 1916-1917.	The Standard Paint Co. of Canada, Ltd.	"	1, 1916.	"
Supply of hose for departmental dredging plant for Manitoba for 1916-1917.	The Rogers Hardware Co., Ltd.	"	1, 1916	"
Supply of hose for departmental dredging plant for Manitoba for 1916-1917.	Dunlop Tire & Rubber Goods Co., Ltd.	"	1, 1916	"
Supply of hose for departmental dredging plant for Manitoba for 1916-1917.	Canadian Consolidated Rubber Co., Ltd.	"	1, 1916	"
Supply of packing for departmental dredging plant for Manitoba for 1916-1917.	Canadian Fairbanks Morse Co., Ltd.	"	1, 1916.	"
Supply of coal for departmental dredging plant for Buckingham for 1916-1917, per ton.	Goodyear Tire & Rubber Co. of Can., Ltd.	"	1, 1916.	"
Supply of coal for departmental dredging plant for Chicomini, Que., for 1916-1917, per ton.	The Standard Paint & Varnish Co., Ltd.	"	1, 1916	"
Supply of coal for departmental dredging plant for Grande's Piles, Que., for 1916-1917, per ton.	Andrew Baile.	"	1, 1916.	5 05
Supply of coal for departmental dredging plant for Quebec for 1916-1917, per ton.	Canadian Import Company	"	1, 1916.	6 15
Supply of coal for departmental dredging plant for Three Rivers, Que., for 1916-1917, per ton.	Andrew Baile.	"	1, 1916.	5 50
Supply of coal for departmental dredging plant for Verdun, Que., for 1916-1917, per ton.	Canadian Import Company	"	1, 1916.	6 05
Supply of coal for departmental dredging plant for Verdun, Que., for 1916-1917, per ton.	"	"	1, 1916.	4 37
Supply of coal for departmental dredging plant for Verdun, Que., for 1916-1917, per ton.	"	"	1, 1916.	5 55
Supply of coal for departmental dredging plant for Hamilton, Ont., for 1916-1917, per ton.	L. Cohen & Son.	"	1, 1916.	5 90
Supply of coal for departmental dredging plant for Ottawa, Ont., for 1916-1917, per ton.	F. P. Weaver Coal Company, Ltd.	"	1, 1916.	5 88
Supply of coal for departmental dredging plant for Ottawa, Ont., for 1916-1917, per ton.	Gillies-Guy, Ltd.	"	1, 1916.	4 30
Supply of coal for departmental dredging plant for Port Burwell, Ont., for 1916-1917, per ton.	Ottawa Transportation Co., Ltd.	"	1, 1916.	5 00
Supply of coal for departmental dredging plant for Port Burwell, Ont., for 1916-1917, per ton.	F. P. Weaver Coal Co., Ltd.	"	1, 1916.	4 03

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
<i>VESSELS, DREDGES AND PLANT—Concluded.</i>			
Supply of coal for departmental dredging plant for Port Stanley, Ont., for 1916-1917, per ton.....	P. P. Weaver Coal Co., Ltd.....	May 1, 1916.	3 33
Supply of coal for departmental dredging plant for Sturgeon Falls, Ont., for 1916-1917, per ton.....	"	" 1, 1916.	5 68
Supply of coal for departmental dredging plant for Bathurst, N.B., for 1916-1917, p. ton.....	F. P. Elkin.....	" 1, 1916.	5 90
Supply of coal for departmental dredging plant for Chatham, N.B., for 1916-1917, p. ton.....	"	" 1, 1916.	5 90
Supply of coal for departmental dredging plant for Shippigan, N.B., for 1916-1917, per ton.....	"	" 1, 1916.	6 40
Supply of coal for departmental dredging plant for Campbellton, N.B., for 1916-1917, per ton.....	R. K. Shives.....	" 1, 1916.	5 50
Supply of coal for departmental dredging plant for Canso, N.S., for 1916-1917, per ton.....	A. N. Whitman & Son, Ltd.....	" 1, 1916.	5 00
Supply of coal for departmental dredging plant for Fort Lawrence, N.S., for 1916-1917, per ton.....	W. A. Fillmore.....	" 1, 1916.	4 15
Supply of coal for departmental dredging plant for Liverpool, N.S., for 1916-1917, p. ton.....	Southern Salvage Co., Ltd.....	" 1, 1916.	6 00
Supply of coal for departmental dredging plant for Mulgrave, N.S., for 1916-1917, p. ton.....	A. C. Aucoin.....	" 1, 1916.	4 70
Supply of coal for departmental dredging plant for Pictou, N.S., for 1916-1917, p. ton.....	Garnison & Weir.....	" 1, 1916.	4 80
Supply of coal for departmental dredging plant for Charlottetown, P.E.I., for 1916-1917, per ton.....	Buntain Bell Co., Ltd.....	" 1, 1916.	3 00
Supply of coal for departmental dredging plant for Selkirk, Man., for 1916-1917, p. ton.....	The Winnipeg Supply & Fuel Co., Ltd.....	" 1, 1916.	6 60
Supply of coal for departmental dredging plant for Winnipegosis, Man., for 1916-1917, per ton.....	The Winnipeg Supply & Fuel Co., Ltd.....	" 1, 1916.	7 80
Supply of Marine cylinder oil for departmental dredging plant for Ontario and Quebec, for 1916-1917, per gal.....	The British American Oil Co., Ltd.....	" 17, 1916.	0 38
Supply of tallow for departmental dredging plant for Ontario and Quebec, for 1916-1917, per gal.....	The British American Oil Co., Ltd.....	" 17, 1916.	0 10½
Supply of Marine engine oil for departmental dredging plant for Ontario and Quebec, for 1916-1917, per gal.....	The Imperial Oil Co., Ltd.....	" 17, 1916.	0 53½
Supply of chain and cable grease for departmental dredging plant for Ontario and Quebec, for 1916-1917, per lb.....	"	" 17, 1916.	0 02 <sup>85</sup> / <sub>100</sub>
Supply of coal oil for departmental dredging plant for Ontario and Quebec, for 1916-1917, per gal.....	McCool Bros. & Company.....	" 17, 1916.	0 15½
Supply of compression grease for departmental dredging plant for Ontario and Quebec, for 1916-1917, per lb.....	"	" 17, 1916.	0 05
Supply of Marine cylinder oil for departmental dredging plant for New Brunswick and Nova Scotia, for 1916-1917, per gal.....	The British American Oil Co., Ltd.....	" 17, 1916.	0 36
Supply of Coal oil for departmental dredging plant for New Brunswick and Nova Scotia, for 1916-1917, per gal.....	"	" 17, 1916.	0 18

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Supply of compression grease for departmental dredging plant for New Brunswick and Nova Scotia, for 1916-1917, per lb.	"	"	17, 1916.	0 06
Supply of Marine engine oil for departmental dredging plant for New Brunswick and Nova Scotia, for 1916-1917, per gal.	The Imperial Oil Co., Ltd.	"	17, 1916.	0 54½
Supply of chain and cable grease for departmental dredging plant for New Brunswick and Nova Scotia, for 1916-1917, per lb.	"	"	17, 1916.	0 03
Supply of tallow for departmental dredging plant for New Brunswick and Nova Scotia, for 1916-1917, per lb.	Canadian Oils Companies, Ltd.	"	17, 1916.	0 08
Supply of Marine cylinder oil for departmental dredging plant for Prince Edward Island, for 1916-1917, per gal.	The British American Oil Co., Ltd.	"	17, 1916.	0 38
Supply of Marine engine oil for departmental dredging plant for Prince Edward Island, for 1916-1917, per gal.	The Imperial Oil Co., Ltd.	"	17, 1916.	0 54½
Supply of chain and cable grease for departmental dredging plant for Prince Edward Island, for 1916-1917, per lb.	"	"	17, 1916.	0 03
Supply of coal oil for departmental dredging plant for Prince Edward Island, for 1916-1917, per gal.	McCool Bros. & Co.	"	17, 1916.	0 19¼
Supply of compression grease for departmental dredging plant for Prince Edward Island, for 1916-1917, per lb.	Canadian Oils Companies, Ltd.	"	17, 1916.	0 06½
Supply of Tallow for departmental dredging plant for Prince Edward Island, for 1916-1917, per lb.	"	"	17, 1916.	0 08
Supply of Marine cylinder oil for departmental dredging plant for Manitoba, for 1916-1917, per gal.	The British American Oil Co., Ltd.	"	17, 1916.	0 50
Supply of Marine engine oil for departmental dredging plant for Manitoba, for 1916-1917, per gal.	The Imperial Oil Co., Ltd.	"	17, 1916.	0 56½
Supply of chain and cable grease for departmental dredging plant for Manitoba, for 1916-1917, per lb.	"	"	17, 1916.	0 03½
Supply of coal oil for departmental dredging plant for Manitoba, for 1916-1917, per gal.	Canadian Oils Companies, Ltd.	"	17, 1916.	0 20
Supply of compression grease for departmental dredging plant for Manitoba, for 1916-1917, per lb.	"	"	17, 1916.	0 07
Supply of 200 tons of coal for departmental dredging plant for Chicoutimi, Que., for 1916-1917, per ton.	Canadian Import Company.	June 5, 1916.		6 15
Supply of 1,500 tons of coal for departmental dredging plant for Montreal, Que., for 1916-1917, per ton.	"	"	5, 1916.	3 79
Supply of 800 tons of coal for departmental dredging plant for Quebec, for 1916-1917, per ton.	"	"	5, 1916.	4 79
Supply of 200 tons of coal for departmental dredging plant for Rimouski, Que., for 1916-1917, per ton.	"	"	5, 1916.	6 05
Supply of 575 tons of coal for departmental dredging plant for Three Rivers, Que., for 1916-1917, per ton.	"	"	5, 1916.	4 37
Supply of 125 tons of coal for departmental dredging plant for Verdun, Que., for 1916-1917, per ton.	"	"	5, 1916.	5 55
Supply of 500 tons of coal for departmental dredging plant for Levis, Que., for 1916-1917, per ton.	Pierre Robitaille.	Sept. 27, 1916.		6 60
Construction of boiler for Dredge "P. D. W. No. 120"	Campbell Steel & Iron Works, Ltd.	Jan. 27, 1917.		3,000 00
Docking, painting and overhaul of Dredge "King Edward"	B. C. Marine, Limited.	Feb. 15, 1917.		Unit prices.
Supply of timber for Dredge "P. W. D. No. 125"	Mason Gordon & Company	" 19, 1917.		7,024 93

STATEMENT No. 1.—Contracts let by the Department of Public Works of Canada, from April 1, 1916, to March 31, 1917—*Concluded.*

Works.	Names of Contractors.	Date of Contract.	Amount.
GOVERNMENT TELEGRAPH SERVICE.			
Freighting of supplies for Yukon Telegraph Line at Hazelton, B.C., per lb.	Geo. M. Beames.....	May 12, 1916.	0 17
Freighting of supplies for Yukon Telegraph Line at Telegraph Creek, B.C., per lb.	J. F. Callbreath.....	June 10, 1916	0 11 <sup>15</sup> / <sub>100</sub>
Supply and delivery of 40 knots of Submarine Cable at Halifax, N.S.	Siemens Company of Canada, Ltd.....	July 5, 1916	12,165 00
Supply of 163,500 lbs. of Telegraph wire for Government Telegraph Lines at Kamloops and Vancouver, B.C.	The Steel Co. of Canada, Ltd.....	" 31, 1916.	10,273 50



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STATEMENT No. 2.—Properties purchased or sold by the Department of Public Works of Canada from April 1, 1916, to March 31, 1917.

Date of Conveyance.	Vendors.	Purchasers.	Description of Property.	For what purpose.	Area.	Price.
						\$ cts.
April 1	Webb & Bradburn	His Majesty	Sale of parts of lots Nos. 6 and 7, Fort William (McKellar Riv., Ont).	McKellar Riv. Impvmts.	3.46 acres.	14,122 30
" 10	Geo. Chisholm	"	Sale of land on west side of East River, Stonehouse Point, N.S.	East River Impvmts.	0.6 acre.	300 00
" 16	Timiskaming & Northern Railway Commission	"	Transfer of part of lot No. 9, 1st Con, Tp. of Dymond, Ont.	Site for wharf (New Lisk-eard)	20,625 feet.	100 00
" 28	C. H. Henley & al.	"	Sale of land at Spry Bay, N.S.	Right of way to wharf.	0.28 acre.	50 00
" 29	T. K. Seovill	"	Sale of part of lot No. 3 at Portland, Ont.	Site for wharf.	580 sq. ft.	100 00
May 2	J. D. McEachern	"	Sale of land at Malignant Cove, N.S.	Right of way to pier.	0.9 acre.	69 13
" 3	J. Bedard	"	Release for all damages and claims in re-flooding of lot No. 48, Tp. of Gungues, Que.	Timiskaming Reservoir Dam		Free Grant.
" 11	His Majesty	Town of Le Pas	Grant of part of Hudson Bay Reserve at Le Pas, Man.		0.02 acre.	7,000 00
" 17	"	E. Sugarman	Sale of scrap metal from Parlt. B'ld'gs., Ottawa, Ont.	Timiskaming Reservoir Dam		50 00
" 25	J. B. Delay	His Majesty	Release for all damages and claims in re-flooding of lot No. 61, Tp. of Gungues, Que.	Site for Public B'ld'g.		1 00
" 31	Emma Aylmer	"	Sale of part of lot No. 517, Chase, B.C.			6 00
" —	Arthur Lachapelle	"	Release for all damages and claims in re-rent of beacon site, etc., St. Francois du Lac, Q.			77,000 00
June 1	J. Manuel	"	Sale of lots Nos. 25 and 26, Kent St., Ottawa, Ont., and lot No. 16, Victoria St.	Site for new Dept. B'ld'g.		100,000 00
" 1	J. Manuel	"	Sale of lots Nos. 40, 41 and 42, Victoria St., and parts of lots No. 27 and 28 Wellington St., Ottawa, Ont.	"		58,376 00
" 2	A. A. Fournier, Ltd.	"	Release in re lot No. 4, north side of Wellington St., lots Nos. 19 and 20 Victoria St., Ottawa, Ont.	"		65,000 00
" 5	G. H. Gennill	"	Conveyance of lot No. 43 and part of lot No. 4, south side of Victoria St., and parts of lots Nos. 30 and 31 north side of Wellington St., Ottawa, Ont.	"		401 36
" 6	F. B. McLauren et ux.	"	Sale of wharf property at Port Clyde, N.S.	Site for wharf.		41 50
" 10	Joseph Houle	"	Release for all claims and damages in re-flooding of lots 1B and 2B, Range 3, Tp. of Duhamel, Que.	Timiskaming Reservoir Dam		



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" 31 Aug. 3	A. Slavin & C. Slavin, The Kent Lumber Co., Ltd.	"	Sale of land at Sydenham, Ont.	Public Building Site.	1,000 00
"	His Majesty	Corporation of the City of Ottawa.	Release for all damages caused by dredging at Gold River, N.S. Agreement re compensation for closing streets north side of Wellington St., Ottawa, Ont., and Corporation paying to Government annually.		1 00
" 7	His Majesty	His Majesty	Quit claim deed re certain streets and portion of streets, etc., Ottawa, Ont.	New Depart. Buildings.	11,506 62
" 11	David Cadieux (father)	"	Grant of part of lot No. 24, Hamilton, Ont.	New Depart. Buildings. Post Office.	406 24
" 12	David Cadieux (father and son.)	"	Release for all claims and damages caused by flooding part of lot No. 35, Tp. of Guignes, Que.	Timiskam. Reserv. Dam.	488 00
" 13	Daniel Dempsey	"	Release for all claims and damages caused by flooding part of lot No. 35, Tp. of Guignes, Que.	"	165 64
" 14	Certificate of Title— Joseph St. Germain.	"	Sale of part of north ½ of lot No. 8, Con. 2, Tp. of Casey, Ont.	"	13-75 acres.
" 28	T. P. Kelly	"	Sale of parts of lot No. 45, Esquimalt, B.C.		300 00
Sept. 5	A. M. Andrews	"	Release for all claims and damages re flooding of lot No. 38, Range 3, Tp. of Guignes, Que.	Timiskam. Reserv. Dam. Kamistiquia and Mission River Improv.	3,075 73
" 9	A. Piche	"	Sale of part of lot No. 10, con. D, Isld. No. 2, Fort William, Ont.	Timiskam. Reserv. Dam.	191 acres.
" 15	The Corporation of the City of Port Arthur— S. Christian & al.	His Majesty	Release for all claims and damages re lot No. 63, Tp. of Fabre, Que.	"	49 00
Oct 6	Naval Service.	Public Works Dept.	Grant of parcel of land, being part of lot No. 5, P., Port Arthur, Ont.	Government purposes.	1 00
" 7	Notice of Abandonment— His Majesty	"	Sale of land at Bear Cove, N.S.	Boat landing.	37 50
" 11	C. E. McDonald et ux. A. R. Armstrong.	His Majesty	Transfer of land at Tuff's Cove, Halifax, N.S.	Dry Dock.	Free transfer.
" 17	Prov. Govern. of Quebec. J. W. J. Presso. A. Bouchard.	His Majesty	Abandonment of land at Albert, N.B.	Site for wharf.	1 acre.
Nov. 2	Interior Department.	Pub. Wks. Dept	Grant of parcel of land at Port Arthur, Ont.	Right of way to wharf.	Free transfer. 15 00
Dec. 5	His Majesty	F. E. Clark	Sale of lot No. 3 and ½ of lot No. 4, New Liskeard, Ont.	Timiskam. Reserv. Dam. Wharf Latchford, Dam.	150 00 430 82 267 08
" 6	His Majesty	"	Letters patent re water lot, Hudson, Que.	Approach to wharf.	
" 5	A. A. St. Arnaud	"	Sale of lot No. 190, Latchford, Ont.	"	
" 14	Interior Department.	"	Exchange of land at St. Geneviève de Batis- can, Que.	Telegraph Service.	Free transfer. 123 00
" 22	His Majesty	"	Transfer of tract of land northeast ¼ of sect. 30, Tp. 70, Calling River, B.C.		
"	His Majesty	"	Sale of launch on Lake Nipissing.		

STATEMENT No. 2.—Properties purchased or sold by the Department of Public Works of Canada from April 1, 1916, to March 31, 1917.—Continued.

Date of Conveyance.	Vendors.	Purchasers.	Description of Property.	For what purpose.	Area.	Price.
						\$ cts.
1916.						
Dec. 29.	The King.	vs Western Imperial Co., Ltd., <i>et al.</i>	Certificate of judgment in re Esquimaux Graving Dock.			20,550 00
" 30.	Trefle Jacob.	His Majesty.	Sale of land at St. Genevieve de Batiscan, Que.	Approach to wharf.	830.1 sq. feet.	180 00
1917.						
Jan. 15.	His Majesty.	Hamilton Harbour Commissioners.	Grant of two parcels of land, Hamilton, Ont.	Harbour construction.		Free grant.
" 16.	P. F. Bulger.	His Majesty.	Sale of part of south $\frac{1}{2}$ of lots Nos. 7 and 8, 3rd Con., Tp. of Casey, Ont.	Timiskam. Reserv. Dam.	9.25 acres.	
" 18.	W. Rosenberger.	"	Sale of part of north $\frac{1}{2}$ of lot No. 8, 6th Con., Tp. of Harris, Ont.	"	82 acres.	
" 26.	His Majesty.	Jos. Hogue.	Grant of parts of lots Nos. 141 and 142, Ste. Therese de Blainville, Que.	Private enterprise.	1 acre.	1 00
" 30.	Notice of Abandonment.	His Majesty.	Abandonment of land at Port Hastings, Ont.	Wharf site.		
Feb. 2.	Margaret S. Christie.	His Majesty.	Sale of land being lot No. 32, Block 6, at Grande Prairie, Alta.	Government, Teleg. Office.		300 00
" 3.	Notice of Expropriation.	His Majesty.	Expropriated land at Albert, N.B.	Site for wharf.	14 acres.	300 00
" 15.	J. A. Gird.	"	Sale of land at St. Roch (Richelieu) Que.	"	5,325 sq. ft.	300 00
" 15.	J. Richer.	"	Sale of land at St. Roch (Richelieu) Que.	"	6,578 sq. ft.	300 00
" 28.	Certificate of Title.	B. C.	Sale of part of lot No. 2617, North Parkway, B. C.	Telegraph Office.	0.23 acre.	
Mar. 3.	"	"	Sale of part of river lot No. 46, Le Pas, Man.	Wharf.		650 00
" 8.	"	"	Sale of Block "A", Sect. 1, Claycoquet, B. C.	Telegraph Office.	3,926 ft.	1,000 00
" 9.	His Majesty.	Town of Lévis.	Grant of tract of land at Lévis, Que.			
" 10.	"	Saché Bros.	Sale of machinery of old "Baker Laundry", Ottawa, Ont.			
" 15.	Severe Amyot.	His Majesty.	Sale of tract of land at Quebec, Que.	Post Office extension.	890.3 sq. ft.	650 00
" 16.	H. N. Bate Realty Corporation, Ltd.	"	Sale of lot No. 3, north side of Rear St., Ottawa, Ont.	Governmental purposes.	18.1 perches.	11,000 00 with 5% interest.
" 17.	J. & W. Keswick.	"	Sale of land at Bass River, N. B.	Site for wharf.	0.19 acres.	30 00
" 22.	W. H. Mandle <i>et al.</i>	"	Sale of part of lot No. 2, Kemptville, Ont.	Site for Public Building.		2,000 00

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The following items were received too late for insertion in last year annual report (1915-1916)

1883.	July 24	Notice of Expropriation	Expropriation of land and water lot at Bayfield, N.S.	Wharf		
1895.	July 10	T. Marks <i>et al.</i>	Sale of part of lot No. 18, Port Arthur, Ont.	Government purposes	0.23 acre.	1 00
1899.	Dec. 13	T. Macbeth	Sale of part of lot No. 5, east side of Dundas St., London, Ont.	Drill Hall		4,950 00
1901.	May 16	Notice of Expropriation	Expropriated land at Englishtown, N.S.	Wharf	$\frac{1}{2}$ acre.	
1906.	Oct. 20	J. Arthur Lavigne	Sale of part of lot No. 182, Trois Pistoles, Que.	Wharf and approach	5.893 sq. ft.	100 00
1913.	May 21	W. Ash & E. R. Rogers	Sale of land at Aurora, Ont.	Public Building		2,000 00
1914.	Aug. 15	Notice of Expropriation	Expropriated land at Dalhousie, N.B.	"	2,600 sq. ft.	
1915.	Jan. 5	W. D. Morris <i>et al.</i>	Sale of land at Harlech Point (Wallace Island, Ont.)	Wharf	$\frac{1}{2}$ acre	600 00
	Mar. 8	Elic Joel Rochon	Sale of portion of westerly $\frac{1}{2}$ of lot No. 6, in front of north westerly $\frac{1}{2}$ of lot No. 6 and part of westerly portion of lot No. 6 at Fort William, Ont.		4.63 acres.	29,216 23
	Aug. 3	T. Simard	Release for damages in re lot No. 7, Ville Marie, Que.	Timiskam. Reserv. Dam.		125 00
	Sept. 21	Louis Fleury	Release for damages in re lots Nos. 481 and 482, Ville Marie, Que.	"		300 00
	Oct. 2	John Campbell <i>et al.</i>	Sale of land at Stonehouse Point, East River, N.S.	East River Improvements	11.4 acres.	1,200 00
	Oct. 11	F. Taylor	Sale of land at House River, Alta.	Telegraph Service	1 acre.	500 00
	Nov. 15	A. E. Milligan	Sale of land at Stonehouse Point, East River, N.S.	East River Improvements	1.8 acre.	959 00
	Nov. 24	Art. Jolicoeur	Release for damages re lot No. 10, Ville Marie, Que.	Timiskam. Reserv. Dam.		125 00
	Dec. 29	Jos. Lavigne	Release for damages re lot No. 21, Ville Marie, Que.	"		253 00
	" 29	Palma Ranger	Release for damages re lot No. 8, ville Marie, Que.	"		30 00
	" 29	E. S. Carow	Sale of land at Cantley Point, East River, N.S.	East River Improvements	9. $\frac{1}{2}$ acres.	2,952 36
	" 31	T. W. Juttien <i>et al.</i>	Sale of part of lot No. 13, Hamilton, Ont.	Hamilton Harbour		8,500 00
	" 31	T. Marshall	Sale of part of lot No. 15, Hamilton, Ont.	"		1,500 00

STATEMENT No. 2.—Properties purchased or sold by the Department of Public Works of Canada from April 1, 1916, to March 31, 1917—*Concluded*.

Date of Conveyance.	Vendors.	Purchasers.	Description of Property.	For what purpose.	Area.	Price.
1916.						\$ cts.
Jan. 15.	Adam Burwash.....	"	Sale of part of lot No. 69-1, Tp. Guigues, Que.	Bridge Over Quinze River	64,500 sq. ft.....	50 00
" 15.	Jacques de St. Leon.....	"	Release for damages re lots Nos. 13 and 14, Ville Marie, Que.....	Timiskam. Reserv. Dum.		200 00
" 15.	Alexis Bombardier.....	"	Release for damages re lots Nos. 592 and 593, Ville Marie, Que.....	"		202 00
" 17.	J. B. Lacasse.....	"	Release for damages re lot No. 64, Ville Marie, Que.....	"		70 00
Feb. 2.	The Community General Hosp. etc., of the Sisters of Charity.....	"	Release for damages re lot No. 1, Subdivision of lot No. 24, Ville Marie, Que.....	"		591 00
" 17.	J. B. Bruncau.....	"	Release for damages re lot No. 47, Tp. of Guigues, Que.....	"		63 12
" 17.	Reni Filteau.....	"	Release for damages re lot No. 75, Ville Marie, Que.....	"		84 45
" 19.	Donald McIntosh.....	"	Release for damages re east 3/4 lot No. 9, 5th Con., Tp. of Bucke, Ont.....	"		50 00
" 23.	Henri Arcand.....	"	Release for damages re lot No. 63, Tp. of Guigues, Que.....	"		30 00
Mar. 4.	Mrs. C. A. Dubé.....	"	Release for damages re lot No. 15, Ville Marie, Que.....	"		591 00
" 20.	Geoffrey Scott.....	"	Sale of land in north division known as "Block K", Subdivision of Sect. 1, Salt Spring Island, Cowichan District, B.C.....	Wharf.....		1 00

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STATEMENT No. 3.—Properties leased to and from the Department of Public Works of Canada from April 1, 1916, to March 31, 1917.

Date of Lease.	Lessors.	Lessees.	Description of Property.	For what purpose.	Duration of Lease.	Rental.
						\$ cts.
1916.						
Apr. 3	J. S. Bergeron	His Majesty	Lease of 2nd floor in Building St. John St., Quebec, P.Q.	Colonization Office	1 yr. from 1st May, 1916	450 p. ann.
" 5	Joseph Pelletier	"	Lease of two rooms in Building, Edmundston, N.B.	Immigration	1 yr. from 1st March, 1916	144 p. ann.
" 5	The Molsons Bank	"	Lease of 2 stories in Building, Nos. 64 & 66 George St., Ottawa, Ont.	Militia & Defence	1 yr. from 20th Feb., 1916	150 p. month.
" 5	His Majesty	Halifax Civic Improvement League	Permission to use piece of land at Halifax, N.S.	Garden plot	during pleasure	
" 10	The Two (2) Maes, Ltd.	His Majesty	Lease of 3rd & 4th floors in Stephen's B'ld'g., Queen St., Ottawa, Ont.	Interior Dept.	6 mos. from occupation	0.06 per foot monthly.
" 10	Russell Blackburn	"	Lease of two rooms in Building No. 209 Sparks St., Ottawa, Ont.	Public Works Depart.	1 yr. from 1st May, 1916	350 p. annum.
" 10	L. J. Robb	"	Lease of three rooms in rear of "Bank Hamilton Building," Salmon Arm, B.C.	Chief Fire Ranger	From 1st March '16 and as long as required	12 p. month.
" 20	W. J. Boyd	"	Lease of part of 2nd floor in "Boyd B'ld'g", Winnipeg, Man.	Railway Commission	1 yr. from 1st June, 1916	1,270 p. ann.
" 26	The Imperial Canadian Trust Co.	"	Lease of suite No. 414 in Building, Saskatoon, Sask.	Railway-Mail Service	1 yr. from occupation	249 p. annum.
" 28	J. O. Giroux	"	Lease of room on lot No. 1 at Ground, Alta.	Immigration	12 mos. from 1st June, 1916	25 p. month.
May 2	La Banque Nationale	"	Lease of sixth floor in Building, Rideau St., Ottawa, Ont.	Translators	3 yrs. from occupation	2,116.20 p. ann.
" 5	W. Hueckvale & S. T. Estey Hooper	"	Lease of office No. 306, Medicine Hat, Alta.	Immigration	1 yr. from 1st June, 1916	28 p. month.
" 12	T. C. Rice	"	Lease of Building on Main Road at Weymouth, N.S.	Post Office	1 yr. from 1st June, 1916	200 p. annum.
" 15	Y.M.C.A.	"	Lease of 2nd floor in "Y.M.C.A." Building, North Sydney, N.S.	Engineers	1 yr. from 1st May, 1916	600 p. annum, renewable.
" 18	A. L. Foster	"	Lease of premises No. 126 Queen St., Ottawa, Ont.	Interior Department	6 mos. from 1st May, 1916	75 p. month.
" 19	La Cie d'Imprimerie et de Publicite de Trois-Rivieres	"	Lease of room in Building No. 111 Bonaventure St., Three Rivers, Que.	Public Works Dept.	1 yr. from 1st May, 1916	240 p. annum.
June 2	Railways & Canals Dept.	Pub. Wks. Dept.	Lease of parcel of land being lot No. 1, Tignish, P.E.I.	Post Office	From 1st May, 1916	1 p. annum.

STATEMENT No. 3.—Properties leased to and from the Department of Public Works of Canada from April 1, 1916, to March 31, 1917.—Continued.

Date of Lease.	Lessors.	Lessees.	Description of Property.	For what purpose.	Duration of Lease.	Rental.
1916.						\$ cts.
June 2	O'Connor Bros.	His Majesty	Lease of 1,377 sq. ft. and vault in Building, Huntingdon, Que.	Post Office	5 yrs. from 1st. April, 1916.	900 p. annum.
" 15	The Hamilton Bridge Works, Co., Ltd.	"	Lease of parcel of land at Hamilton, Ont.	Storage of materials	During pleasure.	1 p. annum.
" 15	Bank of Toronto	"	Lease of room No. 26 in Building at London, Ont.	Business profit war taxes.	1 yr. from June 16th, 1916.	16.66 p. month
" 20	The Canadian City Town Properties of Saskatoon.	"	Lease of 2,000 sq. ft. on ground floor of York Building, Saskatoon, Sask.	Examining Warehouse	1 yr. from 5th June, 1916.	840 p. annum.
" 22	The Bell Telephone Co. of Canada, Ltd.	"	Agreement re connection and use of Government & Company's line at Berthier en Haut, Ile au Castor, Ile du Pas, Ile St. Ignace, Que.		During 3 yrs. from June 22, 1916.	20 p. annum.
" 26	Odlion Cliche	"	Lease of part of building on Main St., St. Joseph de Beauce, Que.	Post Office	5 yrs. from occupation.	350 p. annum.
July 3	A. J. Major	"	Lease of Building No. 18 York St., Ottawa, Ont.	Distribution Branch, Pigeon Bureau.	5 yrs. from Oct. 6, 1916.	1.55 p. ann.
" 4	T. H. H. Fortier	"	Lease of two rooms and ground floor in Building on George St., Annapolis Royal, N.S.	Immigration	1 yr. from 1st. Sept., 1916.	180 p. annum.
" 5	Mrs. L. A. Osment	"	Lease of 2nd floor of building on Main St., Indian Head, Sask.	Forestry Branch	1 yr. from 1st. Sept., 1916.	43 p. month.
" 19	His Majesty	The Economy Sales Co.	Lease of building No. 69 Victoria St., Toronto, Ont.		2 yrs. from 30th. June, 1916.	900 p. annum.
" 27	The Imperial Canadian Trust Co.	His Majesty	Lease of suites Nos. 412 & 415, Saskatoon, Sask.	Railway Mail Service	1 yr. from 1st. Sept., 1916.	631.20 p. ann.
" 28	Sam. Nesbitt	"	Lease of part of "Stanley Block", Brighton, Ont.	Post Office	4 yrs from occupation.	100 p. annum.
Aug. 1	Dom. Bridge Co., Ltd.	"	Lease of part of south 1/2 of lot 5, Eastview, Ont.	For storing materials.	During pleasure.	1 p. annum.
" 1	Robert Simpson Co., Ltd.	"	Lease of 1,600 sq. ft. on ground floor of Building at Regina, Sask.	Post Office	From Yr. to Yr. 1st July, 1916.	1 per annum.
" 2	David Johnson	"	Lease of two rooms in building corner King & Water Sts., St. Stephen, N.B.	Immigration	3 yrs. from 13th. Aug., 1916.	150 p. annum.
" 2	Alex. Mullin	"	Lease of ground floor and basement of building at Toronto, Ont.	Postal Stn. "E"	1 yr. from 1st. Aug., 1916.	1,440 p. ann.
" 4	His Majesty	The Bell Telephone Co. of Canada, Ltd.	Permission to carry cable over Catarqui River between Kingston & Barrieffield, Ont. and to lay and maintain submarine cables at Bascule Bridge.		During pleasure.	56 p. annum.



Aug. 7	Dennis Realty Corporation, Ltd.	His Majesty	Lease of part of 6th floor in "Dennis Bld'g", Halifax, N.S.	Militia & Defence.	From occupation to 1st. Oct., 1918.	2,225 p. ann.
" 19	B. E. Rothwell	"	Lease of room in b'ld'g. at Swan River, Man. Halifax, N.S.	Immigration.	12 mos. from 6th Sept., 1916.	15 p. month.
" 21	Eastern Trust Company	"	Lease of 216 sq. ft. in "McCurdy Building", Halifax, N.S.	Fisheries Inspector.	1 yr. from 1st. Aug., 1916.	150 p. annum.
" 28	A. Belanger, Ltd.	"	Lease of building at Montmagny, Que.	Storing machines, etc.	2 yrs. from 1st. Nov., 1916.	50 p. annum.
" 30	Mrs. Clara Kerehoffer	"	Lease of room in building at Brandon, Man. Brock Sts., Kingston, Ont.	Examining Warehouse.	1 yr. from occupation.	1,800 p. ann. renewable.
" 30	The Bank of Toronto	"	Lease of four rooms in building cor. King & Englebert Sts., Toronto.	Engineers.	6 mos. from 1st. Nov., 1916.	180 whole.
Sept. 2	His Majesty	The New Brunswick Telephone Co. of St. John, N.B.	Permission to attach Company's wires along International Bridge over River St. John, Buren, U.S.A.		During pleasure.	1 compensation.
" 7	S. E. Levey	"	Lease of parcel of land at Cardinal, Ont.	Post Office.	From 21st. Nov. 1916, until bought by his Majesty.	25 p. month.
" 7	W. G. McMyne	"	Lease of part of lot No. 498, Christina Creek, B.C.	Fish screen.	1 yr. and thereafter from yr. to year.	150 p. month.
" 8	Sydney Post Publishing Co., Ltd.	"	Lease of rooms Nos. 3 & 4a in "Post Bld'g", Sydney, N.S.	Fisheries Inspector.	1 yr. from 1st. Oct., 1916.	360 p. annum.
" 9	Imperial Realty Co., Ltd.	"	Lease of premises Nos. 12, 14, 26 & 28 Slater St., and 64 & 66 Queen St., Ottawa, Ont.	Dom. Govt. Offices.	2 yrs. from 1st. May, 1916.	88,711.84 p. ann.
" 12	Union Bank of Canada	"	Lease of premises 801 & 803, Winnipeg, Man.	Inspector of war profit taxes.	1 yr. from 1st. July, 1916.	675 p. annum.
" 18	Wilson Bros.	"	Lease of premises at Saskatoon, Sask.	Dom. Lands Office.	1 yr. from 1st. Oct., 1916.	200 p. month.
" 19	The Merchants Bank of Canada.	"	Lease of two upper floors and part of ground floor and basement in building cor. Sparks & O'Connor Sts., Ottawa, Ont.	Trade & Commerce.	5 yrs. from 15th. July, 1916.	0.80 p. sq. ft.
" 21	Ottawa Terminals Railway Company	"	Lease of 2nd, 3rd & 4th floors in Central Station, Ottawa, Ont.	Railway Commission.	5 yrs. from 1st. Nov., 1916.	19,500 p. ann.
" 22	W. M. Birks, J. H. Birks & G. W. Birks.	"	Lease of five upper floors and part of basement in "Birks Building, Ottawa, Ont.	Government Offices.	5 yrs. from 1st. Oct., 1916.	17,000 p. ann.
" 26	His Majesty	Can. Pac. Rail.	Lease of part of Beacon Bar Flats, St. John, N.B.	Public Works Dept.	From 29th Sept. 1916 to 30th. June, 1917.	1 per annum. renewable.
" 27	W. M. Birks, J. H. Birks & G. W. Birks.	His Majesty	Lease of rooms Nos. 614, 615, 616, 617 & 618 in "Birks Building", Vancouver, B.C.		1 yr. from 1st. Dec., 1916.	900 p. annum.
" 28	His Majesty	The Bell Telephone Co. of Can., Ltd.	Agreement for interchange of business between Crane Island and Montmagny, Que., exchange.		from year to year, (28th. Sept., 1916).	Sched. of rates.
" 30	W. M. Birks, J. H. Birks & G. W. Birks.	His Majesty	Lease of room and vault on 1st floor of "Birks Building", Ottawa, Ont.	Royal. Can. Engrs.	1 yr. from occupation.	343.14 p. ann.
Oct. 6	Thomas Culbert	"	Lease of part of "Culbert Block", Merrickville, Ont.	Post Office.	1 yr. from occupation.	200 p. annum. renewable.

STATEMENT No. 3.—Properties leased to and from the Department of Public Works of Canada from April 1, 1916, to March 31, 1917.—Continued.

Date of Lease.	Lessors.	Lessees.	Description of Property.	For what purpose.	Duration of Lease.	Rental.
1916.						cts.
Oct. 10	C. B. McAllister.	His Majesty.	Lease of building at High Prairie, Alta.	Dom. Lands Office.	5 yrs. from occupation.	750 p. annum.
" 11	H. D. Johnston.	"	Lease of building at Edmonton, Alta.	Examining Warehouse.	3 yrs. from 14th. Aug., 1916.	4,200 p. annum.
" 16	R. L. & R. Blackburn.	"	Lease room No. 414, Union Bank Building, Sparks St., Ottawa, Ont.	Government Office.	1 yr. from 9th. Nov., 1916.	371 p. annum.
" 18	Fraser McRobertis Co., Ltd.	"	Lease of two rooms in building at Fincher Creek, Alta.	Forestry Branch.	From 1st Sept., 1916.	30 p. month.
" 19	Rossin House Company.	"	Lease of premises No. 121 King St., West Toronto, Ont.	Postal Station "B".	2 yrs. from 8th. Aug., 1916.	1,800 p. ann.
" 19	Imp. Can. Trust Co.	"	Lease of suite No. 212 in building at Saskatoon, Sask.	Inland Revenue.	1 yr. from 1st. Nov., 1916.	486 p. annum.
" 19	J. H. Cameron & A. M. Johnstone.	"	Lease of two rooms in building at Saskatoon, Sask.	Insp. of Weights & Measures.	1 yr. from 11th. Nov., 1916.	60 p. month.
" 20	His Majesty.	Maurice Dion.	Lease of 1,630 sq. ft. of lot No. 381 at Levis, Que.	Priv. enterprise.	During pleasure.	2 p. month.
" 24	C. J. Swales.	His Majesty.	Lease of premises at Hamilton, Ont.	Postal Station "B".	3 yrs. from 1st. Nov., 1916.	1,200 p. annum.
" 31	His Majesty.	W. T. Dawley.	Lease of lot No. 1, Block 4, Nootka Dist., B.C.	Private enterprise.	During pleasure.	1 p. annum.
Nov. 8	The Canada Life Assurance Co.	His Majesty.	Lease of rooms Nos. 42, 43, 44, 51 & 52 in Co's. Bldg., Ottawa, Ont.	National Service Board.	From 8th. Nov. 1916 and from month to mo. From 31st. Mar. 1916 to 1st. Sept., 1916.	97.05 p. month.
" 13	Dr. T. H. Blow.	"	Lease of offices on 1st & 2nd floors of "Blow Bldg.", Calgary, Alta.	Irrigation office.	From 1st. Nov. 1916 to 30th. April, 1917.	489.40 p. mont.
" 14	W. H. Martin & Co.	His Majesty.	Lease of basement in building, Wellington St., Ottawa, Ont.	Militia & Defence.	1 yr. from 4th. Dec., 1916.	900 p. annum.
" 16	Hood Bros.	"	Lease of office in building, Vancouver, B.C.	Inspector of Fisheries.	From 1st. Nov. 1916 to 30th. April, 1917.	22 p. month.
" 21	Sir Redmond P. Roblin.	"	Lease of premises No. 103 Osborne St., Winnipeg, Man.	Postal Station "C".	1 yr. from 1st. Feb., 1917.	1,500 p. ann.
" 21	C. Thompson.	"	Lease of ground floor of building, Saskatoon, Sask.	Customs Department.	1 yr. from 12th. Dec., 1916.	350 p. month.
" 24	T. Y. Newton.	"	Lease of 2nd floor of building on lot No. 6, Roblin, Man.	Supervisor of Riding Mount Reserve.	1 yr. from 1st. Dec., 1916.	27.50 p. month.

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" 25	A. J. C. McDermott	"	"	Lease of building, Victoria, B.C.	Examining Warehouse	3 yrs. from 1st. 300 p. month. Jan., 1917.
" 27	Can. Bank of Commerce	"	"	Lease of three rooms in Bank Building, Revelstoke, B.C.	Chief fire Ranger	1 yr. from 16th. 40 p. month. Dec., 1916.
" 27	Edouard Desormeaux	"	"	Lease of addition to top flats, No. 109 Rideau St., Ottawa, Ont.	Militia & Defence	From 1st. Dec., 1916 to 20th. Feb., 1917.
Dec. 5	Bank of Hochelaga	"	"	Lease of ground floor in building No. 1128 Mount Royal Ave. East, Montreal, Que.	Postal Station	From 1st. Nov. 1916 and from Month to Mo.
" 6	K. A. McLeod	"	"	Lease of premises at Edmonton, Alta.	National Service	50 p. month.
" 13	Can. Bank of Commerce	"	"	Lease of premises at Revelstoke, B.C.	Interior Department	1 yr. from 1st. 60 p. month. Feb., 1917.
" 19	Dr. T. H. Blow	"	"	Lease of ground floor of "Blow Building", Calgary, Alta.	Dominion Lands Office	From 1st. May 1916 to 1st. Sept., 1919.
" 19	Dr. T. H. Blow	"	"	Lease of part of 1st & 2nd floors and parts of ground floor in "Blow Building, Calgary, Alta.	Irrigation Office	3 yrs. from 1st. 6,157.75 p. ann. Sept., 1916.
" 26	J. O. Patterson	"	"	Lease of premises at Grande Prairie, Alta.	Immigration	1 yr. from 1st. 65 p. month. Jan., 1917.
1917.						
Jan. 1	Robt. Kerr	"	"	Lease of office in "Kerr Building at Le Pas, Man.	Int. Dept.	1 yr. from 6c-60 p. month. eputation.
" 3	J. L. Hopwood & W. J. Hopwood	"	"	Lease of three rooms in building at Peterboro, Ont.	Weights & Measures	1 yr. from 1st. 200 p. annum. Jan., 1917.
" 9	Foley Welch, Stewart & Fauriquet.	"	"	Permission to take away sand and gravel at MacNab's Island, N.S.		During pleasure. 0.5 p. c. yd.
" 12	The School District of Virden	"	"	Lease of building at Virden, Man.	Immigration	1 yr. from 15th. 250 p. annum. March, 1917.
" 13	La Banque Nationale	"	"	Lease of 5th floor in Bank Building, Ottawa, Ont.	Nat. Serv.	From 25th Dec., 1916 to 25th. Mar., 1917.
" 15	J. H. Lavallee	"	"	Lease of part of Building, St. Felix de Valois, Que.	Post Office	1 yr. from 1st. 125 p. annum. Jan., 1917.
" 15	The City of Moose Jaw	"	"	Lease of lots Nos. 28 & 29, Moose Jaw, Sask.	Immigration	1 yr. from 15th. 100 p. annum. Apr., 1917.
" 19	Russell Blackburn	"	"	Lease of four rooms in Building cor. Sparks & Bank Sts., Ottawa, Ont.	Pub. Works Department	1 yr. from 1st. 350 p. annum. May, 1917.
" 25	Canadian City & Town Properties of Saskatoon, Sask.	"	"	Lease of ground floor of building at Saskatoon, Sask.	Examining Warehouse	1 yr. from 5th. 1,200 p. ann. June, 1917.
" 26	Jos. Pelletier	"	"	Lease of two rooms in building at Edmonton, N.B.	Immigration	1 yr. from 1st. 144 p. annum. Mar., 1917.
" 26	Quebec Buildings, Ltd.	"	"	Lease of five rooms in "Quebec Bank Building", Ottawa, Ont.	Railways & Canals	1 yr. from 1st. 1,200 p. ann. May, 1917.

STATEMENT No. 3.—Properties leased to and from the Department of Public Works of Canada from April 1, 1916, to March 31, 1917.—*Concluded.*

Date of Lease.	Lessor.	Lessee.	Description of Property.	For what purpose.	Duration of Lease.	Rental.
1917.						\$ cts.
Jan. 29	Hope Realty Ltd.	His Majesty	Lease of part of building, corner Sparks and Elgin Sts., Ottawa, Ont.	Chief Censor	1 yr. from occupation and from month to month.	750 p. annum.
" 29	J. E. Annable	"	Lease of four rooms in building, Nelson, B.C.	Dist. Engr. P. W. Dept.	1 yr. from 13th. Apr., 1917.	50 p. month.
" 29	His Majesty	St. Maurice River Boom & Driving Co., Ltd.	Lease of Government property from Grandes Piles to Three Rivers (St. Maurice), Que.	Private enterprise	3 yrs. from 1st. Feb., 1917.	1 p. annum.
" 31	E. R. McNeil & R. Stewart	His Majesty	Lease of 1st. floor in building No. 202, Queen St., Ottawa, Ont.	Auditor General	From 1st. June, 1916 to 15th. July, 1917.	1,018.80 whole period.
Feb. 5	Catharine Matthewson	"	Lease of front room in building at Kingston, Ont.	Immigration	1 yr. from 1st. June, 1917.	180 p. annum.
" 5	Margaret White	"	Lease of three rooms, vault and vestibule in Building St. Louis St., Quebec, Que.	Archives	1 yr. from 30th. Apr., 1917.	33 p. month.
" 5	A. McAllister	"	Lease of building at Brownsburg, Que.	Post Office	From month to month from 1st. Jan., 1917.	100 p. annum.
" 9	J. S. Bergeron	His Majesty	Lease of 2nd floor of Building, St. John St., Quebec, Que.	Colonization	1 yr. from 1st. May, 1917.	500 p. annum.
" 9	J. S. Bergeron	"	Lease of part of building, St. John St., Quebec, Que.	Pub. Wks. Department	1 yr. from 1st. May, 1917.	325 p. annum.
" 19	W. J. Boyd	"	Lease of room No. 406 in "Boyd Building", Winnipeg, Man.	Archives	1 yr. from 31st. Mar., 1917.	45 p. month.
" 23	Corporation du Village de Ste Rose, Odile Lavoie	"	Lease of west 1/2 of building, Ste Rose, Que.	Post Office	5 yrs. from 1st. May, 1917.	200 p. annum.
" 26	Edward Desormeaux	"	Lease of part of building, Maisonneuve, Que.	"	1 yr. from 1st. May, 1917.	600 p. annum. (renewable)
" 27	E. D. McAvoy	"	Lease of two top flats in building No. 109, Rideau St., Ottawa, Ont.	Militia & Defence	1 yr. from 20th. Feb., 1917.	1,677 p. ann.
Mar. 1	E. D. McAvoy	"	Lease of premises at "Hudson Bay Jet.", Sask.	Supervisor of Forest Service	From month to month from 30th. June, 1916.	12 p. month.
" 3	J. O. Giroux	"	Lease of room in building at Grouard, Alta.	Immigration	1 yr. from 1st. June, 1917.	25 p. month.

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" 6	Estate of late Dr. J. Wal-ker.	"	Lease of premises at Halifax, N.S.	Custs. Express Warehouse.	2 yrs. from 30th, Apr., 1917.	1,200 p. annuum.
" 7	A. L'Heureux & J. B. Lebrun.	"	Lease of premises at St. Titc, Que.	Post Office.	5 yrs. from 1st, 300 p. annuum.	
" 8	The Ottawa Wine Vault Co., Ltd.	"	Lease of premises Nos. 35 & 37, George St., Ottawa, Ont.	Militia & Defence.	3 yrs. from occupation.	8,130 p. ann., (renewable.)
" 8	L. H. Gaudry.	"	Lease of three offices in building, St. Peter St., Quebec, Que.	Busin. Prof. and War Tax.	1 yr. from 1st, 300 p. annuum.	
" 9	Rideau Club.	"	Lease of part of ground floor in building, Wellington, St., Ottawa, Ont.	Rural Mail Delivery.	5 yrs. from 1st, 1,800 p. ann.	
" 15	Mrs. H. B. Boulay.	"	Lease of premises at Sayabec Stn., Que.	Post Office.	5 yrs. from 15th, 200 p. annuum.	
" 22	The Ashbury College, Ltd	"	Lease of building No. 140 Argyle Ave., Ottawa, Ont.	House of Commons Restaurant.	1 yr. from 1st, 2,000 p. ann.	
" 22	W. J. Boyd.	"	Lease of part of 2nd floor in "Boyd Building", Winnipeg, Man.	Railway Commission.	1 yr. from 1st, 1,270 p. ann.	
" 28	R. L. & R. Blackburn.	"	Lease of parts of 1st and 9th floors in "Union Bank Building", Ottawa, Ont.	Board of Pens. Commis.	From date of occupation to 31st, Dec. 1919	3,652.75 p. ann.
" 28	R. L. & R. Blackburn.	"	Lease of 6 floors in "Union Bank Building", Ottawa, Ont.	Government purposes.	3 yrs. from 6th, 13,000 p. ann.	
" 28	R. L. & R. Blackburn.	"	Lease of parts of 7th, 8th and 9th floors in "Union Bank Building", Ottawa, Ont.	Board of Pens. Commis.	3 yrs. from 1st, 11,555.20 p. ann.	
" 30	R. L. Moisan.	"	Lease of premises at St. George East, Beauce, Que.	Post Office.	5 yrs. from 1st, 300 p. annuum.	

The following item had been received too late for insertion in last year's annual report (1915-1916).

1881.	Quebec Harbour Commissioner	Lease of land in Town of Levis, Que.	99 years from 1st, 1878.
July 13.	His Majesty		

# THE NATIONAL GALLERY OF CANADA.

Owing to the closing of the premises of the National Gallery in February, 1916, as a result of the destruction of the Parliament buildings by fire and the taking over of the Victoria museum for the Houses of Parliament, the work of the National Gallery during the past year has necessarily been concentrated upon the increase and development of its policy of loan exhibitions, and of utilizing as far as possible the possessions of the National Gallery for the furtherance of artistic knowledge throughout the Dominion.

The grant of twenty-five thousand dollars (25,000) enabled a considerable number of Canadian, as well as a very few foreign works of art to be purchased..

The following regular annual loans of works of art were sent out during the year: Moosejaw, 21 pictures; Winnipeg, 24 pictures; Halifax, 27 pictures.

A special exhibition of six pictures was sent to the Edmonton art Exhibition, November, 1916.

An exhibition of twelve pictures was held at the summer agricultural and industrial fairs at Regina and Saskatoon, July, 1916.

A special exhibition of fifty modern paintings was lent to the art association of Montreal, January and February, 1917.

Special exhibitions were lent to the art museum of Toronto, consisting of sixty-five drawings, October and November, 1916, and fifty lithographs, February and March, 1917.

A number of coloured prints of the world's most famous pictures, known as Medici prints, belonging to the National Gallery, were lent to the Ottawa public schools and to the Carnegie library.

The National Gallery annual travelling scholarship of one thousand dollars (\$1,000) was judged for the third successive year by the Council of the Royal Canadian Academy of Arts, and was awarded, with the trustees' concurrence, to Mr. E. R. Glen, 715 Colborne street, London, Ont.

The trustees met formerly on five occasions, and the following works of art were acquired by gift or purchase:—

### GIFTS.

An unusual and important gift to the National Gallery was that of an extensive and representative series of the works of the late Elizabeth Adela Stanhope Forbes, the wife of Stanhope Forbes, R.A., who was born Elizabeth Armstrong at Kingston, Ont. The trustees approached Mr. Forbes with a view of securing a better representation of the work of one of the most widely known of Canadian born artists. Mr. Forbes' response was most generous. An important oil painting "When Daffodils Begin to Peer" was purchased by the trustees and according to the wishes of Mr. Forbes and his son Alec., then a lieutenant in the Duke of Cornwall's Light Infantry, the purchase price of the picture was divided equally between the Canadian Red Cross Society and the Young Men's Christian Association war work in memory of Mrs. Forbes. In addition to this Mr. Forbes presented the National Gallery with five water colours, three charcoal drawings, and thirteen etchings, so that now Mrs. Forbes' work is thoroughly well represented in the National Gallery of her native country.

- Barrett, W. P. . . . . . 5 book plates. Presented by Sir Edmund Walker.
- Manly, C. M., A.R.C.A. . . . . . 1 Lithograph "Pierette." Presented by C. M. Manly.
- Nichols, Juliette S. . . . . . 1 Wood block "Fete Day." Presented by Juliette S. Nichols.

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## DIPLOMA PICTURE.

Aurèle de Foy Suzor-Côté, R.C.A. . . . "A Corner of my Village Arthabaska."

## PURCHASES.

## Oil Paintings—

Harris, Lawren S. . . . .	Snow II.
MacDonald, Manly . . . . .	The Barn, Winter.
Thomson, Thomas . . . . .	Spring Ice.
Johnstone, John Young . . . . .	Bonsecours Market.
Woodcock, P. F., R.C.A. . . . .	An Ontario Farm.
Macdonald, J. E. H., A.R.C.A. . . . .	March Evening, Northland.
Cutts, W. M., A.R.C.A. . . . .	Britain's Domain.
Brownell, Franklin, R.C.A. . . . .	Golden Age.
Mofra, Gerald . . . . .	A July Day.
Fisher, Mark, A.R.A. . . . .	Sheep Shearing in a Barn.
Forbes, Elizabeth A. S., A.R.W.S. . . . .	When Daffodils Begin to Peer.
Bell-Smith, F. M., R.C.A. . . . .	St. Mary's le Strand.
Clapp, W. H., A.R.C.A. . . . .	The Three Bathers.
Franchère, J. C., A.R.C.A. . . . .	Sylphide.
Gagnon, C. A., A.R.C.A. . . . .	The Wayside Cross, Autumn.
Leduc, O. . . . .	Neige Dorée.
Lismer, Arthur . . . . .	A Westerly Gale, Georgian Bay.
May, H. Mabel, A.R.C.A. . . . .	Boats on St. Lawrence.
Palmer, H. S., A.R.C.A. . . . .	On the Hillside.
Reid, Lorna F. . . . .	The Wind Flower.
Rosaire, Arthur D., A.R.C.A. . . . .	The Play Hour.
Russell, G. Horne, A.R.C.A. . . . .	Seal Cove, Grand Manan.
Edson, A. Allan, R.C.A. . . . .	Mounts Orford and Owls Head from Lake Memphremagog.

## Drawings, Prints—

Caron, Paul . . . . .	Infant.
Léger, J. A. . . . .	Le Matin et le Soir de la Vie.
Raine, Herbert . . . . .	Bonsecours Market, 1915.
" " . . . . .	Old Courtyard, St. Vincent St., Montreal.
" " . . . . .	The Fisher Folk at Kamouraska.
Cotton, J. W. . . . .	Drowsy Summertime.
Fawcette, George . . . . .	St. Boniface Cathedral.
Jopling, F. W. . . . .	In a Toronto Shipbuilding Yard.
Neilson, H. Ivan . . . . .	Timber Ship, Quebec.
" " . . . . .	The Centre Span, Quebec Bridge.
" " . . . . .	French Canadian Village.
" " . . . . .	Les Eboulements from L'Islet.
" " . . . . .	Quebec Harbour.
Phillips, W. J. . . . .	The Lake.
" " . . . . .	The Red River at Selkirk.
" " . . . . .	The Red River at Winnipeg.
Russell, Gyrth . . . . .	The Rother at Rye.
" " . . . . .	La Havre Globe Trotters.
Simpson, Chas. W. . . . .	An Oratory Notre Dame.
Sutherland, F. W. . . . .	Turkish Bazaar.
" " . . . . .	Birds.
Brymner, Wm., P.R.C.A. . . . .	A Street in Paris.
Armington, Frank M. . . . .	Thames from Waterloo Bridge.
Carot, J. B. C. . . . .	Souvenir d'Italie.
Goya . . . . .	Bull Fighting.
Shannon, Charles H. . . . .	Three Women's Heads.
" " . . . . .	Nude Study.
" " . . . . .	Stone Bath.
Rothenstein, William . . . . .	Charles H. Shannon.
" " . . . . .	Aubrey Beardsley.
" " . . . . .	Max Beerbohm.
Sternier, Albert . . . . .	The Blind.
" " . . . . .	Seated Dancer.
" " . . . . .	Amour Mort.
Zorn, Anders . . . . .	The Hair Ribbon.
" " . . . . .	The Swan.
" " . . . . .	Gulli.
" " . . . . .	Grover Cleveland.
" " . . . . .	The Ford.
Grillon, René . . . . .	Puento Real, Valencia.
" " . . . . .	My Mother.
" " . . . . .	Lake Nymphs.
Chavannes, Puvis De . . . . .	Work.
John, Augustus . . . . .	Nude on Pedestal
May, Phil . . . . .	Convict.
Baer, Herbert M. . . . .	Yellow Maeaw.

Drawing Prints—*Continued.*

Bartlett, Chas. W.	Agra.
Baumann, Gustave	Martins are back.
Colwell, Elizabeth	The Lake in Winter.
Dow, Arthur Wesley	The Gap.
Gardiner, Eliza D.	Picking Poppies.
Gilmore, Ada	Rag Rugs.
Hopkins, Edna Boies	Fuschia.
Ivins, Florence Wyman	The Swan.
" " "	The Dream of the Rose.
" " "	The Balcony.
McMillen, Mildred	The Merry-go-round.
Nichols, Juliette S.	Fete Day.
Nordfeldt, B. J. O.	The Harbour.
Patterson, Margaret	The Swan.
Ruzicka, Rudolph	Peck Slip.
" " "	New York.
" " "	Tatjana.
Brown, Arnesby, R.A.	Great Yarmouth.
" " "	The River Edge.
" " "	In the Marshes.
" " "	On the Hill.
" " "	Evening.
" " "	A Gleamy Day.
" " "	Uplands.
Gavarni	50 lithographs
Patterson, Mrs.	The Archway, Winchelsea.
Hopper, Hieronymous	The Emperor Charles V.
Durer	Christ on the Mount of Olives.
Van Ostade	The School.
Goltzius, Hendrick	Jesus Christ led before Pilate.
" " "	The Jews seizing Jesus.
" " "	The Scourging.
Virgil, Solis	The Seven Planets.
Burkmair, Hans	Weiss Kunig.
Mellan, Claude	The Sudarium of Veronica.
Drevet	Louis XV.
Whistler, James McNeill	Hungerford Bridge.
Fantin-Latour	Lithograph.
Cole, Ernest	Heads of Children.
" " "	Studies of an Athlete.
Levitt, Joel J.	Head.
Coburn, F. W.	Winter.

## Pastels—

De Belle, Charles	The Last Flowers.
Rothenstein	The Praying Jews.

## Water Colours—

Jefferys, Chas. W., A.R.C.A.	Willow Creek, August.
Ward, Dudley	Fairy Sleep.
Kilpin, L. M.	A Good One.
Staples, Owen	Brink of the Horse Shoe Falls.
" " "	The Coming Shower.
" " "	Morning.
" " "	Tomato Gathering.
" " "	Nocturne.
Donly, Eva Brooke	Elba Beach, Bermuda.
" " "	Bluffs and Beach, Turkey Point.
Howard, A. H., R.C.A.	Garden Scene.
" " "	Scarlet Poppies.
" " "	Hedgerow, Flowers.
" " "	Landscape, River Foreground.
" " "	The Wish.
" " "	The Lesser Grief.
Brown, Arnesby, R.A.	A Grey Day.
Ford, Harriet	The Market Square, Segovia.

## Sculpture—

Laliberté, A., A.R.C.A.	La Muse.
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DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS AND CANALS

For the Fiscal Year from April 1, 1916, to March 31, 1917

*Submitted in accordance with the provisions of the Revised Statutes of Canada, 1916,  
Chapter 35, Section 33.*

PRINTED BY ORDER OF PARLIAMENT



OTTAWA  
J. DE LABROQUERIE TACHÉ  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1918

[No. 20—1918] *Price, 10 cents.*



*To His Excellency the Duke of Devonshire, K.G., P.C., G.C.M.G., G.C.V.O., etc., etc.,  
etc., Governor General and Commander in Chief of the Dominion of Canada.*

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Railways and Canals, of the Dominion of Canada, for the past fiscal year from April 1, 1916, to March 31, 1917.

J. D. REID,  
*Minister of Railways and Canals.*



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II. Reports of the General Manager and other officers of Government Railways.

III. Report of the Chief Engineer of the Department.

IV. Report of the Government Chief Engineer for the Western Division of the National Transcontinental Railway.

V. Report of the Board of Engineers, Quebec Bridge.



REPORT  
OF THE  
DEPUTY MINISTER OF RAILWAYS AND CANALS  
FOR THE YEAR ENDING MARCH 31, 1917.

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To the Honourable J. D. REID,  
Minister of Railways and Canals.

SIR,—In presenting the departmental report for the fiscal year 1916-17, it is necessary that explanation be given as to the very considerable reduction in the amount of the material comprised in it, in comparison with reports of previous years. This reduction has been made in conformity with the requirements of the Order in Council of the 23rd of October, 1917, passed in view of the conditions arising out of the war, which have compelled curtailment of expenditure on public printing.

The present report accordingly omits all maps, plans, and illustrations of canal and railway works, such as in past years have been supplied, and which, though of much interest and value, are not essential, and can reasonably be dispensed with under the circumstances.

Further, the printing of the subsidiary detail reports sent in by the individual engineers and other officers has, as required by the order, been omitted, only the direct reports of the chiefs being inserted; the detail reports are, however, of course, available for reference in the department if required. Various statistical tables and miscellaneous information relating to previous years, dimensions, etc., are this year omitted, but are available in the reports already published. The reports of the accountant of the department and of the comptroller of government railways are printed practically as heretofore, though with some compression and rearrangement, which does not impair their utility.

The making of these reductions has naturally been facilitated by the suspension of certain construction works undertaken by the department and the curtailment of its operations, otherwise, in the interests of economy.

## GENERAL SUMMARY.

During the twelve months of the past fiscal year 1916-17 the expenditures made by or through the department on its several works of operation, maintenance, and construction, both railway and canal, and in furtherance by subsidy, under specific votes granted by Parliament, of railway enterprises in various parts of Canada other than the government roads; also the revenue derived from the government works, aggregate as follows: The total railway expenditure, including the Quebec bridge, amounted to \$41,895,886.53, of which \$14,737,326.70 was charged to capital, \$25,799,906.54 to revenue, and \$1,358,653.29 to income.

The railway expenditure on capital account included \$4,490,472.56 for the Intercolonial railway, \$609,751.71 for the Prince Edward Island railway, \$3,916,586.20 for the National Transcontinental railway, which is in course of construction by a board of commissioners, \$2,604,279.94 for the Hudson Bay railway, and \$2,733,677 for the Quebec bridge; \$3,724.98 for the International railway; \$46,579.38 for the New Brunswick and Prince Edward Island railway; and \$332,254.93 for the Quebec and Saguenay railway.

The railway expenditure on income included a total of \$959,583.88 paid as subsidies to railways other than the government roads, \$215,947.14 for the Board of Railway Commissioners for Canada, and \$46,630.53 for railway grade crossing fund, and \$44,149.09 for surveys and inspections.

The expenditure on the Intercolonial railway amounted to \$20,143,830.34, namely, \$4,490,472.56 on capital account, and on revenue account (working expenses and improvements and betterments), \$15,653,357.78.

On the Prince Edward Island railway, the total expenditure was \$1,443,604.73, of which \$609,751.71 was charged to capital and \$833,853.02 to revenue.

The total expenditure on the National Transcontinental railway amounted to \$11,723,508.40, namely, \$3,916,586.20 on capital, and \$7,806,922.20 on revenue account (working expenses). The working expenses for the International railway amounted to \$165,107.26, which does not include the sum of \$90,000 paid as rental for the road. The working expenses for the New Brunswick and Prince Edward Island railway were \$78,031.22, and for the St. John and Quebec railway, \$98,300.42.

The expenditure on canals aggregated \$6,028,100.73, of which \$4,304,589.09 was chargeable to capital account, \$399,414.50 to income, \$801,937.90 for staff, and \$522,159.24 for repairs, the last two amounts being charged to revenue.

Adding to the above for miscellaneous expenditures common to both branches, the sum of \$302,095.14, of which \$299,934.09 was chargeable to the special war appropriation (special services having been required of the department in connection with the war, entailing expenditures for the protection of its bridges and canal structures, transportation of goods for the Belgium Relief Fund, the Red Cross Society, and for payment of salaries for substitutes for enlisted men), the total expenditure for the year on railways and canals was \$48,226,052.40.

The total revenue derived from the government railways and canal works was \$24,001,181.75, of which the railways produced \$23,539,758.61, and the canals,



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\$461,423.14,<sup>1</sup> the sum of \$271,820.28 being derived from hydraulic and other rents, and \$175,536.50 from the Port Colborne elevator.

The total government expenditure on railways prior to and since Confederation (July 1, 1867) up to March 31, 1917, amounts, on capital account, to \$391,884,025.79, including expenditure on the Quebec bridge, and also the sum of \$25,000,000 granted to the Canadian Pacific Railway Company for its main line; also the amount, \$660,683.09, expended on the Annapolis and Digby railway. In addition, there has been expended from the consolidated fund a total of \$267,997,373.17, covering the operating expenses of the government roads, and \$75,117,415.47 on subsidies other than that for the main line of the Canadian Pacific railway, making a total expenditure of \$734,998,814.43.<sup>2</sup> Of this amount, the sum of \$13,881,460.65 was expended prior to Confederation, namely on the construction of portions of what is now the Interecolonial Railway system, \$10,766,725.54, and on the construction of the Prince Edward Island railway, \$3,114,735.11.

The total government expenditure on canals prior to and since July 1, 1867, to March 31, 1917, amounts on capital account to \$122,919,314.84, of which \$20,593,866.13 was expended prior to Confederation, and from the consolidated fund, for operation, maintenance and repairs, \$41,221,419.60, making a total of \$164,140,734.44.

The total expenditure on the two branches, railways and canals, up to March 31, 1917, is as above, \$899,139,548.87, adding to which for general expenditures embracing both, the further sum of \$1,457,384.31, the grand total expenditure amounts to \$900,596,933.18.

The total revenue collected since July 1, 1867, to March 31, 1917, amounts, from the government railways, to \$248,395,298.47, and from the canals to \$16,665,271.32, making a total of \$265,060,569.79.

Details in tabulated form showing the general classes and directions of the above expenditures and revenues will be found in the statements of the accountant of the department, printed in the appendices, Part I.

## GOVERNMENT RAILWAYS IN OPERATION.

The government railways in operation and their main line lengths are, respectively, as follows:—

	Miles.
Intercolonial Railway . . . . .	1,518'39
Prince Edward Island Railway . . . . .	275'20
National Transcontinental Railway . . . . .	1,811'28
Grand Trunk Pacific Railway (the Lake Superior Branch leased). . . . .	191'75
New Brunswick and Prince Edward Island Railway . . . . .	36'05
International Railway of New Brunswick . . . . .	111'30
Total . . . . .	3,943'97
St. John and Quebec Railway operated but not owned . . . . .	119'87
Total . . . . .	4,063'84

<sup>1</sup> Under the authority of an Order in Council, dated June 22, 1905, the system of charging tolls for the passage of vessels and goods was abolished on all the canals of the Dominion. Records, however, are kept for statistical purposes, and the compilation of the resultant figures is given in a separate report issued by the department.

<sup>2</sup> This amount does not include the annual payment of \$119,700 to the Provincial Government of Quebec, being interest at the rate of 5 per cent on the sum of \$2,394,000 up to 1905, granted by 47 Victoria, ch. 8 (1884), nor the annual payment of \$107,730, being interest at the rate of 4½ per cent since and including 1903, on the said sum of \$2,394,000, for the line between Ottawa and Quebec, which sum was transferred to the public debt as a liability, and is dealt with by the Finance Department. (See Public Accounts, 1893-4, page 10, and 1906, page 79.)

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Information as to these roads will be found in reports of the General Manager and other officials, Appendix II, with traffic details of each road separately in *tabulated* form on pages 40 and 41.

The Intercolonial Railway earnings amounted to \$16,767,386.89, and its working expenses to \$15,653,357.78, including the rental of the Vale railway at \$1,200 a year, producing a surplus of \$1,112,829.11. This surplus has been partly absorbed, under the authority of the Act of 1912, chapter 8, by crediting the Rail, the Fire and the Equipment Renewal Accounts with amounts aggregating \$1,070,334.64. \$4,000 was paid as "compassionate allowances" under special votes.

The Prince Edward Island Railway working expenses amounted to \$833,853.02. Its earnings amounted to \$630,045.69, the deficit being \$203,807.33.

The International Railway working expenses amounted to \$165,107.26, and the earnings to \$116,678.67, a deficit of \$48,428.59. This does not include the sum of \$90,000 paid as interest on the purchase price of the road.

The St. John and Quebec Railway working expenses amounted to \$98,300.42, and the earnings to \$70,759.62, a deficit of \$27,540.80.

The New Brunswick and Prince Edward Island Railway working expenses amounted to \$72,357.80, and the earnings to \$38,336.75, leaving a deficiency of \$34,021.05. This does not include \$5,673.42 paid as interest on the purchase price of the road pending payment.

The working expenses of the portion of the National Transcontinental Railway operated by the Government amounted to \$7,206,922.20, not including \$600,000 paid for rental of the Lake Superior branch. The earnings amounted to \$5,916,550.99.

The total length of the government railways in operation amounted to 3,943.97 miles. The train mileage was 12,412,757 miles, and car mileage, 204,369,625. The total earnings were \$23,930,398.06, which is \$5,853.38 per mile, \$1.86 per train mile, or \$11.30 per car mile. The expenses were \$1.89 per train mile, amounting to \$5,973.72 per mile of railway.<sup>1</sup>

The expenditure for maintenance of way and structures amounted to \$4,727,351; maintenance of equipment, \$4,426,200; traffic, \$418,425; rail transportation, \$13,227,794; water transportation, \$370,229; rental of leased lines, \$696,873; miscellaneous, \$760,397; the total expenditures aggregated \$24,627,261.<sup>1</sup>

The repairs to locomotives amounted to \$1,803,420.63; to freight cars, \$1,327,376.99; to passenger cars, \$721,547.50.<sup>1</sup>

The passenger traffic produced \$6,705,080.28; the freight traffic, \$16,642,458.16; and mail and express, \$664,910.04. The total number of passengers was 5,764,170, namely, through passengers, 459,075, and local, 5,305,095.<sup>1</sup>

The local freight traffic amounted to 5,605,403 tons, and the through traffic to 4,744,073 tons, a total of 10,349,476 tons; the total mileage for both was 3,012,144,640 miles.<sup>1</sup>

There are 76.21 miles of double tracking and 973.71 miles of sidings and spurs.

The weight of the rails laid is 80 pounds per yard for 3,178.02 miles, and 85 pounds for 273.24 miles, the balance being of lighter weight rails.

<sup>1</sup> These figures do not include the St. John and Quebec railway.

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The capacity of the freight yards has been increased largely at several points, and two grain elevators are being built, a new 500,000-bushel one at St. John, N.B., replacing that destroyed by fire, and the other a 1,000,000-bushel one at Transcona, Man.

The sum of \$1,070,334.64 was placed to the credit of Equipment Renewal Account and \$40,266.01 was received for sales of old rolling stock. During the year there was spent on this account a total of \$2,514,092.38 in the purchase of rolling stock, leaving a credit balance on March 31, 1917, of \$1,661,208.89.

The total number of freight cars on hand at the close of the year is 17,121, and of passenger cars, 639. There are 10,400 box cars, 198 refrigerating cars, 3,371 platform cars, 1,175 dump cars, 385 stock cars and 1,592 cars of other descriptions. In addition, there are 575 work cars.

The number of locomotives at the close of the year was 547, of which 113 were either purchased or built during the year.

In addition to the above rolling stock, the equipment of the Prince Edward Island railway, which is a narrow-gauge railway, consists of 31 locomotives, 59 passenger cars, 530 freight cars and 20 work cars.

The Safety Engineer reports that during the year 629 employees were injured and thirteen killed; 21 passengers were injured, but none were killed.

The value of stores on hand at the close of the year was \$4,818,102.74, comprising ordinary stores and fuel, \$4,071,207.71, and roadway and bridge material, \$746,895.03.

The above statements do not contain the expenditure nor revenue of the St. John and Quebec railway.

The Carleton branch of the Prince Edward Island railway, 3 miles in length, connecting Carleton Point to the Cape Traverse branch of the railway, has been completed. The terminal works at cape Tormentine and at Carleton Point are completed, with the exception of certain filling and dredging.

#### COMPARATIVE STATISTICS, INTERCOLONIAL RAILWAY, YEARS 1915-16 AND 1916-17.

In 1915-16, the average tons of freight carried per train, producing revenue, was 327.86, and the number of passengers, 64.15; in 1916-17, the average freight tonnage was 357.07, and passengers, 94.82.

In 1915-16, the average tons per loaded car, producing revenue, was 19.22, and the number of passengers, 9.24; in 1916-17, the number of tons was 22.08, and of passengers, 12.16.

The number of tons per train, all freight, in 1915-16, was 332.62, and in 1916-17, 358.40.

The number of tons per car, all freight, in 1915-16, was 15.95, and in 1916-17, 18.27.

The average distance each ton of freight was carried in 1915-16 was 280.58 miles, and in 1916-17, 261.53. The average distance passengers were carried in those years was 48.21 miles and 72.04, respectively.

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The average number of loaded cars per train in 1915-16 was 17.05 cars of freight, and 6.94 cars of passengers; in 1916-17, the number of freight cars per train was 16.03, and of passengers, 7.80.

The average number of empty cars per train in 1915-16 was 3.79, and in 1916-17, 3.58.

In 1915-16, the average of train miles per mile of road was, for freight trains, 3,137.84, and for passenger, 2,029.72; in 1916-17, these figures were, respectively, 3,365.72 and 2,270.37.

In 1915-16, the average per mile of road of revenue producing freight carried one mile was 1,028,785.16 tons, and passengers, 130,201.02; in 1916-17, the figures were: freight, 1,191,703.93 tons, and passengers, 215,271.92.

The number of tons all freight, per mile of road, carried one mile in 1915-16 was 1,043,694.43, and in 1916-17, 1,206,280.31.

The train mileage in 1915-16 was: passenger, 3,099,463 miles; freight, 4,791,476 miles; and in 1916-17, passenger, 3,447,301 miles; freight, 5,110,481 miles.

The loaded car mileage in 1915-16 was 81,714,686 miles, and in 1916-17, 81,933,436 miles.

The empty car mileage in 1915-16 was 18,178,425 miles, and in 1916-17, 18,294,030 miles.

The caboose car mileage in 1915-16 was 4,515,858 miles, and in 1916-17, 4,773,896 miles.

The total car mileage in 1915-16 was: passenger, 21,506,251 miles, and freight, 104,408,969 miles; in 1916-17 the figures were: passenger, 26,872,659, and freight, 105,001,362.

The total freight moved in 1915-16 was 5,680,178 tons; of this quantity, 5,447,220 tons were revenue producing. In 1916-17 the total freight moved was 7,003,379 tons, of which 6,770,224 tons were revenue producing.

Repairs to passenger cars cost, per car, in 1915-16, \$717.77, or per car mile, 1.67 cents; and in 1916-17, \$882.59, or per car mile, 1.73 cents.

Repairs to freight cars cost, per car, in 1915-16, \$60.12, or per car mile, 0.81 of a cent; and in 1916-17, \$75.83, or per car mile, 0.78 of a cent.

Repairs to locomotives cost, per locomotive, in 1915-16, \$1,930.91, or per locomotive mile, 6.86 cents; and in 1916-17, \$2,797.43, or per locomotive mile, 9.48 cents.

#### PRINCE EDWARD ISLAND RAILWAY.

This is a narrow gauge railway, 3 feet 6 inches. It extends from Tignish to Georgetown, 158.60 miles, and from Charlottetown to Murray Harbour, 52.30 miles, with branches to Souris, Elmira and Cape Traverse. The length of the road operated was 275.20 miles.

#### CAPITAL ACCOUNT.

There was an addition of \$609,751.71 to the expenditure on capital account during the year ended March 31, 1917, making the total capital expenditure \$11,451,124.15. The principal item was \$604,676.86 for the car ferry between Carleton Point, P.E.I., and Cape Tormentine, N.B., on the mainland.

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## REVENUE ACCOUNT.

The gross earnings amounted to \$630,045.69, and the working expenses to \$833,853.02, leaving a deficiency of \$203,807.33. Compared with the previous year, there was an increase of \$239,118.87 in the gross earnings, and an increase of \$288,832.40 in the working expenses.

The number of passengers carried was 401,636, producing a traffic of \$247,002.37, of which \$69,113.52 was for water traffic. Of freight, 150,101 tons were carried. The freight earnings amounted to \$219,442.74 for the railway and \$108,508.13 for water traffic to mainland. The earnings from mail and express amounted to \$47,498.70 for the railway and \$7,593.75 for water traffic.

The engine mileage was 458,376 miles; the train mileage, 368,495 miles; the car mileage, 2,143,610 miles.

The gross earnings per mile of railway amounted to \$1,616.39; per engine mile, 97 cents; per train mile, 1.21; and per car mile, 20.75 cents.

The working expenses per mile of railway aggregated \$2.135.15, and per train mile, 159.46 cents.

## NEW BRUNSWICK AND PRINCE EDWARD ISLAND RAILWAY.

Under an agreement, dated March 18, 1915, ratified by the Act of 1915, chapter 16, and under an Order in Council of May 12, 1915, this railway has been purchased by the Government, as part of the government railway system, for the sum of \$270,000. The agreement provided that it should be held to have come into force on August 1, 1914, and that the Government should have the right to sole possession, to operate the road, and to receive all its revenues, until the transfer is completed and the purchase price paid. The transfer has not yet been completed, but the road was taken over on August 31, 1914, and has since been operated by the Government.

The road is 36.05 miles in length, and runs from Sackville to cape Tormentine, New Brunswick, forming a connection between the Intercolonial railway and the new car ferry between cape Tormentine and Carleton Point, on Prince Edward Island.

Details as to working expenses, traffic, etc., will be found in the reports of the General Manager of Government Railways and other officers, Appendix II.

## INTERNATIONAL RAILWAY OF NEW BRUNSWICK.

Under an agreement, dated August 1, 1914, ratified by the Act of 1915, chapter 16, and under an Order in Council of August 27, 1914, a lease of this railway has been entered into by the Government for a term not exceeding five years, at an annual rental of \$90,000, payable half-yearly, with option of purchase at any time within that period for the sum of \$2,700,000. The road was taken over, as part of the government railway system, on August 1, 1914. It is 111.30 miles in length, extending from the Intercolonial railway at Campbellton, N.B., to St. Leonards, N.B.

Details as to working expenses, earnings, traffic, etc., will be found in the reports of the General Manager of Government Railways, and other officers, Appendix II.

## ST. JOHN AND QUEBEC RAILWAY.

By the Act of 1912, chapter 49, a certain agreement, dated the 5th of March, 1912, made on behalf of the Dominion and the province of New Brunswick and the St. John and Quebec Railway Company for leasing to the Dominion, for a term of ninety-nine years, the company's railway, when fully constructed, from the city of St. John, N.B., to a point of connection with the Transcontinental railway at or near the town of Grand Falls, N.B., was ratified; the Act to come into force on proclamation by the Governor in Council. The agreement provided that on construction and equipment of certain sections, the Dominion would lease and operate the same.

The road extends from Centreville to Gagetown, 119.87 miles. The portion from Centreville to Fredericton was taken over for operation by the Canadian Government Railways on January 1, 1915, and the portion from Fredericton to Gagetown on March 2, 1915.

Details as to working expenses, earnings, traffic, etc., will be found in the reports of the General Manager of Government Railways and other officers, Appendix II.

## HUDSON BAY RAILWAY.

This railway will run from The Pas, Manitoba, a point on the river Saskatchewan where connection is made with the Canadian Northern Railway system, to Port Nelson, on the western coast of Hudson bay.

The work of construction for the first 185 miles, from The Pas to Thicket Portage, was placed under contract in August, 1911. A contract for a further distance of 68 miles, from Thicket Portage to Split Lake Junction, was let on September 20, 1912, and a third contract, covering the distance, 165 miles, from Split Lake Junction to Port Nelson, on December 17, 1912, a total distance of 418 miles.

The final location into Port Nelson was completed in August, 1914, making the total length of the line from The Pas to Port Nelson, 424 miles. By the end of the fiscal year, March 31, 1917, grading had been completed, except about 11 miles of gaps, to Port Nelson; the track had been laid and the telegraph line built up to about mile 334, the second crossing of the river Nelson, at Kettle rapids.

Over 80 per cent of the track, out of the total 424 miles of railway, has been laid up to the second crossing of the Nelson river at Kettle rapids, about 90 miles from Port Nelson, where the bridge substructure work has been begun.

The work of constructing the terminals for the railway at Port Nelson has been carried on by the Department with a force under an engineer in charge.

The construction of the permanent deep water works, giving connection between the mainland and deep water, has made satisfactory progress in view of an unusually stormy season. The system of steel bridges, seventeen spans, has been completed.

In the season of navigation of 1915 occulting acetylene gas beacon lights, visible at a distance of 8 miles, were established by the Department of Marine and Fisheries at a number of points in Hudson bay and Hudson straits.

Communication with Port Nelson is afforded by means of Marconi wireless stations established at that point and at The Pas.

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The expenditure for the fiscal year ended March 31, 1917, was \$2,604,279.94, making the total expenditure up to that date, \$18,354,188.37.

## NATIONAL TRANSCONTINENTAL RAILWAY.

Under an agreement, dated July 29, 1903, ratified by the Dominion Act of that year, chapter 71, and under a modifying agreement dated February 18, 1904, ratified by the Act of that year, chapter 24, the Grand Trunk Pacific Railway Company, a company incorporated by the Act of 1903, chapter 122, undertook certain obligations in respect of the construction and operation of a line of railway, wholly upon Canadian territory, between the city of Moncton, in the province of New Brunswick, and the navigable waters of the Pacific ocean. The railway is composed of two divisions, namely, the eastern division, between Moncton and Quebec, thence westerly through the northern part of the provinces of Quebec and Ontario, and, in the province of Manitoba, to the city of Winnipeg, and the western division, between Winnipeg and the Pacific ocean. The eastern division is being constructed by the Government under commissioners appointed by the Governor in Council, and on completion is to be leased to and maintained and operated by the company, who undertake to construct at their own cost, and maintain and operate, the western division. The lease of the eastern division is to be for a period of fifty years, at a rental of 3 per cent per annum upon the cost of its construction; the first seven years of the term to be free of rent; both divisions are to be equipped with modern and ample rolling stock by the company, the first equipment to be of a value of not less than \$20,000,000.

By way of assistance to the company in the construction of the western division, it is provided that the Government shall guarantee payment of the principal and interest of an issue of bonds to be made by the company for an amount sufficient to produce a sum equal to 75 per cent of the cost of its construction; but not to exceed \$13,000 per mile in respect of the prairie section from Winnipeg to the eastern limit of the Rocky mountains. This limit has been established as the east bank of Wolf creek, a point 120 miles west from Edmonton.

By the Act of 1905, chapter 98, three deeds of trust by way of mortgage, set out in the said Act, were ratified and confirmed, namely, one dated June 10, 1905, between the Grand Trunk Pacific Railway Company, the Royal Trust Company, and His Majesty, to secure the issue of first mortgage bonds; the second dated March 15, 1905, between the Grand Trunk Pacific Railway Company, the National Trust Company, and the Grand Trunk Railway Company, to secure the issue of second mortgage bonds, and the third, also dated March 15, 1905, between the Grand Trunk Pacific Railway Company, the National Trust Company, and the Grand Trunk Railway Company, to secure the issue of first mortgage bonds in respect of the branch line designated as the "Lake Superior Branch."

Payments from the proceeds of the bonds of the company for work done, etc., on the western division, are made from time to time on certificates given by the Government Chief Engineer of this division, showing approved expenditures.

By the Act of 1909, chapter 19, authority was given for aiding in the completion of the construction of the "prairie" section by a loan to the company of \$10,000,000, to be secured, as collateral, subject to any prior lien, by a mortgage on the "prairie" section of their road; such loan to bear interest at the rate of 4 per cent per annum, and to be repayable in ten years.

This loan, which is dealt with by the Finance Department, was duly made; the mortgage deed being dated May 22, 1909.

By the Act of 1913, chapter 23, authority was given for a loan to the company not exceeding \$15,000,000, at 4 per cent interest, the loan being repayable by July 1, 1923. Under this authority, \$15,000,000 has been advanced to the company. Its debentures to an equal amount have been taken by the Government in pledge as security for this loan, as provided by the Act.

By the Act of 1913, chapter 24, authority was given for the purchase of 3 per cent bonds of the company to the extent of the balance of the authorized issue. Such balance, to the amount of \$6,800,000, has been purchased by the Government.

By the Act of 1914, chapter 34, authority was given for the guarantee of the principal and interest of an issue of 4 per cent bonds to be made by the company for the purpose of aiding the provision of the balance of moneys required for the completion of the "Mountain Section" to provide for expenditures not exceeding \$16,000,000; such bonds to be secured by a new trust deed granting mortgages or charges upon the present and future undertakings and properties of the company; such guarantee to be accepted as a full, final and satisfactory settlement of all claims by the company for further aid in respect of the construction of the western division.

In pursuance of this Act, a trust deed securing the issue of bonds to the amount of £3,280,000, was executed on August 5, 1914.

The several government expenditures on the eastern division were to be made from appropriations by Parliament for the purpose, and on the recommendation of the Minister of Railways and Canals, to whom accounts of all receipts, expenditures and liabilities are to be furnished monthly.

By various Acts and Orders in Council, the time for completion has been extended, and by the Act of 1914 (the Grand Trunk Pacific Railway Guarantee Act), section 11, it was provided that "notwithstanding anything contained in the said trust deed of tenth of June, 1905, or in any Act or Order in Council heretofore passed, the date for completion of the western division shall be the 31st of December, one thousand nine hundred and fifteen." By section 2 of this Act, the "Western Division" was defined as extending from the city of Winnipeg to the Pacific ocean.

By the Act of 1912, chapter 39, the construction of the eastern division, and its operation, until completed and leased to the Grand Trunk Pacific Railway Company, was placed under the charge and control of one commissioner (in place of four) to be appointed by the Governor in Council, and to hold office during pleasure. By an Order in Council, dated April 4, 1912, Mr. R. W. Leonard, C.E., the Chairman of the Commission as then existing, was appointed as such commissioner. Mr. Leonard having resigned, the Minister of Railways and Canals was appointed commissioner by an Order in Council of July 3, 1914, as authorized by the Act of that year, chapter 43.



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## EASTERN DIVISION.—MONCTON TO WINNIPEG.

Tracklaying between Moncton and Winnipeg was completed (with the exception of the Quebec bridge) in November, 1913, the last spike being driven on the 17th of that month.

Pending the completion of the Quebec bridge, the communication across the river will be made by a train ferry.

The statement of the accountant of the department (Part I of the Appendices) shows the capital expenditure on the eastern division for the year ended March 31, 1917, to be \$3,916,586.20, and the total expenditure on capital up to that date, \$163,797,783.66.

During the year 1913-14 the road was operated to a limited extent by the Intercolonial Railway, for the distance 285.25 miles, between Moncton, N.B., and Escourt, Que., a point 54.85 miles west of Edmundston, N.B. During the fiscal year 1914-15 the operation of the road was carried on by the Intercolonial Railway between Moncton and Chaudière, a distance of 455.15 miles.

On May 1, 1915, the National Transcontinental Railway from the city of Quebec to Winnipeg, a distance of 1,355.95 miles, was taken over for operation as part of the Canadian Government Railway system, and was put in operation as such on June 1, 1915.

On July 1, 1915, the Lake Superior branch, between Lake Superior Junction on the Transcontinental Railway and Fort William, Lake Superior, 191.75 miles, was taken over for operation by the Canadian Government Railways, having been leased by the Government from the Grand Trunk Pacific Railway Company.

Authority for the leasing of this branch by the Government was given by the Act of 1915, chapter 18, which provided that any contract for leasing for more than five years, or for the acquisition of the branch, was to be subject to ratification by Parliament.

Under authority of an Order in Council of June 2, 1915, a contract was entered into, dated June 29, 1915, for leasing the branch for 999 years from May 1, 1915, at a rental of \$600,000 a year, payable half-yearly, the first payment to be made on November 1, 1915. The contract provided for an option to the Government for the purchase of the branch for \$13,333,333.33 at any time after March 31, 1936, on notice of one year; the lease to be ratified before June 1, 1920.

The whole railway between Moncton and Winnipeg is operated by the Canadian Government Railways, the distance being 2,003.03 miles, including the Lake Superior branch, 191.75 miles, and the two branches into Quebec city, namely: the Cadorna branch, 5.88 miles, and the Champlain Market branch, 6.48 miles. The Quebec bridge, 0.61 mile, under construction, is not included.

The working expenses amounted to \$7,206,922.20, and the gross earnings to \$5,916,550.99, leaving a deficit of \$1,290,371.21. In addition, \$600,000 was paid as rental for the Lake Superior branch.

Details will be found in the statements of the Comptroller and Treasurer of Government Railways, herewith (Appendix, Part II).

## WESTERN DIVISION.

The Western Division extends from the western boundary of the Winnipeg terminals, on the east bank of the river Assiniboine, in the city of Winnipeg, to the city of Prince Rupert, on the Pacific coast, a distance of 1,748 miles, including the 3½ miles on the Shore line of the terminal grounds.

It is divided into two sections, namely, the "Prairie Section," extending from Winnipeg to the east bank of Wolf creek—a point 120 miles west of Edmonton, the capital of the province of Alberta—a distance of 915 miles, and the "Mountain Section," which extends from the east bank of Wolf creek to Prince Rupert, a distance of 830 miles. The terminals extend for a further distance of 3¼ miles around the water front of the city of Prince Rupert.

The Government chief engineer of the division, on whose certificates payments are made to the company, is Sir Collingwood Schreiber, K.C.M.G., whose report, showing the position of the work at the close of the fiscal year, March 31, 1917, will be found printed in the appendices hereto, Part IV. He states that the entire division is in good, safe condition for operation for public traffic, but that to comply with the parliamentary acts, the contract and the specification, work to the estimated value of \$2,297,500 remained to be executed on the Prairie section, and of \$2,330,385 on the Mountain section. He gives details of this work. He states that the amount of certified expenditure is: for the Prairie section, \$37,910,534.88, and for the Mountain section, \$93,160,195.76, a total of \$131,070,730.64.

The whole division between Winnipeg and Prince Rupert has been operated since September 6, 1914.

QUEBEC BRIDGE.<sup>1</sup>

On August 29, 1907, the cantilever bridge in course of construction over the river St. Lawrence by the Quebec Bridge and Railway Company (originally commenced under a subsidy of \$1,000,000 authorized by the Act of 1899, chapter 7, and a subsidy agreement, dated November 12, 1900), collapsed.

Under the terms of an agreement with the company, dated October 19, 1903, ratified by the Act of 1903, chapter 54, the Government had undertaken to guarantee the principal and interest of the bonds or other securities of the company to the limit of \$6,678,200, the company releasing claim to the balance remaining unpaid of the said subsidy; such guarantee to be secured by mortgage on the company's franchises, tolls and property. On February 1, 1904, a mortgage trust deed was executed, conveying to the Royal Trust Company (Montreal) as trustees, all the property and franchises of the company, and providing for the issue of bonds accordingly.

It was provided in this agreement that the Government should have the right at any time, on one month's notice, to take over the company's undertaking, assets,

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<sup>1</sup>The history of the Government's connection with the bridge prior to its collapse is given in the Department Annual Report of 1907-8, p. xlvii.

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property and franchises on paying the shareholders the amount of their stock at par not exceeding \$265,585.70, with simple interest at 5 per cent and a premium of 10 per cent on the par value of the paid-up shares.

Of the said subsidy of \$1,000,000, there had been paid to the company a total of \$374,353.33 prior to the execution of the above agreement, and subsequent to its execution, payments were made from the proceeds of their bonds on certificates of the Government engineer covering work done and materials delivered.

After the collapse of the bridge, the right of the Government to take over the company's undertaking was exercised under the authority of an Order in Council of August 17, 1908. The date of assumption was December 1, 1908. The total of the amounts paid by the Government to the several shareholders for their shares was \$355,279.07, payment being made to the parties concerned in November, 1908. The deed of assignment and transfer from the company to the Government was dated October 18, 1909.

Under authority of an Order in Council of August 17, 1908, a board of three engineers was constituted for preparation of a new design and specification, and for the reconstruction of the bridge, with powers to call in expert engineers as advisers on points of difference that might arise.

In June, 1910, the formal call for tenders was made by newspaper advertisement. In response, 35 different propositions were submitted, which were duly considered by the board, who, finally, after calling in advisory engineers, recommended the acceptance of an alternative design sent in by the St. Lawrence Bridge Company (with whom are associated the Dominion Bridge Company and the Canadian Bridge Company). This design the board considered to possess certain features of strength, simplification of erection, economical distribution of material, and general appearance which, in their opinion, would produce a bridge that "would compare most favourably with the highest type of long-span bridges in existence." By an Order in Council of March 31, 1911, authority was given for entrance into contract with the conjoined companies named, and such contract was executed under date April 4, 1911. The contract price is 9.02 cents a pound, aggregating about \$8,650,000, a saving of about \$2,600,000 having been effected by the elimination of the highways for vehicular traffic contemplated in the original design; the contract date for completion was December 31, 1915.

The bridge will have a total length of 3,228 feet, or about three-fifths of a mile. The centre span will be 1,800 feet long; the length of the suspended portion of it being 640 feet. This span will, for a length of 760 feet over the channel of the river, have a height of 150 feet between its lower members and the high water level of the river. The two cantilever arms will each be 580 feet long. The width of the bridge between trusses will be 88 feet. The bridge will comprise a double-track railway and two side-walks for foot passengers.

Under date January 10, 1910, a contract for the substructure was entered into with Messrs. M. P. and J. T. Davis, whose tender was the lowest of three obtained after newspaper advertisement calling for tenders; and supplementary agreements necessitated by changes in the caisson design and in the location of the north anchor pier, were made with them on May 23, 1910, and September 2, 1911.

The Board of Engineers for reconstruction, as originally constituted, has been modified by retirements and death, and is at present composed as follows: Charles N. Monsarrat, M. Can. Soc. C.E., chairman and chief engineer; Ralph Modjeski, Am. Soc. C.E., and H. P. Borden, M. Can. Soc. C.E.

The headquarters of the board are in Montreal.

The report of the chairman and chief engineer for the year ended on March 31, 1917, will be found printed in the appendices hereto, Part V.

The report shows that during the year the whole structure was completed, including the suspended span which was erected at a point about 3 miles down the river. On the 11th of September, 1916, this span was floated up the river, and the operation of lifting it into place began and proceeded successfully until it had reached a height of about 20 feet above the water, when some portion of the contractor's erection equipment failed, with the result that the entire span tilted towards the west and disappeared into the river. The St. Lawrence Bridge Company assumed entire responsibility for the loss, and took immediate steps to replace the span at their own expense. At the close of the year fabrication had been going ahead rapidly.

An investigation was at once held by the board and officers of the company, and the board made a report on the accident, which will be found in Appendix V, p. 74.

The expenditure during the fiscal year ended March 31, 1917, was \$2,733,677, paid out of capital, making the total capital expenditure on the reconstruction of the bridge, \$13,244,583.54. Expenditure had previously been made from income, namely, for the year 1908-9, \$422,867.12 (in which is included the amount, \$355,279.07, paid for acquiring the stock of the Quebec Bridge and Railway Company, and \$31,765.44, the expenses of the commission of inquiry into the causes of the collapse of the old structure), and for the year 1909-10, \$111,788.02 for the preparation of plans, etc., or a total of \$534,655.14, against which there is credited the sum of \$100,000 paid in 1910 to the Government by the Phoenix Bridge Company, the contractors for the original super-structure, in the final adjustment of claims arising out of the collapse. The total net expenditure by this department up to March 31, 1917, after crediting the sum of \$91,188.10, the proceeds of the sale of scrap and unused material from the collapsed bridge, is \$13,679,238.98. This is irrespective of the amount of subsidy, \$274,353.33 paid to the Quebec Bridge Company as above mentioned, and of the amounts paid by the Finance Department, namely, for the guaranteed bonds of the company, \$6,424,751; to the province of Quebec, \$250,000; to the city of Quebec, \$300,000; and \$485.20, an award of the Supreme Court, in all \$6,975,266.20. Including these items the aggregate of all expenditure is \$21,028,858.51.

#### WELLAND SHIP CANAL.

This important work has for its object the affording of greater and better accommodation for a larger class of vessels than those that can be used on the present canal.

The present canal lies between Port Colborne, lake Erie, and Port Dalhousie,

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lake Ontario. Its length is  $26\frac{3}{4}$  miles, and comprises 25 lift locks, the dimensions of which are 270 feet by 45 feet, with a depth of 14 feet of water on the sills.

The proposed Welland ship canal as finally located follows the course of the present canal from Port Colborne on lake Erie to Allanburg, half-way across the peninsula. From this point an entirely new cutting is to be made, crossing the present canal just below lock No. 25, the water level of the two canals at this point being the same, viz.: 568 feet above sea-level. The new canal again crosses the present one below lock No. 11, the water of both canals at this point being at an elevation of 382 feet above sea-level.

The proposed canal enters lake Ontario at the mouth of the Ten Mile creek about three miles east of Port Dalhousie. The total length of canal from lake to lake is 25 miles; and the difference in level between the two lakes, 325 $\frac{1}{2}$  feet, is to be overcome by seven lift locks, each having a lift of 46 $\frac{1}{2}$  feet. The dimensions of the locks are to be 800 feet in length by 80 feet in width in the clear and with 30 feet of water over the mitre sills at extreme low stages in the lakes. The width of the canal at the bottom will be 200 feet and, for the present, the canal reaches will be excavated to a depth of 25 feet only, but all structures will be sunk to the 30-foot depth, so that the canal can be deepened at any future date by dredging out the reaches.

A new western breakwater will be built at Port Colborne to ensure quiet water in the harbour during storms.

The outer entrance piers in Lake Ontario will be placed about  $1\frac{1}{2}$  miles from shore, where the depth of water is 30 feet; a wide channel will be dredged out from these piers and an embankment formed on either side of it about 500 feet wide. The lock walls will be 82 feet high above the top of the gate sills.

The work is divided into 9 sections, of which section No. 1, approximately 3 miles, at the Lake Ontario end of the canal, was placed under contract on the 1st of August, 1913; section No. 2, approximately 4 $\frac{1}{2}$  miles, was placed under contract on the 31st of December, 1913; section No. 3, approximately 2 miles, was placed under contract on the 4th of October, 1913; section No. 5 was placed under contract on the 22nd of December, 1913.

During the fiscal year 1916-17, the sum of \$3,513,769.82 was expended, making the total expenditure, \$13,474,333.26; to this is to be added for previous expenditure, for preliminary surveys, borings, etc., \$219,589.73, making the total cost up to the 31st of March, 1917, \$13,693,922.99.

In view of existing war conditions contract work on the canal has been suspended under notices served in January, 1917.

## SUBSIDIZED RAILWAYS.

Information as to subsidized railways is given in the statements of the accountant of the department, which will be found in the appendix hereto, Part I. The accountant's statements show all payments made since the beginning of the system of railway subsidies in the year 1883-84.

The total payments made on subsidy account during the year ended March 31, 1917, amounted to \$959,583.88, paid out of income.

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## BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

By the Act 3, Edward VII, chapter 58 (1903), amending and consolidating the law respecting railways, the Railway Committee of the Privy Council was abolished, and in lieu thereof a Board of Commissioners, under the above title, was created, to consist of three members (increased to six by the Act of 1908, chapter 62), to be appointed by the Governor in Council; this Act was brought into force on February 1, 1904, by proclamation, on the authority of an Order in Council, dated January 18, 1904, which also appointed certain persons as commissioners. By the Act of 1908, chap. 61, the jurisdiction of the board was extended to cover the operation of telegraph and telephone lines, and by the Act of 1908, chapter 62, certain amendments were made to its constitution and otherwise. By the Act of 1909, chapter 31, the board was empowered to determine the maximum price to be charged for electricity developed through water-powers leased from the Crown. An Act of 1910, chapter 50, amended certain provisions of the Railway Act regarding the powers of the board, and the Act of the same year, chapter 57, extended the jurisdiction of the board to cover the fixing by it of the tariffs of wireless telegraph and marine electric telegraphs or cables. The Act of 1911, chapter 22, gave powers to the board to require from railway companies the establishment of a staff of fire-rangers, modified the previous enactments regarding the disposal of electricity developed through Government leased water-powers, and amongst other enactments, made provision for action, through the board, to ensure the efficient operation of subsidized railways. The office of the board is at Ottawa, though it is authorized to hold sessions in any part of Canada. Its decisions and orders are final, subject to appeal to the Supreme Court upon questions of jurisdiction or law, and also to action thereon by the Governor in Council, in his discretion.

It is required to make annually a report of its proceedings, which report is laid before Parliament. The report for the year ended March 31, 1917, has been received, and will be laid before Parliament in due course.

## CANALS.

The total expenditure on the Dominion canals for the twelve months ended March 31, 1917, was \$6,028,100.73, comprising \$1,304,589.09 charged to capital, \$399,414.50 charged to income, \$801,937.90 for staff, and \$522,159.24 for repairs; the last two items being charged to revenue.

The balance of rentals due on April 1, 1916, was \$153,055.38. The rentals accrued during the year amounted to \$275,206.99, making a total of \$428,262.37. Of this amount, there was collected during the year a total, after deducting abatements aggregating \$7,380.65, of \$271,820.28. The balance remaining due on March 31, 1917, was \$149,061.144. It should be observed that, as a general rule, rentals are payable in advance, this fact accounting, to a considerable extent, for the large amount of rental due at the end of each year.

The total revenue collected amounted to \$461,423.14, the balance being made up of wharfage dues, fines, etc., and a total of \$175,536.50 derived from the operation of the Port Colborne grain elevator on the Welland canal.

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No tolls have been charged on any of the Dominion canals since 1903-4.

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

The above figures relate to the fiscal year 1916-17, but very voluminous statistics relating to canal traffic, and various commercial statistics for the season of navigation of the year 1916, will be found in the "Canal Statistics," which are issued as a separate report.

## CANAL TRAFFIC.

The following features of the principal canal traffic during the season of 1916 will be of interest:—

On the Welland canal, 2,544,964 tons of freight were moved, a decrease of 516,048 tons. Of the total, 693,578 tons were agricultural products, and 265,563 tons were produce of the forest; of coal, 1,190,142 tons were carried; 2,544,964 tons were through freight, of which 2,045,343 tons passed eastward.

Of the through freight, Canadian vessels carried 1,682,826 tons, a decrease of 233,189 tons, and United States vessels 632,142 tons, a decrease of 292,902 tons.

The total through freight passed eastward and westward through this canal to United States ports was 203,407 tons, a decrease of 282,209 tons compared with the year of 1915.

The quantity of grain passed down the Welland and St. Lawrence canals to Montreal was 609,119 tons, a decrease of 510,008 tons, as compared with the previous year; no transshipments have been made at Ogdensburg since 1903.

On the St. Lawrence canals, 3,368,064 tons were moved, a decrease of 41,403 tons, of which 2,404,815 tons were eastbound through freight and 568,970 tons westbound freight; 660,555 tons were agricultural products, 1,688,304 tons coal, and 650,590 tons forest products.

On the Ottawa river canals, the total quantity of freight moved was 237,651 tons, a decrease of 34,719 tons, of which 139,168 tons were products of the forest.

On the Chambly canal, 398,977 tons were moved, a decrease of 16,501 tons, of which 242,654 tons were produce of the forest and 100,165 tons of coal.

On the Rideau canal, 105,430 tons were carried, a decrease of 15,351 tons; 9,912 tons being produce of the forest and 6,915 tons of coal.

On the St. Peters' canal, 9,629 tons were carried, an increase of 6,734 tons; 3,787 tons were coal. The canal was closed to public traffic, during the season of 1915, for the reconstruction of the lock and was opened on September 1, 1916.

On the Murray canal, 46,680 tons passed, an increase of 15,952 tons.

On the Trent canal, 45,009 tons were moved, a decrease of 4,895 tons, of which 38,841 tons were the produce of the forest.

On the St. Andrews lock, on the Red River, Manitoba, the volume of business was 13,438 tons.<sup>1</sup>

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<sup>1</sup>This work, which consists of a lock and dam on the Red River, about fifteen miles north of Winnipeg, was built and is operated by the Department of Public Works. It affords communication between Winnipeg and lake Winnipeg. It is only mentioned here for statistical purposes.

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On the Sault Ste Marie canal, the total movement of freight was 16,813,649 tons, being an increase of 9,062,692 tons. There were 6,689 passages of vessels, the number of lockages being 4,777. Of wheat, 86,874,340 bushels, and of other grain, 46,096,508 bushels were carried; also 3,353,270 barrels of flour; 11,504,773 tons of iron ore; 1,033,647 tons of coal; and 6,333,600 feet, board measure, of lumber.

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

The total traffic through the several canals of the Dominion for the season of 1916 amounted to 23,583,491 tons, an increase of 8,384,688 tons compared with the previous year; 263,648 passengers were carried, an increase of 12,812.

The report of the chief engineer of the department, which will be found in Part III of the appendices, give comprehensive information as to the several works under his charge, the principal of which are the Hudson Bay railway, the Trent canal, the new Welland ship canal, and the terminals of the Interecolonial Railway near Halifax.

#### RAILWAY STATISTICS.

The digest of the sworn statements of railway companies relating to their operations in Canada for the twelve months ended June 30, 1917, is prepared by the departmental comptroller of statistics, and is issued as a separate report.

#### CANAL STATISTICS.

The traffic statistics of the Dominion canals for the season of navigation of 1916 are compiled under the direction of the same officer, and are also issued as a separate report.

I have the honour to be, sir,

Your obedient servant,

A. W. CAMPBELL,  
*Deputy Minister.*



APPENDIX I

STATEMENTS OF THE ACCOUNTANT



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## SUMMARY.

GENERAL SUMMARY of the Expenditure and the Revenue for the fiscal year ending March 31, 1917, and previous years.

## EXPENDITURE.

	\$	cts.
Total expenditure for the year as per statements following pages 6 to 35 .....	48,226,082	40
Total expenditure on Railways for the year, including Quebec Bridge and Railway Subsidies.....	41,895,886	53
Total expenditure on Canals for the year .....	6,028,100	73
General expenditure common to both Railways and Canals, for the year.....	302,095	14
The grand total of the expenditure to March 31, 1917, on Railways and Canals, as shown on page 23 of this report, amounts to...	900,596,933	18
This expenditure is divided as follows:—		
Grand total expenditure on Railways, including Quebec Bridge and Railway Subsidies.....	734,998,814	43
Grand total expenditure on Canals.....	164,140,734	44
Grand total general expenditure, common to both Railways and Canals .....	1,457,384	31

## REVENUE.

The revenue from both Railways and Canals, for the fiscal year amounts to.....	24,001,181	75
Revenue from the Railways.....	23,539,758	61
Revenue from the Canals.....	461,423	14
The grand total of the revenue to March 31, 1917, on Railways and Canals both amounts to (see page 23) .....	265,060,569	79
Grand total of the revenue from the Railways.....	248,395,298	47
Grand total of the revenue from the Canals, amounts to .....	16,665,271	32

The sundry classifications of the expenditure and the revenue are shown on pages 6, 7, 8 and 9 for the fiscal year; and page 23 for the expenditure previous to Confederation and since.

According to instructions, approved by Order in Council dated October 23, 1917, the annual report of the branch has been made as concise as possible. All statements of a statistical nature have been omitted, and for more complete information on the expenditure or revenue of any railway or canal the previous annual reports should be consulted.

DEPARTMENT OF RAILWAYS AND CANALS.

W. C. LITTLE,  
*Accountant.*

## EXPENDITURE.

GENERAL STATEMENT of Expenditure during the Year ending March 31, 1917.

	§	cts.	§	cts.
TOTAL EXPENDITURE—as per statements, pages 8 and 9.....			48,226,082	40
Expenditure chargeable to Railways.....	37,799,556	24		
"    "    Railways, General.....	403,069	41		
"    "    Quebec Bridge.....	2,733,677	00		
"    "    Railway Subsidies.....	359,583	88		
Total expenditure, Railways.....			41,895,886	53
Expenditure chargeable to Canals.....	5,862,881	83		
"    "    Canals, General.....	165,218	90		
Total expenditure, Canals.....			6,028,100	73
General expenditure.....			302,051	14
Total expenditure.....			48,226,082	40
CLASSIFICATION OF EXPENDITURE IN GENERAL—				
Capital Account.....	19,041,915	79		
Revenue Account.....	27,124,003	68		
Income Account.....	1,100,579	05		
Consolidated Fund (railway subsidies) Income.....	959,583	88		
Total expenditure.....			48,226,082	40
CLASSIFICATION OF EXPENDITURE BY ACCOUNTS—				
<i>Railways—</i>				
Capital expenditure—Railways.....	12,003,649	70	12,003,649	70
Revenue expenditure—Railways.....	25,795,906	54		
"    "    Railways, General.....	4,000	00	25,799,906	54
Income expenditure—Railways, General.....			399,069	41
<i>Quebec Bridge—</i>				
Capital expenditure—Quebec Bridge.....	2,733,677	00	2,733,677	00
<i>Railway Subsidies—</i>				
Consolidated Fund—Railway Subsidies.....	959,583	88	959,583	88
Total expenditure, Railways, \$41,895,886 53.				
<i>Canals—</i>				
Capital expenditure—Canals.....	4,304,589	09	4,304,589	09
Income    "    Canals.....	372,102	96		
"    "    Canals, General.....	27,311	54	399,414	50
Revenue    "    Canals Staff.....	700,022	11		
"    "    Canals Staff, General.....	101,915	79		
"    "    Canals Repairs.....	486,167	67		
"    "    Canals Repairs, General.....	35,991	57	1,324,097	14
Total expenditure on Canals, \$6,028,100 73.				
General Expenditure—Income account.....			302,095	14
Total expenditure.....			48,226,082	40

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## REVENUE.

GENERAL STATEMENT of the Revenue received during the Year ending  
March, 31 1917.

	\$	cts.	\$	cts.
TOTAL REVENUE RECEIVED DURING FISCAL YEAR.....			24,001,181	75
Revenue from Railways.....	23,539,758	61		
"    "    Canals.....	461,423	14		
Total revenue as above .....			24,001,181	75
STATEMENT OF REVENUE RECEIVED, IN DETAIL—				
Railways—				
Intercolonial Railway.....	16,767,386	89		
International Railway of New Brunswick.....	116,678	67		
National Transcontinental Railway.....	5,916,550	99		
New Brunswick and Prince Edward Island Railway.....	38,336	75		
Prince Edward Island Railway.....	630,045	69		
Total.....	23,468,998	99		
St. John & Quebec Ry.....	70,759	62		
Total revenue from Railways.....			23,539,758	61
Canals—				
Welland Canal.....	68,277	37		
"    Elevator, Port Colborne.....	175,536	50		
Welland Ship Canal.....	824	50		
Lachine Canal.....	141,476	75		
Beauharnois Canal.....	15,120	40		
Cornwall Canal.....	38,332	50		
Williamsburg Canal.....	2,944	74		
Soulanges Canal.....	3,609	00		
Chambly Canal.....	769	00		
Carillon and Grenville Canal.....	860	00		
Rideau.....	9,397	86		
Trent Canal.....	3,707	23		
St. Peters Canal.....	2	00		
Sault Ste. Marie Canal.....	143	08		
Murray Canal.....	218	00		
Ste. Anne's Lock and Canal.....	204	21	461,423	14
Total revenue received during fiscal year.....			24,001,181	75

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## EXPENDITURE on Canals for year ended March 31, 1917.

Name of Canals.	Chargeable to Capital.	Chargeable to Income.	Chargeable to Revenue.		Total Expenditure during year.
			Staff.	Repairs.	
	§ cts.	§ cts.	§ cts.	§ cts.	§ cts.
Carillon and Grenville.....			26,235 56	16,914 51	43,150 07
Chambly.....	49,300 00		35,300 97	35,678 51	120,279 48
Cornwall.....		1,614 41	87,050 60	38,459 87	127,124 88
Lachine.....	24,073 21	175,000 00	100,803 96	95,423 01	395,300 18
Murray.....			5,656 45	4,076 73	9,733 18
Rideau.....	33,735 10	29,999 46	61,858 80	71,498 90	197,092 26
Sault Ste. Marie.....			28,047 09	24,223 18	52,270 27
Soulanges.....		1,493 07	35,664 97	24,402 39	61,560 43
St. Anne's Lock.....			3,958 16	4,459 01	8,417 17
St. Lawrence River and Canals—					
North Channel.....	48,955 31				48,955 31
St. Ours Lock.....			4,176 25	3,829 74	8,005 99
St. Peters.....		126,561 99	3,301 49	455 38	130,318 86
Trent.....	613,088 60	16,616 85	53,204 67	47,315 71	730,225 83
Welland.....		18,776 39	221,004 06	96,111 44	335,891 89
Welland Ship.....	3,513,769 82				3,513,769 82
Williamsburg—					
Galops.....	20,028 25				20,028 25
Rapide Plat.....	1,638 80				1,638 80
Williamsburg.....		2,040 79	33,759 08	23,319 29	59,119 16
	4,304,589 09	372,102 96	700,022 11	486,167 67	5,862,881 83
GENERAL ON CANALS.					
Dredge Vessels, Lachine.....				7,734 71	7,734 71
Dredge Vessels, Rideau.....				24,648 74	24,648 74
Miscellaneous.....			3,333 18	610 18	3,943 36
Statistical Officers.....			34,175 54		34,175 54
Sunday Labour.....			42,372 25		42,372 25
Surveys and Inspections.....		15,583 51			15,583 51
Quebec Canals—					
Dredging.....		7,218 16			7,218 16
Maintenance.....			19,134 82		19,134 82
Hungry Bay Dyke.....				3,002 94	3,002 94
Miscellaneous—					
Miscellaneous works not provided for.....		1,020 31			1,020 31
Civil Service Amendment Act.....		3,489 56			3,489 56
Compassionate allowances to families of deceased employees.....			2,900 00		2,900 00
		27,311 54	101,915 79	35,991 57	165,218 90
Grand total.....	4,304,589 09	399,414 50	801,937 90	522,159 24	6,028,100 73



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## EXPENDITURE on Railways for Year ended March 31, 1917.

Name of Railways.	Chargeable to Capital.		Chargeable to Income.		Chargeable to Revenue.		Total.
	\$	cts.	\$	cts.	\$	cts.	
Hudson Bay Railway .....	2,604,279	94					2,604,279 94
Intercolonial Railway .....	4,490,472	56			*15,653,357	78	20,143,830 34
" " Improvements and Betterments .....					1,070,334	64	1,070,334 64
International Railway of New Brunswick .....	3,724	98			165,107	26	168,832 24
" " " (Statutory) .....					90,000	00	90,000 00
National Transcontinental Railway Construction .....	122,328	33					122,328 33
National Transcontinental Railway Grain Elevator, Winnipeg .....	279,949	83					279,949 83
National Transcontinental Railway (Statutory) .....	3,514,308	04			7,806,922	20	11,321,230 24
New Brunswick and P. E. I. Ry. ....	46,579	38			78,031	22	124,610 60
Prince Edward Island Ry. ....	609,751	71			833,853	02	1,443,604 73
Quebec & Saguenay Ry. ....	332,254	93					332,254 93
St. John & Quebec Ry. ....					98,300	42	98,300 42
Total .....	\$12,003,649	70			25,795,906	54	37,799,556 24
Quebec Bridge .....	2,733,677	00					2,733,677 00
Railway Subsidies .....			959,583	88			959,583 88
GENERAL ON RAILWAYS.							
Enquiry and Report on the Railway Situation of Canada .....			72,233	74			72,233 74
Railway Commission—Maintenance .....			166,447	14			166,447 14
" " Statutory .....			49,500	00			49,500 00
Surveys and Inspections .....			44,149	09			44,149 09
Railway Grade Crossing Fund .....			46,630	53			46,630 53
Governor General's Cars, attendance, etc. ....			4,738	25			4,738 25
Grand Trunk Pacific Ry. Remuneration to Government Director .....			666	66			666 66
Contribution to the International Association of Railways Congress .....			97	33			97 33
Expenses with Consolidation of the Railway Act .....			440	00			440 00
Contribution of the Government to the Faculty of McGill University .....			2,500	00			2,500 00
Contribution of the Government to the Faculty of the Polytechnic School, Montreal .....			2,500	00			2,500 00
Compassionate allowances to families of deceased employees .....					4,000	00	4,000 00
Continuous Audit on behalf of the Government of Canada .....			9,166	67			9,166 67
Total .....			399,069	41	4,000	00	403,069 41
Grand total .....	14,737,326	70	1,358,653	29	25,799,906	54	41,895,886 53
MISCELLANEOUS EXPENDITURE.							
War Appropriation .....			299,934	09			299,934 09
Cost of Litigation .....			2,161	05			2,161 05
Total .....			302,095	14			302,095 14
Grand Total on Railways and Canals, including Miscellaneous Expenditure .....	19,041,915	79	2,060,162	93	27,124,003	68	48,226,082 40

\* Amount includes rental of the Vale Railway at \$1,200 per annum.

EXPENDITURE on Canals to March 31, 1917.  
(CAPITAL ACCOUNT.)

Canal.	Previous Years.		1916-17.		Total.	
	§	cts.	§	cts.	§	cts.
Baie Verte.....						
Beauharnois.....	1,636,690	26			1,636,690	26
Carillon and Grenville.....	4,182,092	96			4,182,092	96
Chambly.....	731,696	52	49,300	00	780,996	52
Cornwall.....	7,246,304	21			7,246,304	21
Culbute Lock and Dam.....	382,391	46			382,391	46
Lachine.....	14,108,611	59	24,073	21	14,132,684	80
Lake St. Francis.....	75,906	71			75,906	71
Lake St. Louis.....	298,176	11			298,176	11
Murray.....	1,248,946	71			1,248,946	71
Rideau.....	4,168,069	21	33,735	10	4,201,804	31
Sault Ste. Marie.....	4,994,372	51			4,994,372	51
Soulanges.....	7,904,044	53			7,904,044	53
Ste. Anne's Lock and Canal.....	1,170,215	63			1,170,215	63
St. Lawrence River and Canals—						
North Channel.....	1,946,187	56	48,955	31	1,995,142	87
River Reaches.....	483,830	20			483,830	20
Galops Channel.....	1,039,895	65			1,039,895	65
St. Ours Lock.....	127,228	56			127,228	56
St. Peter's.....	648,547	14			648,547	14
Tay.....	489,599	23			489,599	23
Trent.....	15,626,295	14	613,058	60	16,239,353	74
Welland.....	29,399,405	93			29,399,405	93
Welland Ship.....	10,180,153	17	3,513,769	82	13,693,922	99
Williamsburg.....	1,334,551	80			1,334,551	80
Farran's Point.....	877,090	57			877,090	57
Galops.....	6,121,213	70	20,028	25	6,141,241	95
Rapide-Plat.....	2,158,242	00	1,638	80	2,159,880	80
Total.....	118,579,759	06	4,304,589	09	122,884,348	15
Canals General.....	34,966	69			34,966	69
Grand Total.....	118,614,725	75	4,304,589	09	122,919,314	84

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EXPENDITURE ON Canals to March 31, 1917.  
INCOME ACCOUNT.

Canals.	Previous Years.		1916-17.		Total.		
	\$	cts.	\$	cts.	\$	cts.	
Baie Verte .....	44,387	53			44,387	53	
Beauharnois .....	265,810	84			265,810	84	
Carillon and Grenville .....	351,431	74			351,431	74	
Chaumbly .....	759,574	15			759,574	15	
Cornwall .....	592,038	21	1,614	41	593,652	62	
Culbute Lock and dam .....	60,923	37			60,923	37	
Lachine .....	1,420,902	70	175,000	00	1,595,902	70	
Lake St. Francis .....	25,043	68			25,043	68	
Lake St. Louis .....							
Murray .....	101,425	11			101,423	11	
Rideau .....	646,832	76	29,999	46	676,832	22	
Sault Ste. Marie .....	280,098	04			280,098	04	
Soulanges .....	157,574	35	1,493	07	159,067	42	
St. Anne's Lock and Canal .....	84,044	81			84,044	81	
St. Lawrence River and Canals .....	128,298	11			128,298	11	
St. Ours Lock .....	174,028	88			174,028	88	
St. Peters .....	534,991	54	126,561	99	661,553	53	
Tay .....		748		65		748	65
Trent .....	924,169	46	16,616	85	940,786	31	
Welland .....	1,541,620	07	18,776	39	1,560,396	46	
Welland Ship .....							
Williamsburg .....	297,559	36	2,040	79	299,600	15	
Total .....	8,391,501	36	372,102	96	8,763,604	32	
Canals, General .....	618,073	56	27,311	54	645,385	10	
Grand Total .....	9,009,574	92	399,414	50	9,408,989	42	

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EXPENDITURE on Canals to March 31, 1917.  
REVENUE ACCOUNT---(REPAIRS.)

Canals.	Previous Years.		1916-17.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Baie Verte.....						
Beauharnois.....	525,691	23			525,691	23
Carillon and Grenville.....	560,414	40	16,914	51	577,328	91
Chambly.....	907,558	79	35,678	51	943,237	30
Cornwall.....	956,094	27	38,459	87	994,554	14
Culbute Lock and Dam.....	7,036	15			7,036	15
Lachine.....	2,012,065	75	95,423	01	2,107,488	76
Lake St. Francis.....						
Lake St. Louis.....						
Murray.....	97,161	44	4,076	73	101,238	17
Rideau.....	1,696,166	44	71,498	90	1,767,665	34
Sault Ste. Marie.....	349,935	99	24,223	18	374,159	17
Soulanges.....	437,547	11	24,402	39	461,949	50
Ste. Anne's Lock.....	138,282	62	4,459	01	142,741	63
St. Lawrence River and Canals.....						
St. Ours Lock.....	97,193	02	3,829	74	101,022	76
St. Peters.....	35,968	17	455	38	36,423	55
Tay.....						
Trent.....	674,369	76	47,315	71	721,685	47
Welland.....	3,628,473	42	96,111	44	3,724,584	86
Welland Ship.....						
Williamsburg.....	593,523	49	23,319	29	616,842	78
Total.....	12,717,482	05	486,167	67	13,203,649	72
Canals, General.....	478,266	04	35,991	57	514,257	61
Grand total.....	13,195,748	09	522,159	24	13,717,907	33

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EXPENDITURE on Canals to March 31, 1917.  
REVENUE ACCOUNT—(Staff).

Canals.	Previous Years.		1916-17.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Baie Verte.....						
Beauharnois.....	649,574	89			649,574	89
Carillon and Grenville .....	788,478	60	26,235	56	814,714	16
Chambly.....	946,844	80	35,300	97	982,145	77
Cornwall.....	1,554,282	74	87,050	60	1,641,333	34
Culbute Lock and Dam.....	11,507	48			11,507	48
Lachine.....	2,662,536	68	100,803	96	2,763,340	64
Lake St. Francis.....						
Lake St. Louis.....						
Murray.....	133,983	99	5,656	45	139,640	44
Rideau.....	1,665,890	89	61,858	80	1,727,749	69
Sault Ste. Marie.....	397,825	51	28,047	09	425,872	60
Soulanges.....	504,256	13	35,664	97	539,921	10
Ste. Anne's Lock.....	112,047	47	3,958	16	116,005	63
St. Lawrence River and Canals.....						
St. Ours Lock.....	114,324	51	4,176	25	118,500	76
St. Peter's.....	113,161	44	3,301	49	116,462	93
Tay.....						
Trent.....	522,515	82	53,204	67	575,720	49
Welland.....	4,615,861	25	221,004	06	4,836,865	31
Welland Ship.....						
Williamsburg.....	620,819	79	33,759	08	654,578	87
Total.....	15,413,911	99	700,022	11	16,113,934	10
Canals, General.....	1,878,672	96	101,915	79	1,980,588	75
Grand Total.....	17,292,584	95	801,937	90	18,094,522	85

## TOTAL EXPENDITURE by Canal to March 31, 1917.

Canals.	Capital.	Income.	Revenue.		Totals.
			Staff.	Repairs.	
	§ cts.	§ cts.	§ cts.	§ cts.	§ cts.
Baie Verte .....		44,387 53			44,387 53
Beauharnois .....	1,636,690 26	265,810 84	649,574 89	525,691 23	3,077,767 22
Carillon and Grenville.....	4,182,092 96	351,431 74	814,714 16	577,328 91	5,925,567 77
Chambly .....	780,996 52	759,574 15	982,145 77	943,237 30	3,465,953 74
Cornwall .....	7,246,304 21	593,652 62	1,641,333 34	994,554 14	10,475,844 31
Culbute Lock.....	382,391 46	60,923 37	11,507 48	7,036 15	461,858 46
Lachine.....	14,132 684 80	1,595,902 70	2,763,340 64	2,107,488 76	20,599,416 90
Lake St. Francis .....	75,906 71	25,043 68			100,950 39
Lake St. Louis.....	298,176 11				298,176 11
Murray.....	1,248,946 71	101,423 11	139,640 44	101,234 17	1,591,248 43
Rideau.....	4,201,804 31	676,832 22	1,727,749 69	1,767,665 34	8,374,051 56
Sault Ste. Marie .....	4,994,372 51	280,098 04	425,872 60	374,159 17	6,074,502 32
Soulanges .....	7,904,044 53	159,067 42	539,921 10	461,949 50	9,064,982 55
Ste. Anne's Lock.....	1,170,215 63	84,044 81	116,005 63	142,741 63	1,513,007 70
St. Lawrence River & Canals	2,518,868 72	128,298 11			3,647,166 83
St. Ours Lock .....	127,228 56	174,028 88	118,500 76	101,022 76	520,780 96
St. Peters .....	648,547 14	661,553 53	116,462 93	36,423 55	1,462,987 15
Tay .....	489,599 23	748 65			490,347 88
Trent .....	16,239,383 74	940,786 31	575,720 49	721,685 47	18,477,576 01
Welland.....	29,399,405 93	1,560,396 46	4,836,865 31	3,724,584 85	39,521,252 56
Welland Ship.....	13,693,922 99				13,693,922 99
Williamsburg.....	1,334,551 80				
" Farran's Point.....	877,099 57				
" Galops .....	6,141,241 95	299,600 15	654,578 87	616,842 78	12,083,786 92
" Rapide Plat....	2,159,880 80				
Total.....	122,884,348 15	8,763,604 32	16,113,934 10	13,203,649 72	160,965,536 29
Expenditure, Canals General.	34,966 69	645,385 10	1,980,588 75	514,257 61	3,175,198 15
Grand total expenditure .....	122,919,314 84	9,408,989 42	18,094,522 85	13,717,907 33	164,140,734 44



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## CANALS REVENUE received during year ending March 31, 1917.

Collection Division.	Wharfage, Storage, Harbour Dues, etc.		Hydraulic and other Rents.		Total.	
	\$	cts.	\$	cts.	\$	cts.
<i>Welland Canal</i> .....			404	00	404	00
Port Colborne.....		50 10	9,268	40	9,318	50
Port Colborne Elevator.....	175,536	50			175,536	50
Port Dalhousie.....		516 65	58,038	22	58,554	87
Totals.....	176,103	25	67,710	62	243,813	87
<i>Welland Ship Canal</i> .....			824	50	824	50
<i>St. Lawrence Canals—</i>						
Coteau Landing (Beauharnois Canal).....			15,120	40	15,120	40
" " (Soulanges Canal).....		77 00	3,532	00	3,609	00
Cornwall.....			38,332	50	38,332	50
Cardinal—Williamsburg Canal.....		570 74	2,374	00	2,944	74
Lachine Canal (Montreal).....	11,767	20	129,151	09	140,918	29
" " (Lachine).....		558 46			558	46
Totals.....	12,973	40	188,509	99	201,483	39
<i>Chambly Canal</i> .....			621	00	621	00
Chambly.....			56	00	56	00
St. John's.....			32	60	32	60
St. Ours Lock.....			60	00	60	00
Totals.....			769	00	769	00
<i>Ottawa River Canals—</i>						
Carillon & Grenville Canal.....			192	00	192	00
" " Grenville.....		8 00	20	00	28	00
" " Carillon.....			640	00	640	00
Ste. Anne's Lock.....		52 21	152	00	204	21
Totals.....	60	21	1,004	00	1,064	21
<i>Rideau Canal</i> .....			1,923	00	1,923	00
Ottawa.....	311	00	3,473	41	3,784	41
Kingston Mills.....			411	00	411	00
Smiths Falls.....	95	00	3,184	45	3,279	45
Totals.....	406	00	8,991	86	9,397	86
<i>St. Peter's Canal</i> .....			2	00	2	00
<i>Murray Canal</i> .....			218	00	218	00
<i>Trent Canal</i> .....	60	00	3,647	23	3,707	23
<i>Sault Ste. Marie Canal</i> .....			143	08	143	08
Grand totals.....	189,602	86	271,820	28	461,423	14
Net amount deposited to the credit of the Receiver General.....					461,423	14



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HYDRAULIC AND OTHER RENTS, showing rent accrued, paid, and balances due March 31, 1917.

Balance due April 1, 1916.	Hydraulic and other rents accrued 1916-17.		Lock House rents.		Totals.		Canals.		Abatement for overcharges.		Deposited to the credit of the Receiver General.		Balance due March 31, 1917.		Totals.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$
63,424 52		62,021 66		404 00	125,850 18		Welland		150 00		67,306 62		57,989 56		125,850 18		
264 00		942 00		174 50	1,380 50		Welland Ship.				650 00		556 00		1,380 50		
10,384 17		5,505 50		216 00	16,105 67		Williamsburg.		4,471 00		2,158 00		9,260 67		16,105 67		
14,096 16		25,661 50			39,757 60		Cornwall				38,332 50		1,425 10		39,757 60		
6,650 84		14,816 15			21,466 99		Beauharnois		577 50		15,120 40		5,769 69		21,466 99		
28,999 40		132,027 41		204 00	161,230 81		Lachine		1,446 95		128,947 09		30,632 77		161,230 81		
732 84		126 00		681 00	1,529 84		Chembly				88 00		760 84		1,529 84		
6,717 13		7,268 04		1,923 00	15,908 17		Rideau		165 78		7,068 86		6,750 53		15,908 17		
330 30		16,735 23		1,250 00	18,335 53		Twenty		222 50		2,397 23		14,465 80		18,335 53		
60 00		490 00			530 00		Saint Stee Marie		346 92		143 08		60 00		530 00		
21,400 08		643 00		192 00	22,235 08		Carillon & Grenville				660 00		21,383 08		22,235 08		
		3,136 00		396 00	3,532 00		Soulanges				3,136 00				3,532 00		
		32 00		120 00	156 00		Ste. Anne's Lock				32 00				156 00		
		1 00			1 00		Chats Falls								1 00		
		2 00			2 00		St. Peter's								2 00		
		9 00		210 00	221 00		Murray								221 00		
153,455 38		269,436 49		5,770 50	428,262 37		Totals		7,380 65		266,049 78		149,061 44		428,262 37		

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## WELLAND CANAL.—Amounts Expended on Construction.

	Capital.	
	\$	cts.
Expenditure to March 31, 1916.....	29,618,995	66
Expenditure, 1917.....		
Total.....	29,618,995	66
Less amounts transferred to Welland Ship Canal.....	219,589	73
Net amount of expenditure.....	29,399,405	93

## WELLAND SHIP CANAL.—Amounts expended on Construction.

	Year Ending.	Capital.	
		\$	cts.
Expenditure.....	1914	994,257	60
“.....	1915	4,074,200	69
“.....	1916	4,892,105	15
“.....	1917	3,513,769	82
Total.....		13,474,333	26

Expenditure as above.....	\$13,474,333	26
To which add the preliminary expenditure for surveys, borings, etc., charged to Welland Canal capital as follows:—		
1905-06.....	\$ 13,231	97
1906-07.....	10,825	27
1907-08.....	8,300	34
1908-09.....	19,993	37
1909-10.....	9,979	91
1910-11.....	21,229	35
1911-12.....	23,138	60
1912-13.....	112,890	92
	219,559	73
Total cost of Welland Ship Canal to March 31, 1917.....	\$13,693,922	99

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## HUDSON BAY RAILWAY.—Amounts Expended on Construction.

	Year.	Capital.
		\$ cts.
Government Expenditure since Confederation.....	1909	92,427 83
“ “ “ .....	1910	53,042 63
“ “ “ .....	1911	184,149 81
“ “ “ .....	1912	159,632 00
“ “ “ .....	1913	1,099,063 15
“ “ “ .....	1914	4,498,717 25
“ “ “ .....	1915	4,773,743 99
“ “ “ .....	1916	4,889,131 77
“ “ “ .....	1917	2,604,279 94
Total to March 31, 1917. ....		18,354,188 37

## QUEBEC BRIDGE.—Amounts Expended on Construction.

	Year.	Capital.	Income.
		\$ cts.	\$ cts.
Government Expenditure .....	1909		422,867 12
“ “ .....	1910		111,788 02
“ “ .....	1911	227,563 40	
“ “ .....	1912	603,293 07	
“ “ .....	1913	1,512,825 96	
“ “ .....	1914	2,604,105 61	
“ “ .....	1915	2,816,305 10	
“ “ .....	1916	2,746,813 70	
“ “ .....	1917	2,733,677 00	
Total.....		13,244,583 84	534,655 14
Less amount received from the Phoenix Bridge Co. 1910.....			100,000 00
Total to March 31, 1917.....		13,244,583 84	434,655 14

Capital Expenditure as above .....	\$	13,244,583 84
In this expenditure a total of \$91,188.10 has been credited, being received for the sale of scrap and used material from the collapsed bridge.		
Add amounts paid by the Finance Department not included above :—		
Amount guaranteed by Act of 1903, Chap. 54.....	\$6,424,781 00	
Amount paid to the Province of Quebec .....	250,000 00	
Amount paid to City of Quebec .....	300,000 00	
Amount paid to Emile Tanguay, as per Supreme Court award .....	485 20	6,975,266 20
	\$	20,219,850 04
Less amount received from the Phoenix Bridge Co.....		100,000 00
Agrees with Public Accounts Balance Sheet, 1917.....	\$	20,119,850 04
To which add the expenditure under Income, 1909 and 1910.....	\$	534,655 14
Add also amount paid for subsidies in 1901, 1902 and 1903.....	374,353 33	
		909,008 47
Total expenditure to date of March 31, 1917 .....		\$21,028,858 51

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## EXPENDITURE on the Canadian Government Railways to March 31, 1917.

## CAPITAL ACCOUNT.

Railways.	Previous Years. to 1916-17.		1916-17.		Total.	
	§	cts.	§	cts.	§	cts.
Intercolonial Ry. System as follows:—						
Canada Eastern.....	819,000	00			819,000	00
Cape Breton Ry.....	3,860,679	14			3,860,679	14
Drummond County Ry.....	1,464,000	00			1,464,000	00
Eastern Extension Ry.....	1,324,042	81			1,324,042	81
Intercolonial Ry.....	106,015,832	36	4,490,472	56	110,506,304	92
Montreal & European Short line.....	333,942	72			333,942	72
Oxford & New Glasgow Ry.....	1,949,063	21			1,949,063	21
Total.....	115,766,560	24	4,490,472	56	120,257,032	80
<i>a</i> European & North American Ry.....	88,363	18			88,363	18
<i>a</i> Nova Scotia Ry.....	208,509	72			208,509	72
International Ry of New Brunswick.....	3,937	47	3,724	98	7,662	45
Prince Edward Island Ry.....	10,841,372	44	609,751	71	11,451,124	15
New Brunswick & P. E. I. Ry.....	224,211	28	46,579	38	270,790	66
<i>b</i> Quebec & Saguenay Ry.....			332,254	93	332,254	93
Hudson Bay Ry.....	15,749,908	43	2,604,279	91	18,354,188	37
National Transcontinental Ry.....	159,881,197	46	3,916,586	20	163,797,783	66
Annapolis and Digby.....	660,683	09			660,683	09
Canadian Pacific Ry.....	62,789,776	09			62,789,776	09
<i>c</i> Carleton Branch Ry.....	48,410	48			48,410	48
Yukon Territory Works:—Stikine Teslin Ry.....	283,323	55			283,323	55
Governor General's Cars.....	71,538	82			71,538	82
Miscellaneous Expenditure.....	18,000	00			18,000	00
Total on Railways.....	366,635,792	25	12,003,649	70	378,639,441	95
<i>b</i> Quebec Bridge.....	10,510,906	84	2,733,677	00	13,244,583	84
Total.....	377,146,699	09	14,737,326	70	391,884,025	79

*a*—Amount paid on this line between 1868 and 1873 included was transferred to Consolidated Fund.*b*—See Special Statement page 19.*c*—This Railway which cost \$88,410.48 was sold in 1893 to the City of St. John, N. B., for \$40,000.00 (Vict. Cap. 6).

## EXPENDITURE on the Canadian Government Railways to March 31, 1917.

## INCOME ACCOUNT.

Railways.	Previous to 1916-17.		1916-17.		Total.	
	§	cts.	§	cts.	§	cts.
Annapolis and Digby Ry.....	8,381	82			8,381	82
Intercolonial Ry.....	280,000	00			280,000	00
Miscellaneous expenditure.....	3,281,398	20	399,069	41	3,680,467	61
Total.....	3,569,780	02	399,069	41	3,968,849	43
Quebec Bridge.....	434,655	14			434,655	14
Total.....	4,004,435	16	399,069	41	4,403,504	57

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## EXPENDITURE on the Canadian Government Railways to March 31, 1917.

## REVENUE ACCOUNT—WORKING EXPENSES.

Railways.	Previous to 1916-17.		1916-17.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Canadian Pacific Ry.....	318,216	30			318,216	30
Eastern Extension Ry.....	538,094	06			538,094	06
*Intercolonial Ry.....	217,866,649	49	15,653,357	78	233,520,007	27
Intercolonial Ry. Improvements and Betterments....	1,515,895	57	1,070,334	64	2,586,230	21
International Ry. of New Brunswick.....	318,357	73	253,107	26	573,464	99
New Brunswick and Prince Edward Island Ry.....	130,973	46	78,031	22	209,004	68
National Transcontinental Ry.....	4,744,130	10	7,806,922	20	12,551,052	30
Prince Edward Island Ry.....	12,156,003	50	833,853	02	12,989,856	52
St. John and Quebec Ry.....	115,451	88	98,300	42	213,752	30
Miscellaneous expenditure.....	90,189	97	4,000	00	94,189	97
	237,793,962	06	25,799,906	54	263,593,868	60

\* Including expenditure on the Baie des Chaleurs Railway in 1897, amounting to \$18,679 97.

## REVENUE Received by the Canadian Government Railways to March 31, 1917.

Railways.	Previous to 1916-17.		1916-17.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Canadian Pacific Ry.....	396,473	75			396,473	75
Eastern Extension Ry.....	462,465	68			462,465	68
Intercolonial Ry.....	211,169,540	78	16,767,386	89	227,936,927	67
International Ry. of New Brunswick.....	170,992	41	116,678	67	286,771	08
New Brunswick and Prince Edward Island Ry.....	75,834	15	38,336	75	114,170	90
National Transcontinental Ry.....	3,956,235	05	5,916,550	99	9,872,786	04
Prince Edward Island Ry.....	8,548,415	60	630,045	69	9,178,461	29
St. John and Quebec Ry.....	76,482	44	70,759	62	147,242	06
	224,855,539	86	23,539,758	61	248,395,298	47

## EXPENDITURE common to both Railways and Canals to March 31, 1917.

## INCOME ACCOUNT.

Expenditure previous to 1916-17.....	\$	1,085,578	12
Expenditure during 1916-17.....	\$	302,095	14
	\$	1,387,673	26

## EXPENDITURE common to both Railways and Canals to March 31, 1917.

## REVENUE ACCOUNT.

	Previous to 1916-17.		1916-17.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Expenditure.....	69,711	05			69,711	05



## SESSIONAL PAPER No. 20

TOTAL EXPENDITURE and Revenue of the Department of Railways and Canals prior to and since Confederation to March 31, 1917.

	\$	cts.	\$	cts.
TOTAL EXPENDITURE .....			900,596,933	18
Expenditure on Railways .....	646,202,159	98		
"    Quebec Bridge .....	13,679,238	98		
"    Railway subsidies .....	75,117,415	47		
"    Canals .....	164,140,734	44		
"    Miscellaneous .....	1,457,384	31		
Total expenditure .....			900,596,933	18
CLASSIFICATION OF EXPENDITURE IN GENERAL—				
Capital account .....	514,803,340	63		
Revenue account .....	295,476,009	83		
Income account .....	15,200,362	25		
Consolidated fund—Railway subsidies, pages 25 to 35 .....	75,117,415	47	900,596,933	18
CLASSIFICATION OF EXPENDITURE IN DETAIL—				
Railways—				
Capital—See page 20 .....	378,639,441	95		
Income—See page 20 .....	3,968,849	43		
Revenue—See page 21 .....	263,593,868	60	646,202,159	98
Quebec Bridge—				
Capital—See page 19 .....	13,244,583	84		
Income—See page 19 .....	434,655	14	13,679,238	98
Railway Subsidies—See pages 25 to 35 .....	75,117,415	47	75,117,415	47
Total on railways \$734,998,814.43.				
Canals—				
Capital—See pages 14 and 15 .....	122,919,314	84		
Income—See pages 14 and 15 .....	9,408,989	42		
Revenue—See pages 14 and 15 .....				
"    Staff — \$18,094,522.85				
"    Repairs     13,717,907.33	31,812,430	18	164,140,734	44
Miscellaneous Expenditure—				
Income—See page 21 .....	1,387,673	26		
Revenue—See page 21 .....	69,711	05	1,457,384	31
Total expenditure .....			900,596,933	18
CLASSIFICATION OF EXPENDITURE INTO CAPITAL AND CONSOLIDATED FUND—				
Railways—				
Capital—Including Quebec bridge .....	391,884,025	79		
Consolidated Fund (Income and Revenue) Railway Subsidies, etc .....	343,114,788	64	734,998,814	43
Canals—				
Capital .....	122,919,314	84		
Consolidated Fund (Income and Revenue) .....	41,221,419	60	164,140,734	44
General Expenditure—				
Consolidated Fund (Income and Revenue) .....	1,457,384	31	1,457,384	31
Total expenditure .....			900,596,933	18
TOTAL REVENUE RECEIVED from July 1, 1867, to March 31, 1917—				
Railways—See page 22 .....	248,395,298	47		
Canals—See page 15 .....	16,665,271	32		
Total revenue .....			265,060,569	79

## RAILWAY AND BRIDGE SUBSIDY STATEMENTS

I.—*Statement showing the Railway Subsidies paid during the year ending March 31, 1917.*

II.—*Statement of Railway and Bridge Subsidies paid from July 1, 1883, to March 31st, 1917.*



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## RAILWAY Subsidies paid during the year ending March 31, 1917.

Name of Railway.	Amount.
	\$ cts.
<i>Lake Erie and Northern Railway Co.—</i>	
Balance of subsidy on 50·03 miles of railway from the town of Galt to Port Dover..	185,062 40
<i>Ha-Ha Bay Railway Co.—</i>	
Further payment on account of subsidy on 12 miles of railway from La Terrière Junction southerly to Lake Kenogami <i>via</i> La Terrière Village .....	235 80
<i>Canadian Northern Ontario Railway Co.—</i>	
Further payment on account of subsidy on 894·48 miles of railway from Ottawa to Port Arthur .....	\$236,180 41
Subsidy on Capreol-Sellwood Junction section being 7·5 miles.....	42,000 00
Further subsidy on 214·57 miles from Toronto to Ottawa .....	80,000 00
	358,180 41
<i>Kettle Valley Railway Co.—</i>	
Further and full payment of subsidy on 52·48 miles of railway from a point on the line between Merritt and Penticton Wharf, about 25 miles south of Merritt to a point on the Fraser River near Hope Station.....	\$111,674 82
Payment of full subsidy on 28·65 miles of railway from Merritt to Brookmere and 70·8 miles from Penticton Wharf to Princeton, a total of 99·45 miles .....	179,227 61
	290,902 43
<i>Edmonton, Dunvegan and British Columbia Railway Co.—</i>	
Subsidy on 50·11 miles, from a point on its line situated near the Spirit River Settlement to and through the Grand Prairie Land District, Alberta.....	125,202 84
	\$959,583 88

STATEMENT showing subsidies voted for Railways as to which contracts

Subsidies Voted.		Number.	Railways.	July 1, 1883, to March 31, 1910	
Authority.	Amount.			\$	cts.
	\$	cts.		\$	cts.
46 Vic., chap. 25	156,800	00	1 International Railway, Quebec.....	156,800	00
53 " "	384,000	00			
45 " "	80,000	00			
46 " "	95,000	00			
48-49 " "	186,295	00			
49 " "	28,800	00	2 Quebec and Lake St. John Railway, Quebec.....	1,233,943	50
50 1 " "	96,000	00			
51 " "	64,000	00			
52 " "	40,000	00			
53 " "	5,250	00			
54-5 " "	44,800	00			
57-8 " "	89,600	00			
46 " "	70,000	00	3 Kingston, Napanee and Western Ry., formerly		
49 " "	12,800	00	Napanee, Tamworth and Quebec Ry., Ontario...	208,732	80
50-1 " "	32,000	00			
52 " "	64,000	00			
55-6 " "	272,000	00	4 Pontiac Pacific Junction Railway, Quebec.....	193,578	00
47 " "	41,000	00			
51 " "	24,000	00			
53 " "	115,200	00	5 Caraquette Railway, N.-B. ....	224,000	00
46 " "	76,800	00			
47 " "	32,000	00			
59-1 " "	32,000	00			
47 " "	32,000	00			
49 " "	57,600	00	6 Canadian Northern Quebec Ry. Co., formerly Great		
52 " "	22,400	00	Northern Ry., Quebec.....	1,034,280	60
53 " "	48,000	00			
56 " "	47,000	00			
57-8 " "	70,400	00			
7-8 Ed. VII	*				
63 " "	48,000	00	7 Kingston and Pembroke Ry., Ontario.....	48,000	00
47 " "	660,000	00			
45 " "	660,000	00	8 Northern and Pacific Junction Railway, Ontario...	1,320,000	00
46 " "	128,000	00			
53 " "	19,200	00			
47 " "	32,000	00	9 Canada Eastern Ry., formerly Northern and West-		
48-9 " "	24,439	84	ern Ry., N.B., including also Chatham Branch		
48-9 " "	140,800	00	Ry .....	374,839	84
51 " "	35,200	00			
57-8 " "	*				
62-3 " "	60,342	00	10 Quebec Central Railway, Quebec.....	403,980	69
47 " "	288,000	00			
51 " "	72,000	00			
7-8 " "	40,000	00	11 Montreal and Sorel Railway, Quebec .....	93,757	57
53 " "	30,000	00			
48-9 " "	64,000	00	12 Montreal and Champlain Junction Ry., Quebec...	103,600	00
50-1 " "	9,600	00			
51 " "	38,400	00	13 Elgin Petitecodiac and Havelock Railway, N.B....	82,652	82
46 " "	44,252	82			
51 " "	22,400	00	14 St. Louis and Richibucto Railway, N.B.....	22,400	00
47 " "	96,000	00			
48-9 " "	38,400	00	15 Canada Atlantic Railway, Ontario.....	282,355	20
49 " "	180,000	00			
50-1 " "	750,000	00	16 Esquimalt and Nanaimo Railway, B.C. ....	750,000	00
47 " "	96,000	00	17 Erie and Huron Railway, Ontario .....	96,000	00
47 " "	320,000	00			
46 " "	306,000	00	18 Baie des Chaleurs Railway, Quebec.....	620,000	00
47 " "					
52 " "					
Carried forward.....				7,248,921	02

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have been entered into and payments made up to March 31, 1917—Continued.

Payments.							Total to March 31, 1917.	Number.
1910-1911.	1911-1912.	1912-1913.	1913-1914.	1914-1915.	1915-1916.	1916-1917.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
							156,800 00	1
	27,520 00						1,261,463 50	2
							208,732 80	3
							193,578 00	4
							224,000 00	5
144,608 51	86,468 03						1,265,357 14	6
							48,000 00	7
							1,320,000 00	8
							374,839 84	9
129,320 61		8,576 00			43,161 60		585,038 90	10
							93,757 57	11
							103,600 00	12
							82,652 82	13
							22,400 00	14
							282,355 20	15
		356,440 00		405,120 00			1,520,560 00	16
							96,000 00	17
							620,000 60	18
273,929 12	113,988 03	374,016 00		405,120 00	43,161 60		8,459,135 77	

8 GEORGE V, A. 1918

STATEMENT showing subsidies voted for Railways as to which contracts

Subsidies Voted.		Number.	Railways.	July 1, 1883, to March 31, 1910.	
Authority.	Amount.			\$	cts.
			Brought forward.....	7,248,921	02
48-9 Vic, c. 59	118,400 00	1	New Brunswick and Prince Edward Island Railway.	113,440	00
50-1 " 24	217,600 00	2	Laurentian Railway, formerly St. Lawrence, Lower Laurentian and Saguenay Railway, Quebec.....	217,600	00
49 " 10	11,200 00	3	L'Assomption Railway, Quebec.....	11,200	00
49 " 10	32,000 00				
50-1 " 24	96,000 00	4	Great Eastern Railway, Quebec.....	40,345	00
56 " 2	64,000 00				
53 " 2	37,500 00				
47 " 8	160,000 00	5	Irondale, Bancroft and Ottawa Railway, Ontario.....	144,000	00
52 " 3					
49 " 10	96,000 00	6	Buctouche and Moncton Railway, N.B.....	101,600	00
50-1 " 24	6,400 00				
47 " 8	51,200 00	7	Albert Southern Railway, N.B.....	50,460	00
52 " 3					
50-1 " 24	65,200 00	8	Lake Temiscamingue Colonisation Ry. Quebec....	310,335	95
57-8 " 4	274,940 00				
49 " 10	38,400 00	9	Joggins Railway, N.S.....	37,500	00
50-1 " 24	4,000 00				
45 " 14	240,000 00	10	Temiscouata Railway, N.B., and Quebec.....	645,950	00
48-9 " 58	258,000 00				
51 " 3	100,000 00				
53 " 2	51,200 00				
48-9 " 50	44,800 00	11	Leamington and St. Clair Railway, Ontario.....	51,200	00
50-1 " 24	6,400 00				
59 " 10	16,000 00	12	Toronto, Grey and Bruce Railway, Ontario.....	14,656	00
50-1 " 24	22,400 00	13	Dominion Lime Co., Quebec.....	15,360	00
49 " 10	256,000 00	14	West Ontario Pacific Railway and Ontario and Quebec Railway.....	256,000	00
53 " 2					
50-1 " 24	96,000 00				
52 " 3	14,400 00	15	Drummond County Railway, Quebec.....	423,936	00
53 " 2	76,800 00				
57-8 " 4	96,000 00				
48-9 " 59	128,000 00	16	Brockville, Westport and Sault Ste. Marie Rail- way, Ontario.....	140,800	00
53 " 2					
54-5 " 8	64,000 00				
57-8 " 4					
49 " 10	32,000 00	17	Montreal and Lake Maskinongé Railway, Quebec..	41,280	00
53 " 2	10,200 00				
50-1 " 24	54,400 00	18	South Norfolk Railway, Ontario.....	54,400	00
50-1 " 24	51,200 00	19	Guelph Junction Railway, Ontario.....	46,000	00
48-9 " 54	22,400 00	20	Belleville and North Hastings Railway, Ontario.....	21,888	00
49 " 19					
49 " 10	108,800 00	21	Hereford Railway, Quebec.....	155,200	00
52 " 3	48,000 00				
50-1 " 23	118,400 00	22	Lake Erie and Detroit River Railway, Ontario....	475,851	00
55-6 " 4	224,000 00				
62-3 " 5					
50-1 " 27	62,400 00	23	Beauharnois Junction Railway, Quebec.....	62,400	00
56 " 4					
50-1 " 24	138,400 00				
55-6 " 5	108,000 00	24	St. Catharines and Niagara Central Ry., Ontario..	38,400	00
57-8 " 4	108,800 00				
52 " 3	30,000 00	25	Fredericton and St. Mary's Ry. Bridge Co., N.B....	30,000	00
50-1 " 24	9,600 00	26	Harvey Branch Railway Co., N.B.....	5,553	57
55-6 " 5	240,000 00	27	Nova Scotia Central Railway Co., N. S.....	235,200	00
61 " 1					
50-1 " 24	44,800 00	28	Cumberland Railway and Coal Co., N.S.....	39,850	00
52 " 3	19,200 00	29	Pontiac and Renfrew Railway, Ontario.....	13,600	00
52 " 3	54,400 00	30	Thousand Islands Railway, Ontario.....	29,840	00
63 4 " 8					
			Carried forward.....	11,072,766	54

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have been entered into and payments made up to March 31, 1917—Continued.

Payments.							Total to March 31, 1917.	Number.
1910-11.	1911-12	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
273,929 12	113,988 03	374,016 00	.....	405,120 00	43,161 60	.....	8,459,135 77	
.....	.....	.....	.....	.....	.....	.....	113,440 00	1
.....	.....	.....	.....	.....	.....	.....	217,600 00	2
.....	.....	.....	.....	.....	.....	.....	11,200 00	3
.....	.....	.....	.....	.....	.....	.....	40,345 00	4
.....	.....	.....	.....	.....	.....	.....	144,000 00	5
.....	.....	.....	.....	.....	.....	.....	101,600 00	6
.....	.....	.....	.....	.....	.....	.....	50,460 00	7
.....	.....	.....	.....	.....	.....	.....	310,335 95	8
.....	.....	.....	.....	.....	.....	.....	37,500 00	9
.....	.....	.....	.....	.....	.....	.....	645,950 00	10
.....	.....	.....	.....	.....	.....	.....	51,200 00	11
.....	.....	.....	.....	.....	.....	.....	14,656 00	12
.....	.....	.....	.....	.....	.....	.....	15,360 00	13
.....	.....	.....	.....	.....	.....	.....	256,000 00	14
.....	.....	.....	.....	.....	.....	.....	423,936 00	15
.....	.....	.....	.....	.....	.....	.....	140,800 00	16
.....	.....	.....	.....	.....	.....	.....	41,280 00	17
.....	.....	.....	.....	.....	.....	.....	54,400 00	18
.....	.....	.....	.....	.....	.....	.....	46,000 00	19
.....	.....	.....	.....	.....	.....	.....	21,888 00	20
.....	.....	.....	.....	.....	.....	.....	155,200 00	21
.....	.....	.....	.....	.....	.....	.....	475,851 00	22
.....	.....	.....	.....	.....	.....	.....	62,400 00	23
.....	.....	.....	.....	.....	.....	.....	38,400 00	24
.....	.....	.....	.....	.....	.....	.....	30,000 00	25
.....	.....	.....	.....	.....	.....	.....	5,553 57	26
.....	.....	.....	.....	.....	.....	.....	235,200 00	27
.....	.....	.....	.....	.....	.....	.....	39,850 00	28
.....	.....	.....	.....	.....	.....	.....	13,600 00	29
.....	.....	.....	.....	.....	.....	.....	29,840 00	30
273,929 12	113,988 03	374,016 00	.....	405,120 00	43,161 60	.....	12,282,981 29	

STATEMENT showing subsidies voted for Railways as to which contracts

SUBSIDIES VOTED.		Number.	Railways.	July 1, 1883, to March 31, 1910.	
Authority.	Amount.			\$	cts.
			Brought forward.....	11,072,766	54
52 Vic., chap.	3	1	Quebec, Montmorency and Charlevoix Ry. Co., Que.	96,000	00
56 "	3	2	St. Clair Frontier Tunnel Co., Ontario ..	375,000	00
52 "	3	3	Brantford, Waterloo and Lake Erie Ry., Ontario...	57,600	00
50-1 "	24	4	Port Arthur, Duluth and Western Ry., Ontario ....	271,200	00
57-8 "	4				
51 "	3				
53 "	2				
50-1 "	24	5	Montreal and Ottawa Railway, Ontario .....	192,000	00
53 "	2				
54-5 "	8				
57-8 "	4				
50-1 "	24	6	Cornwallis Valley Railway, N.S.....	44,800	00
52 "	3				
52 "	3			320,000	00
57-8 "	6	7	Ottawa, Northern and Western Railway, Quebec, formerly Ottawa and Gatineau Valley Railway.	64,000	00
60-1 "	4			*	
47 "	8				
51 "	3				
52 "	3			83,612	00
53 "	2	8	Central Railway, N.B. ....	142,400	00
57-8 "	4			48,000	00
61 "	1				
62-3 "	1				
53 "	2	9	Montreal and Western Railway, Quebec.....	361,270	00
52 "	3	10	Parry Sound and Colonization Railway, Ontario .....	128,000	00
57-8 "	4			64,000	00
52 "	3	11	Shuswap and Okanagan Railway, B.C.....	163,200	00
54-5 "	8			89,600	00
53 "	2	12	Tobique Valley Railway, N.B. ....	35,200	00
55-6 "	5			9,600	00
53 "	2	13	Colombia and Kootenay, B.C.....	112,000	00
53 "	2	14	Waterloo Junction Railway, Ontario .....	35,200	00
53 "	2	15	Orford Mountain Railway Company, Quebec.....	99,200	00
53 "	2	16	St. Lawrence and Adirondack Railway, Quebec ...	57,600	00
55-6 "	5			25,024	00
55-6 "	5	17	New Glasgow Iron, Coal and Railway Co., N.S. ....	*40,000	00
56 "	2			102,400	00
57-8 "	4	18	United Counties Railway Co., Quebec. ....	102,400	00
55-6 "	5	19	Phillipsburg Junction Ry. Quarry Co., Quebec.....	*21,600	00
55-6 "	5	20	Ottawa, Arnprior and Parry Sound Ry., Ontario.....	*430,400	00
56 "	2			67,200	00
57-8 "	4	21	Montfort Colonization Railway, Quebec.....	38,400	00
60-1 "	4			66,000	00
55-6 "	5	22	Lotbinière and Megantic Railway, Québec.....	48,000	00
57-8 "	4			48,000	00
56 "	2	23	Grand Trunk, Georgian Bay and Lake Erie Ry., Ont.	80,000	00
55-6 "	5	24	Can. Pac. Ry., B.C. Revelstoke to Arrow Lake.....	80,000	00
57-8 "	4	25	Nakusp and Slocan Railway, B.C.....	121,600	00
55-6 "	5	26	Dominion Coal Company, N.S. ....	89,600	00
56 "	2	27	Oshawa Railway and Navigation Co., Ontario. ....	22,400	00
57-8 "	4	28	Tilsonburg, Lake Erie and Pacific Ry., Ontario. ....	*51,200	00
56 "	2	29	St. Stephen and Milltown Ry., N.B.....	*11,200	00
57-8 "	4	30	Gulf Shore Railway Company, N.B. ....	*38,400	00
57-8 "	4	31	Cap de la Magdeleine Railway, Quebec.....	9,000	00
56 "	2	32	Ontario, Belmont and Northern Ry. Co., Ontario ...	32,000	00
*		33	Coast line of N.S., now Halifax and Yarmouth Ry. ...	*	
*		34	Ottawa and New York Railway Company, Ontario..	*	
			Carried forward.....	16,315,359	06

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have been entered into and payments made up to March 31, 1917.—Continued.

Payments.							Total to March 31, 1917.	Number.
1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
273,929 12	113,988 03	374,016 00	.....	405,120 00	43,161 60	.....	12,282,981 29	
.....	.....	.....	.....	.....	.....	.....	96,000 00	1
.....	.....	.....	.....	.....	.....	.....	375,000 00	2
.....	.....	.....	.....	.....	.....	.....	57,600 00	3
.....	.....	.....	.....	.....	.....	.....	271,200 00	4
.....	.....	.....	.....	.....	.....	.....	192,000 00	5
.....	.....	.....	.....	.....	.....	.....	44,800 00	6
.....	.....	.....	.....	.....	.....	.....	414,931 20	7
.....	.....	.....	.....	.....	.....	.....	226,012 54	8
.....	.....	.....	.....	.....	.....	.....	361,270 00	9
.....	.....	.....	.....	.....	.....	.....	152,800 00	10
.....	.....	.....	.....	.....	.....	.....	163,200 00	11
.....	.....	.....	.....	.....	.....	.....	134,016 00	12
.....	.....	.....	.....	.....	.....	.....	88,800 00	13
.....	.....	.....	.....	.....	.....	.....	32,800 00	14
.....	.....	9,984 00	.....	.....	.....	.....	202,926 50	15
.....	.....	.....	.....	.....	.....	.....	149,481 60	16
.....	.....	.....	.....	.....	.....	.....	39,840 00	17
.....	.....	.....	.....	.....	.....	.....	188,816 00	18
.....	.....	.....	.....	.....	.....	.....	23,712 00	19
.....	.....	.....	.....	.....	.....	.....	779,712 00	20
.....	.....	.....	.....	.....	.....	.....	167,440 00	21
.....	.....	.....	.....	.....	.....	.....	96,000 00	22
.....	.....	.....	.....	.....	.....	.....	39,744 00	23
.....	.....	.....	.....	.....	.....	.....	80,000 00	24
.....	.....	.....	.....	.....	.....	.....	117,760 00	25
.....	.....	.....	.....	.....	.....	.....	87,808 00	26
.....	.....	.....	.....	.....	.....	.....	22,400 00	27
.....	.....	.....	32,640 00	.....	.....	.....	150,071 48	28
.....	.....	.....	.....	.....	.....	.....	14,848 00	29
.....	.....	.....	.....	.....	.....	.....	53,699 20	30
.....	.....	.....	.....	.....	.....	.....	7,424 00	31
.....	.....	.....	.....	.....	.....	.....	30,720 00	32
.....	.....	.....	.....	.....	.....	.....	160,000 00	33
.....	.....	.....	.....	.....	.....	.....	262,384 00	34
273,929 12	113,988 03	384,000 00	32,640 00	405,120 00	43,161 60	.....	17,568,197 81	

8 GEORGE V, A. 1918

STATEMENT showing subsidies voted for Railways as to which contracts

Subsidies Voted.		Number.	Railways.	July 1, 1883,
Authority.	Amount.			to March 31, 1910.
	§ cts.			§ cts.
			Brought forward.....	16,315,359 06
60-61 Vic., chap. 5	3,630,000 00	1	Canadian Pacific Ry. Co., B.C. (Crow's Nest Pass) .	3,404,720 00
60-61 " " 4	500,000 00	2	Grand Trunk Ry. Co., Victoria Jubilee Bridge, Que.	500,000 00
68 " " 3	*	3	International Ry. of New Brunswick, formerly Res-	
7-8 Ed. VII, 63	*	3	tigonche and Western Ry. Co. ....	555,751 47
" " " "	*	4	East Richelieu Railway Co., Quebec.....	69,952 00
7-8 Ed. VII, 63	*	5	South Shore Ry. (Quebec, Montreal and Southern)..	430,975 36
" " " "	*	6	Pembroke Southern Railway, Ontario.....	64,000 00
" " " "	*	7	Massawippi Valley Railway Co., Quebec.....	5,376 00
" " " "	*	8	Inverness and Richmond Ry. Co., N.S., now Inver-	
" " " "	*	8	ness Ry. and Coal Co. ....	368,545 97
" " " "	*	9	Canadian Northern Ry. Co., Ontario, Manitoba and	
" " " "	*	9	N.W.T. ....	1,909,132 00
" " " "	*	10	Canadian Pacific Railway Co. (Pipestone Branch) .	160,000 00
6-7 Ed. VII, 49	*	11	Central Ontario Railway Co., Ontario.....	179,466 00
" " " "	*	12	Midland Railway Co., N.S. ....	309,060 40
63-3 Vic., chap. 7	1,000,000 00	13	Quebec Bridge Co., Quebec.....	374,353 33
63-4 " " 8		14	St. Mary River Railway Co., N.W.T. ....	148,094 00
60-1 Vic., cnap. 4	212,500 00	15	Pontiac Pacific and Ottawa & Gatineau Ry. Co.	
63-4 " " 2		15	(Interprovincial Bridge over Ottawa River).....	212,500 00
1 Ed. VII, chap. 7	*	16	Atlantic and Lake Superior Ry., Quebec.....	144,969 02
1 " " 7	*	17	Montreal and Province Line Railway, Quebec.....	58,560 00
62-3 Vic., chap. 7	*	18	York and Carleton Railway, N.B. ....	32,896 00
62-3 " " 7	*	19	Algoma Central and Hudson Bay Ry., Ontario.....	924,976 00
63-4 " " 8	*	20	Cape Breton Extension Railway, N.S. ....	196,800 00
1 Ed. VII, chap. 7	*	21	Can. Pac. Ry. Co. (Kootenay & Arrowhead Branch).	153,866 00
" " " "	*	22	" (Selkirk Branch) .....	83,200 00
" " " "	*	23	" (Dyment Branch) .....	22,336 00
" " " "	*	24	" (Waskada Branch) .....	64,000 00
9-10 Ed. VII, 51	*	25	Algoma Eastern Ry. Co., formerly Manitoulin and	
" " " "	*	25	North Shore Ry. Co., Ontario .....	32,000 00
" " " "	*	26	Bay of Quinte Railway, Ont. ....	141,722 45
" " " "	*	27	Bruce Mines and Algoma Railway, Ont. ....	53,920 00
" " " "	*	28	Magnetawan River Railway Co., Ont. ....	3,552 00
" " " "	*	29	Canadian Northern Quebec Ry., formerly Chateau-	
" " " "	*	29	guay and Northern Ry., Quebec.....	391,819 75
" " " "	*	30	Canadian Pacific Ry. Co. (Pheasant Hills Branch)...	435,200 00
" " " "	*	31	Halifax and Southwestern Railway Co., N.S. ....	1,238,450 93
" " " "	*	32	Northern Colonization Railway Co., Quebec.....	355,200 00
" " " "	*	33	New Brunswick Coal and Railway Co., N.B. ....	48,000 00
" " " "	*	34	Schomberg and Aurora Railway Co., Ont. ....	46,144 00
" " " "	*	35	Lindsay, Bobcaygeon Pontypool Ry. Co., Ont. ....	185,173 06
" " " "	*	36	Middleton and Victoria Beach Ry. Co., N.S. ....	125,760 00
Ed. VII, chap. 57	*	37	Nicola, Kamloops and Similkameen Coal & Ry. Co.	300,800 00
4 " " 34	*	38	Canadian Pacific Ry. (Staynerville Branch) .....	13,024 00
6 " " 43	*	39	Klondike Mines Railway .....	197,184 00
6 " " 43	*	40	Kettle Valley Ry. Co., B.C. ....	97,771 52
6 " " 43	*	41	Colchester Coal and Ry. Co., N.S. ....	12,800 00
3 " " 57	*	42	Minudie Coal Co., N.S. ....	18,544 00
6 " " 43	*	43	Atlantic, Quebec and Western Ry. Co., Quebec.....	365,568 00
9-10 " " 51	*	44	Napierville Junction Ry. Co., Quebec ..	173,440 00
6 " " 43	*	45	Edmonton, Yukon and Pac. Ry. Co., Alberta....	91,200 00
6-7 " " 40	*	46	Canadian Northern Ontario Ry. Co. ....	2,123,942 40
6-7 " " 40	*			
7-8 " " 63	*			
			Carried forward.....	33,230,105 32

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



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have been entered into and payments made up to March 31, 1917—Continued.

Payments.							Total March 31, 1917.	Number.
1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	\$ cts.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
273,929 12	113,988 03	384,060 00	32,640 00	405,120 00	43,161 60		17,568,197 81	
							3,404,720 00	1
							500,000 00	2
169,536 00					791 93		726,080 00	3
							69,952 00	4
60,000 00	23,835 70						1514,811 06	5
							64,000 00	6
							5,376 00	7
							368,545 97	8
							1,909,132 00	9
							160,000 00	10
24,601 32	826 17		969 30				205,862 79	11
							399,060 40	12
							374,353 33	13
							148,094 00	14
							212,500 00	15
				18,449 17			163,418 19	16
							58,560 00	17
							32,896 00	18
	133,584 00	394,859 44	456,304 00	138,980 56			2,048,704 00	19
							196,800 00	20
							153,866 00	21
							83,200 00	22
							22,336 00	23
							64,000 00	24
68,638 72		254,089 40	179,897 01	13,022 87			547,648 00	25
							141,722 45	26
							53,920 00	27
							3,552 00	28
							391,819 75	29
							435,200 00	30
							1,238,450 93	31
							355,200 00	32
							48,000 00	33
							46,144 00	34
							185,173 06	35
							125,760 00	36
							300,800 00	37
							13,024 00	38
							197,184 00	39
	148,800 00	107,138 40	699,389 60	369,197 28	460,691 49	290,902 43	2,174,190 72	40
							12,800 00	41
							18,544 00	42
31,334 40	91,279 60	414,618 00					902,800 00	43
							173,440 00	44
							91,200 00	45
116,889 60			8,948,809 47	2,243,335 80	495,604 83	358,180 41	14,386,762 51	46
744,929 16	512,313 50	1,554,705 24	10,318,009 38	3,288,405 68	1,000,249 85	649,082 84	51,297,800 97	

<sup>a</sup> Amount actually paid after deductions amounting to \$1,521.82 made in 1905-06 (being for refunds, etc.,) from the total of \$146,490.84, previously reported, for which cheques had issued.

8 GEORGE V, A. 1918

STATEMENT showing subsidies voted for Railways as to which contracts

Subsidies Voted.		Number.	Railways.	July 1, 1883, to Mar. 31, 1910.	
Authority.	Amount.			\$	cts.
			Brought forward. ....	33,230,105	32
7-8 Ed. VII. c. 63	*	1	Maritime Coal and Railway Co. ....	3,200	00
7-8 " " 63	*	2	St. Mary's and Western Ontario Ry. Co., Ont. ....	67,344	00
7-8 " " 63	*	3	North Shore Ry. Co., formerly Beersville Coal and Ry. Co. ....	27,616	00
7-8 " " 63	*	4	St. Maurice Valley Ry. Co.—Three Rivers to Grand Mere, Que. ....	112,640	00
7-8 " " 63	*	5	Grand Trunk Pacific Ry. Co. ....	917,800	96
6 " " 43	*	6	Can. Pacific Ry. Co., Teulon to Icelandic River. ....	30,800	00
7-8 " " 63	*	7	Canadian Pacific Ry. Co., Moosejaw northwesterly. ....	303,360	00
7-8 " " 63	*	8	Canadian and Gulf Terminal Ry. Co. ....		
6-7 " " 40	*	9	Liverpool and Milton Ry. 5 miles, N.S. ....		
7-8 " " 63	*	10	Thessalon and Northern Ry. Co., Ont. ....		
7-8 " " 34	*	11	Vancouver and Lulu Island Railway Co., B.C. ....		
7-8 " " 51	*	12	Quebec and Saguenay Ry. Co., Que. ....		
7-8 " " 63	*	13	Canadian Pacific Ry., Winnipeg to Gimli, Man. ....		
9-10 " " 51	*	14	Ha-Ha Bay Railway Co., Que. ....		
2 Geo. V 47	*	15	Northern New Brunswick and Seaboard Ry. Co., N.B. ....		
3-4 " " 46	*	16	Can. Northern Pacific Ry. Co., B.C. ....		
2 " " 9	*	17	Fredericton and Grand Lake Ry. Co., N.B. ....		
2 " " 48	*	18	Southampton Railway Co., N.B. ....		
2 " " 48	*	19	St. John and Quebec Railway Co., N.B. ....		
2 " " 7	*	20	Canadian Northern Alberta Ry. Co., Alta. ....		
3-4 " " 10	*	21	Central Ry. of Canada, Que. ....		
2 " " 48	*	22	Temiskaming and Northern Ont. Ry. Co., Ont. ....		
3-4 " " 53	*	23	Lake Erie and Northern Ry. Co., Ont. ....		
2 " " 48	*	24	Can. Pac. Ry., Bridge at Outlook ....		
2 " " 48	*	25	Can. Pac. Ry., Bridge at Edmonton, Alta. ....		
2 " " 48	*	26	Alberta Central Railway, Alta. ....		
3-4 " " 46	*	27	Kootenay Central Ry. Co., B.C. ....		
2 " " 48	*	28	Can. Pac. Ry., Gimli to Icelandic River Bridge. ....		
3-4 " " 46	*	29	Edmonton, Dunvegan and British Columbia Ry., Alta. ....		
			Total. ....	34,692,866	28
37 Vic., chap. 14	186,500 annu- ally for 20 yrs.	30	Atlantic and Northwestern Railway. ....	3,732,000	00
46 " " 2	} 1,525,250 00	31	Central Canada Railway. ....	1,525,250	00
47 " " 8		32	Canadian Pacific Extension. ....	1,500,000	00
48-9 " " 58	1,500,000 00		Total. ....	41,450,116	28

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have been entered into and payments made up to March 31, 1917.—*Concluded.*

Payments.							Total March 31, 1917.	Number.
1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
744,929 16	512,313 50	1,554,705 24	10,318,009 38	3,288,405 68	1,000,249 85	649,082 84	51,297,800 97	
	365 00						3,200 00	1
							67,709 00	2
							27,616 00	3
60,480 00							173,120 00	4
302,679 04							1,220,480 00	5
		81,200 00					112,000 00	6
	78,432 09		103,682 27				485,474 27	7
144,803 84	65,249 75						210,053 59	8
32,000 00							32,000 00	9
	6,112 00						6,112 00	10
	61,760 00						61,760 00	11
	104,992 00	27,641 60	116,167 68				248,861 28	12
	30,176 00	4,346 43					34,522 43	13
		148,148 20	66,919 28	16,158 72		235 80	231,462 00	14
		86,528 00	21,632 00				108,160 00	15
		2,705,378 00	2,520,281 00	178,077 80	244,889 57		5,648,626 37	16
		104,996 04		111,579 96			216,576 00	17
		48,442 88	32,837 12				81,280 00	18
		174,120 96	364,617 42	59,581 32			598,319 70	19
			2,832,024 00	262,080 00			3,094,104 00	20
			30,145 02				30,145 02	21
			2,134,080 00				2,134,080 00	22
			135,129 60			185,062 40	320,192 00	23
			115,000 00				115,000 00	24
			126,000 00				126,000 00	25
			119,712 00	209,768 00	75,000 00		404,480 00	26
				1,065,856 00			1,065,856 00	27
					80,032 00		80,032 00	28
						125,202 84	125,202 84	29
1,284,892 04	859,400 25	4,935,507 35	19,036,236 77	5,191,507 48	1,400,171 42	959,583 88	68,360,165 47	30
							3,732,000 00	31
							1,525,250 00	32
							1,500,000 00	32
1,284,892 04	859,400 25	4,935,507 35	19,036,236 77	5,191,507 48	1,400,171 42	959,583 88	75,117,415 47	

## APPENDIX II

## GOVERNMENT RAILWAYS.

## REPORT OF C. A. HAYES, GENERAL MANAGER.

YEAR ENDED MARCH 31, 1917.

INTERCOLONIAL RY. DIVISION.

## CAPITAL ACCOUNT.

The cost of the road and equipment, on March 31, 1916, was.....		\$115,766,560 24	
The additional expenditures during the year were.....		4,490,472 56	
		<hr/>	
Making the total cost to March 31, 1917 .....		\$120,257,032 80	
The gross earnings and working expenses for the year compare as follows—			
Gross earnings—I. C. R. Rail Account .....	\$16,570,186 31		
Water Account.....	197,200 58		
	<hr/>		
N.B. and P.E.I. Ry. Account.	\$16,767,386 89		
	38,336 75		
	<hr/>		\$16,805,723 64
Working expenses—I. C. R. Rail Account ..	\$15,528,188 04		
Water Account..	123,969 74		
	<hr/>		
	\$15,652,157 78		
N.B. and P.E.I. Ry. Account.	72,357 80		
Interest on purchase price.	5,673 42		
Vale Railway (rental) .....	1,200 00		
	<hr/>		15,731,389 00
			<hr/>
Surplus gross earnings over working expenses.....			\$1,074,334 64
From this surplus, \$4,000 was expended as gratuities, and the balance, under authority of 1-2 George V. chapter 8, has been charged to Improvements and Betterments and credited to equipment renewal account .....			\$1,070,334 64

## REVENUE.

The gross earnings, including water line, compare as follows with those of the previous year—			
1915-16 (Water Line, \$ 50,619.83).....		\$14,068,791 41	
1916-17 ( " " 197,200.58).....		16,767,386.89	
		<hr/>	
Increase.....		\$2,698,595 48	
The earnings from passenger traffic (rail) compare as follows—			
1915-16.....		\$4,010,879 58	
1916-17.....		5,587,666 53	
		<hr/>	
Increase.....		\$1,576,786 95	
The earnings from freight traffic, including Water Line, com- pare as follows—			
1915-16 (Water Line, \$ 50,619.83).....		\$ 9,200,339.21	
1916-17 ( " " 197,200.58).....		10,743,137 93	
		<hr/>	
Increase.....		\$1,542,798 72	

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Miscellaneous earnings, including mails and express, compare as follows—	
1915-16.. . . . .	\$857,572 62
1916-17.. . . . .	436,582 43
Decrease.. . . . .	\$420,990 19
The rail earnings per mile of railway, compare as follows—	
1915-16.. . . . .	\$ 9,181 53
1916-17.. . . . .	10,913 00
Increase.. . . . .	\$1,731 47
The earnings per train mile compare as follows—	
1915-16.. . . . .	\$1.87
1916-17.. . . . .	1.94
The number of passengers carried compare as follows—	
1915-16.. . . . .	4,124,387
1916-17.. . . . .	4,537,454
Increase.. . . . .	413,067
The weight of revenue-producing freight compares as follows—	
1915-16.. . . . . tons.	5,447,220
1916-17.. . . . . "	6,770,224
Increase.. . . . . "	1,323,004

A number of statements which give detailed information are appended to this report.

## WORKING EXPENSES.

The working expenses, including Water Line, compare as follows with the previous year—	
1915-16 (Water Line, \$ 50,619.83) . . . . .	\$12,551,495 84
1916-17 ( " " 123,969.74) . . . . .	15,652,157 78
Increase.. . . . .	\$3,100,661 94
The averages, not including Water Line, compare with those of last year as follows—	
Per mile run by engine in 1915-16 . . . . .	1.29
" " " 1916-17 . . . . .	1.39
" " " 1915-16 . . . . .	1.58
" " train 1915-16 . . . . .	1.58
" " " 1916-17 . . . . .	1.81
The working expenses per mile of railway—	
1915-16.. . . . .	\$ 8,187 74
1916-17.. . . . .	10,226 75

The mileage of the railway for the year 1916-17 was 1,518.39.

During the year ended March 31, 1917, 497,019 ordinary ties were put in the track; 178.39 miles of track ballasted, and a total of 72.76 miles of ditching completed to provide better drainage for the roadbed; 20.50 miles of additional business sidings and 5.12 miles of private sidings were provided. Bridges, culverts, wharves, fences and buildings were repaired, and 49.12 miles of standard woven-wire fence erected.

## STORES.

The value of general stores carried over from the previous year was:—

Intercolonial Ry. . . . .	\$1,755,994 47	
New Brunswick and Prince Edward Island Ry. . . . .	3,680 10	
International Railway of New Brunswick. . . . .	15,788 89	
Prince Edward Island Railway. . . . .	54,045 50	
Transcontinental Railway. . . . .	518,850 24	
		\$ 2,348,359 20
The value of stores purchased and charges from other departments. . . . .		16,265,215 35
Total of. . . . .		\$18,613,574 55
The value of stores used and sold. . . . .		13,795,471 81
Balance of general stores on hand, March 31, 1917. . . . .		\$4,818,102 74

## PRINCE EDWARD ISLAND RAILWAY.

The length of railway in operation at the end of the year 1916-17 was 275.2 miles. The gauge is 3 feet 6 inches.

The cost of road and equipment, March 31, 1916, was. . . . .	\$10,341,372 44
The expenditure during year 1916-17, was. . . . .	609,751 71
Making a total cost on March 31, 1917. . . . .	\$11,451,124 15
Gross earnings (including water line, \$185,215.40). . . . .	\$630,045 69
Working expenses (including water line, \$246,259.49) . . . . .	833,853 02
Deficiency. . . . .	\$203,807 33
The gross earnings compare with the previous year as follows—	
1915-16. . . . .	\$390,920 82
1916-17. . . . .	630,045 69
Increase. . . . .	\$239,113 87
The working expenses compare with the previous year as follows—	
1915-16. . . . .	\$545,026 62
1916-17. . . . .	833,353 02
Increase. . . . .	\$288,332 40

The necessary work to maintain the railway in a state of efficiency, the renewing of the track and switch ties, and ballasting of several miles of track, has been carried out.

## NEW BRUNSWICK AND PRINCE EDWARD ISLAND RAILWAY.

The cost of road and equipment, March 31, 1916, was. . . . .	\$224,211 23
The expenditure during year 1916-17, was. . . . .	46,579 38
Making a total cost on March 31, 1917. . . . .	\$270,790 56
The gross earnings and working expenses to March 31, 1917, compare as follows—	
Gross earnings. . . . .	\$33,336 75
Working expenses. . . . .	72,357 80
Deficiency. . . . .	\$34,021 05

In addition to amount of working expenses, there was paid \$5,673.42 as interest on purchase price.

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## INTERNATIONAL RAILWAY OF NEW BRUNSWICK.

The expenditure on road and equipment, March 31, 1916, was	\$3,937 47
The expenditure during the year 1916-17, was. . . . .	3,724 93
	<hr/>
Making a total cost on March 31, 1917. . . . .	\$7,662 45
	<hr/>
Gross earnings and working expenses to March 31, 1917, compare as follows—	
Gross earnings. . . . .	\$116,678 67
Working expenses. . . . .	165,107 26
	<hr/>
Deficiency. . . . .	\$48,428 59
	<hr/>

In addition to amount of working expenses, there was paid \$90,000 as interest on purchase price.

## VALE RAILWAY.

The Vale Railway, running from New Glasgow to Thorburn, N.S., a mileage of 5.35 miles, was leased May 31, 1916, from the Acadia Coal Company at an annual rental of \$1,200.

## NATIONAL TRANSCONTINENTAL RAILWAY.

This line extends from Moncton to Winnipeg and is 2003.03 miles in length, which includes the Grand Trunk Pacific branch line from Fort William to Lake Superior Junction.

The gross earnings and working expenses to March 31, 1917, compare as follows—	
Gross earnings. . . . .	\$5,916,550 99
Working expenses. . . . .	7,206,922 20
	<hr/>
Deficiency. . . . .	\$1,290,371 21
	<hr/>

In addition to amount of working expenses there was paid the sum of \$600,000 on account of rental Lake Superior Branch.

## ST. JOHN AND QUEBEC RAILWAY.

The gross earnings and working expenses to March 31, 1917, compare as follows—	
Gross earnings. . . . .	\$70,759 62
Working expenses. . . . .	93,300 42
	<hr/>
Deficiency. . . . .	\$27,540 80
	<hr/>

CANADIAN GOVERNMENT RAILWAYS—Year ending March 31, 1917.

Statement of Averages.	Intercolonial Ry.	Prince Edward Island Ry.	New Brunswick and Prince Edward Island Ry.	International Ry. of N. B.	National Trans-continental Ry.	Canadian Govt. Rys.	St. John and Quebec Ry.
Mileage of railways.....	1,518.39	275.20	36.05	111.30	2,003.03	3,943.97	119.87
Total engine mileage.....	11,178,913	458,376	65,611	86,516	3,942,535	15,731,981	77,597
" train mileage.....	8,357,782	368,195	40,101	78,891	3,367,185	12,012,757	72,531
" car mileage.....	131,874,021	2,143,610	288,604	683,821	63,429,563	201,369,625	336,623
<i>Earnings.</i>							
Transportation Rail.....	\$ cts. 16,570,186 31	\$ cts. 421,974 29	\$ cts. 38,336 75	\$ cts. 116,678 67	\$ cts. 5,916,550 99	\$ cts. 23,065,727 01	\$ cts. 70,753 62
" Water.....	197,206 58	185,215 40				382,415 98	
Incidentals.....	16,767,386 89	630,015 69	38,336 75	116,678 67	5,916,550 99	23,468,998 99	70,753 62
Total.....	\$ cts. 15,652,137 78	\$ cts. 833,853 02	\$ cts. 72,357 80	\$ cts. 105,107 26	\$ cts. 7,206,922 20	\$ cts. 23,930,398 06	\$ cts. 98,300 42
<i>Ratio of Earnings to Gross Earnings.</i>							
Earnings from transportation (rail).....	p.c. 98.82	p.c. 67.45	p.c. 100.00	p.c. 100.00	p.c. 100.00	p.c. 98.37	p.c. 100.00
" " (water).....	1.18	29.40				1.65	
" " incidentals.....		3.15					
(Gross earnings per mile of railway.....	\$ cts. 10,913 00	\$ cts. 1,616 39	\$ cts. 1,063 43	\$ cts. 1,048 33	\$ cts. 2,933 80	\$ cts. 5,853 38	\$ cts. 590 30
" " engine mile.....	1.48	97 58	1.35	1.35	1.50	1.47	.91
" " train mile.....	1.94	1.21	.96	1.48	1.76	1.86	.98
" " car mile.....	12.57	20.75	16.67	17.06	8.52	11.30	17.81
<i>Ratio of Expenses to Gross Earnings.</i>							
Total.....	p.c. 93.35	p.c. 132.35	p.c. 188.74	p.c. 141.51	p.c. 121.81	p.c. 101.07	p.c. 138.92
<i>Expenses Per Train Mile.</i>							
Total (cents).....	cts. 181.45	cts. 139.16	cts. 180.41	cts. 209.40	cts. 214.01	cts. 189.81	cts. 135.53
<i>Expenses Per Mile of Railway.</i>							
Total rail.....	\$ cts. 10,226 75	\$ cts. 2,135 15	\$ cts. 2,007 15	\$ cts. 1,483 44	\$ cts. 3,598 01	\$ cts. 5,973 72	\$ cts. 820 06
Repairs of locomotives.....	\$ cts. 1,060,224 10	\$ cts. 34,843 97	\$ cts. 4,530 18	\$ cts. 5,925 97	\$ cts. 697,896 41	\$ cts. 1,863,420 63	\$ cts. ....
" freight cars.....	818,898 76	9,357 88	1,418 24	4,179 52	493,522 59	1,327,376 99	....
" passenger cars.....	466,008 15	16,525 85	1,103 32	2,557 52	255,352 66	721,517 50	....
Cost of repairs per locomotive.....	2,737.43	1,124.00	1,510.06	1,481.40	4,417.07	3,136.38	....
" " freight car.....	75.83	17.01	40.52	25.80	74.33	73.00	....
" " passenger car.....	882.59	280.10	367.77	255.75	2,477.40	1,038.20	....



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SUMMARY of the Passenger and Freight Traffic on the Canadian Government Railways and Steamers,  
Year ending March 31st, 1917.

	Intercolonial Railway.	Prince Edward Island Railway.	Ocean Steamships to Mainland.	New Brunswick and Prince Edward Island Railway.	International Railway of N.B.	National Transcontinental Railway.	Canadian Government Railways.	St. John and Quebec Railway.
Passenger Traffic.....	5,587,666.53	177,888.85	69,113.52	8,682.74	37,015.11	824,713.53	6,705,080.28	28,733.00
Freight Traffic.....	10,545,937.35	219,442.74	108,508.13	30,831.71	93,866.04	5,643,869.19	16,642,458.16	50,385.99
Mails, Express, etc.....	436,582.43	47,498.70	7,538.75	3,766.69	2,734.82	166,738.65	664,910.04	2,206.64
Total.....	16,570,186.31	444,830.29	185,215.40	43,284.14	133,615.97	6,635,316.37	24,012,448.48	81,325.63
Ocean Service.....	197,200.56	.....	.....	.....	.....	.....	382,415.98	.....
Total.....	16,767,386.89	444,830.29	185,215.40	43,284.14	133,615.97	6,635,316.37	24,209,649.06	81,325.63
Less Hire of Equipment.....	.....	.....	.....	4,347.39	16,937.30	718,765.38	740,650.07	10,566.01
Net Revenue.....	16,767,386.89	444,830.29	185,215.40	38,936.75	116,678.67	5,916,550.99	23,468,998.99	70,759.62
<i>Passenger Statement.</i>								
Local Traffic—								
Number of Passengers.....	4,189,134	383,386	48,712	14,434	32,916	645,513	5,305,095	43,143
Mileage.....	162,368,608	9,049,535	1,903,929	285,083	1,347,003	16,201,965	191,456,123	1,147,093
Through Traffic—								
Number of Passengers.....	357,320	18,230	.....	.....	592	82,913	459,075	781
Mileage.....	164,468,120	881,701	.....	.....	40,818	33,119,148	198,569,787	9,925
Total Number of Passengers.....	4,557,454	401,636	48,712	14,434	33,508	728,426	5,764,170	43,924
Total Mileage.....	326,836,728	9,931,236	1,903,929	285,083	1,387,821	49,321,113	389,665,910	1,157,018
<i>Freight Statement.</i>								
Local Traffic—								
Local Tons.....	4,297,773	106,688	75,314	67,533	88,571	969,524	5,665,403	33,510
Local Mileage.....	846,631,987	3,693,402	3,340,376	1,437,952	3,583,379	329,700,716	1,179,387,812	988,801
Through Traffic—								
Through Tons.....	2,472,451	43,413	.....	.....	36,473	2,191,736	4,744,073	19,986
Through Mileage.....	962,889,340	2,047,215	.....	.....	2,781,576	865,088,697	1,832,756,828	1,129,352
Total Tons.....	6,770,224	150,101	75,314	67,533	3,161,044	3,151,260	10,349,476	53,496
Total Mileage.....	1,809,471,327	5,740,617	3,340,376	1,437,952	6,364,955	1,185,789,413	3,012,144,640	2,118,153

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## REPORT OF C. B. BROWN, CHIEF ENGINEER.

## HALIFAX OCEAN TERMINALS.

The chief engineer reports that the works under contract have been steadily continued and excellent progress has been made both on the railway and the docks.

*Grading.*—Grading has been completed, and between Rockingham and Fairview, Terminal Junction Yards, the sea slopes have been riprapped to the extent of 9,000 feet.

Raising the main line to new elevation was commenced in May, and 85 pound rails were laid on part of the new inbound line in September. Tracks were laid in terminal yards to provide accommodation for about 1,000 additional cars.

On the main line, from Fairview to Young avenue the grading was completed, as well as all other work, and the line put into service.

Between Young avenue and Halifax harbour, all the excavation on the main line and the lower benches of the proposed freight yard was completed. Several tracks, with a capacity of about 400 cars, were laid.

*Breakwater, Point Pleasant.*—This breakwater has been satisfactorily completed.

*Drainage.*—Drainage at Prince Arthur street, also culvert No. 290, and at Point Pleasant yard was completed. The culverts in terminal yard were extended, and the drainage required at stations 115 to 125 partly completed. The Coburg and the Pleasant street sewers were completed, and the Atlantic street sewer is 10 per cent complete.

*Houses.*—Where necessary, houses were moved, placed on new foundations, and necessary repairs and alterations made.

*Bridges.*—There are twelve concrete and reinforced-concrete overgrade bridges and subways under construction, of which two concrete arches have been completed. The remainder will be completed as soon as the construction material is received.

*Dredging—Basin No. 1.*—Dredging for the 30-foot and 35-foot depths has been completed, and the 45-foot depth is dredged to 40 feet.

*Basin No. 2.*—The northern half is complete to the 45-foot level, and the southern half is 80 per cent complete, as well as the dredging east of the bulkhead passenger landing quay.

*Foundations.*—The dredging for foundations is complete, 201,403 cubic yards having been dredged out. During the year, 4,227 lineal feet of foundations were prepared. With the exception of about 400 lineal feet, all the foundations of the quay walls are prepared ready for the concrete pedestals.

*Quay Walls.*—Some 2,900 lineal feet were built to the top of the block work, and 1,654 lineal feet of the granite work of the quay was set to full height. About 100,000 cubic yards of borrowed filling has been placed in pier "A," and about 30,000 cubic yards behind the bulkhead passenger landing quay.

About 75 per cent of the granite for the face work of the quay walls is dressed.

*Concrete Work.*—The following concrete blocks have been made: Shells, 1,578; total volume concrete cubic yards, 46,246; total pounds steel used, 7,540,691; 199 concrete key-posts and 580 piles were made. The key posts contain 481 cubic yards of concrete and 237,800 pounds of reinforcing steel, while the piles contain 1,184 cubic yards of concrete and 591,000 pounds of steel.

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*Steamship Accommodation.*—Three steamship berths, one of 500, one of 600, and one of 700 feet, have been in use during the winter. Two of these are equipped with temporary sheds of 440 and 396 feet each in length by 90 feet in width.

*Plant.*—The plant in use has been increased by the addition of a 150-ton locomotive crane.

Notwithstanding difficulties in transportation, a very successful year's work was accomplished, the contract having been completed to the extent of 65 per cent.

ROADBED AND TRACK—Table of Mileages.

	Main Line.	Second Main Line.	Passing Sidings.	Other Sidings and Spurs.
	Miles.	Miles.	Miles.	Miles.
Intercolonial Ry.....	1,518.39	66.92	146.55	378.88
Prince Edward Island Ry.....	275.20		7.95	25.93
National Transcontinental Ry.....	1,811.28	9.29	130.20	203.72
Grand Trunk Pacific Ry. (Leased Lines).....	191.75		20.69	42.07
New Brunswick and Prince Edward Island Ry.....	36.05		.93	3.37
International Ry. of N.B.....	111.30		1.13	4.29
St. John and Quebec Ry.....	119.87		3.37	4.63
Total.....	4,063.84	76.21	310.82	662.89

MILEAGE of the various weights of rails.

Weight.	I. C. R.	Trans-continental.	P. E. I. Ry.	N. B. and P. E. I. Ry.	International	Vale Ry.	G. T. P. Ry.	St. J. and Q.
50 lb.....	4.40		3.6					
52 ".....			95.1					
56 ".....	19.48	3.50	40.1	15.69	14.1	3.35		
58 ".....			134.2					
60 ".....					52.8			
67 ".....	231.31	1.16	1.6		44.4	2.0		
70 ".....	19.75							
72 ".....							4.34	
75 ".....							6.00	
80 ".....	1,037.13	1,819.19	0.6	20.36			181.41	119.87
85 ".....	273.24							

*New and relaid rails laid.*—The main line of the I.C.R. was laid with 85-pound rails for a distance of 81½ miles and 8.96 miles were relaid with 80-pound relay rails; 3.59 miles were relaid on the main-line branch lines with 67-pound relay rails, and three-tenths of a mile with 80-pound relay rail.

*New Brunswick and Prince Edward Island Railway Line.*—11.12 miles were relaid with 80-pound relay rail, releasing 56-pound and 67-pound rail.

*The Vale Railway* was relaid with 67-pound rail for 2 miles.

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*Grand Trunk Pacific Railway.*—The main line was relaid with new 80-pound rail for 4.53 miles.

## TIE Renewals, Ballasting, New Sidings, Ditches, etc.

Railways.	Tie Renewals.	Ballast-ing.	Ditches.	Widen Banks.	Tile Drain.	Protec-tion to embank-ments and cuts	New Sidings		
							Passing and Business.	Private.	
	No.	Miles.	Miles.	Miles.	Ft.	Ft.	Ft.	Ft.	
Intercolonial. ....	497,019	178.39	72.76	66.99	2,600	2,500	100,756	27,054	
P. E. Island Ry.....	21,715	9.2	5.50			700		856	
Nat. Transcontinental Ry.....	558,842	61.5	39.34	0.73	11,876	Several points.	6,158	48,529	
N. B. & P. E. I. Ry.. ....	9,840	12.0							115
International of N.B....	35,619								2,731
Vale Ry.....	2,112								7,011
G. T. Pac. Ry. ....	51,384	10.0	0.75					2,240	795
	1,176,531	271.09	109.35	67.72	14,476	3,200	109,154	87,091	

The cleaning out of 20 miles of ditches, the building of 1,502 track feet of private sidings on the St. John and Quebec Railway are not included in the above statement.

## WATER SERVICE.

*Intercolonial Railway.*—All along this railway the water service has received the necessary attention to keep it in efficient order. The tanks and piping were repaired where necessary. A 40,000-gallon tank was installed at North Sydney and a 15-horse-power gasoline pump installed at the Newcastle reservoir. A water meter was installed at Lévis, and a 4-inch Warren steam pump installed at St. Pascal.

*National Transcontinental Railway.*—A steam pump and a 5,000-gallon tank was installed near Cap Rouge, Que. At Transcona 1,000 feet of 6-inch cast-iron pipe was laid to new elevator. The 50,000-gallon tank, at Glendyne, which was destroyed by fire, was replaced by taking down the tank in the N.T.R. yard at Moneton and re-erecting it at Glendyne. Other necessary light repairs and alterations have been carried out.

*Grand Trunk Pacific Railway.*—A 4-inch cast-iron water pipe, 1,300 feet long, was laid to the coach and repair yard at Mission.

## BUILDINGS.

*Intercolonial Railway.*—The necessary additions and alterations, repairs and painting to buildings, stations, and freight sheds have been carried out.

At Rivière-du-Loup, general repairs and painting to power-house, round-house, machine shop, and stores building were carried out.

*Prince Edward Island Railway.*—Coal shed floors renewed at Charlottetown, and the part of the stores building which had been destroyed by fire rebuilt. Other minor repairs were also carried out.

*National Transcontinental Railway.*—Four section tool-houses were erected, and seven shelter stations. The station buildings destroyed by fire at Casey and St. Anselme were rebuilt, and a portable station built at Smooth Rock Falls, Ont.

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A contract has been given for five double cottages at Cochrane and five at Grant. Those at Cochrane are nearly finished.

A temporary wooden grain elevator 46 by 32 feet, with the necessary cleaning machinery, has been established at Transcona.

The machinery of this elevator will be used in a 1,000,000-bushel elevator now building, and soon to be ready.

Standard concrete rail-racks have been built at one mile intervals in districts 2 and 3.

*Grand Trunk Pacific Railway.*—The necessary maintenance repairs were made to all buildings requiring them.

## TERMINAL IMPROVEMENTS.

*Intercolonial Railway.*—The capacity of the Ste. Rosalie yard was increased by 12,900 lineal feet of track (230 cars), and a new coaling crane and air compressor installed. Alterations and improvements were also carried out at Rivière-du-Loup, and Chaudière Junction, where 27,900 lineal feet of siding were installed (580 cars). General repairs and improvements were also carried out at this point.

Moncton: Yard capacity increased by 15,840 feet (316 cars), and storage tracks extended 1,000 feet. A 528-ton ice-house was erected near the new shops. Several alterations and improvements to electric light and telephone circuits were also carried out.

St. John: Two berths adjoining long wharf were dredged to give 30 feet of water at low tide. A contract was entered into for a 500,000-bushel reinforced concrete elevator, and work on foundation started. The heating of the station was improved, and the electric lighting of the rail yard increased. A temporary flour shed built.

Slight alterations and improvements have also been carried out at Pointe du Chêne, Point Tupper, Mulgrave, and Stellarton.

Truro: 14,500 feet of sidings (282 cars) were installed, and general repairs to coaling and car-heating plant carried out.

Halifax: old pier No. 2, damaged by fire in 1916, was rebuilt on the north and the south sides, giving accommodation for two tracks. The power-house, engine-house, heating, and car-cleaning plants, freight and cattle sheds, etc., elevator grain chutes, and 6 piers received general repairs.

Dartmouth, S.D.: Railway owned telephones were installed at three stations.

*Prince Edward Island Railway.*—Summerside: Wharves damaged by storm are being rebuilt. Georgetown wharf, damaged by ice, has been rebuilt.

*National Transcontinental Railway.*—Several additions and improvements are being constantly carried out on this line, of which the briefest report is herewith made.

Leonard shops: Two boiler feed pumps installed, and a feed water heater.

Bridge: Considerable machinery from the Transcona shops were erected at this point. It consists of three lathes, one crane, one pipe machine, one shaper, and other machinery. Six hydrant houses were installed, and additional hose furnished to extent of 1,250 feet.

Cochrane: Car-repair facilities have been improved. Siding for the auxiliary crane constructed. Cross-over and coal tracks built. Fire protection was also increased.

At Hearst, Grant, Armstrong Fitzpatrick, Parent, Doucet, and O'Brien: The fire protection was increased by the installation of several hydrants and several thousand feet of hose.

Graham: Wooden foundations under five machines in the machine shop were replaced by concrete foundations.

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Redditt: A cross-over line was built to reduce time in changing eastbound passenger engines. A coaling track was constructed on the south side of the coal chute. A gasoline-driven electric generator was also installed.

Transcona: The work on the 1,000,000-bushel elevator is 25 per cent complete; 2,100 feet of railway track and a 6-inch water supply pipe have been built to serve this elevator.

The electric light system, the compressed air system, and the steam line to the passenger-coach yard have all been repaired and improved.

Moncton (N.T.R.): A 50-k.w. engine generator set and switchboard has been installed after being removed from Edmundston, where arrangements were made for the purchase of current from an outside source.

*New Brunswick and Prince Edward Island Railway.*—Cape Tormentine: Terminal facilities to handle Prince Edward Island traffic when car ferry is put into operation were commenced.

*Grand Trunk Pacific.*—At Mission terminals a coach storage track, 1,000 feet long, with water service for watering and cleaning cars, has been built. Five car storage sidings (586 feet) were built.

## SURVEYS.

Surveys and track profiles have been completed on the I.C.R. Dartmouth S.D. to the extent of 67 miles, and also 3.48 at other points: Forty-two stations, grounds, and yard plans have also been surveyed; 398 bridges have been surveyed.

*Prince Edward Island Railway.*—One hundred and eighty-one miles of road have been resurveyed, 8 miles of track profile completed, and two station-grounds plans made.

*New Brunswick and Prince Edward Island Railway.*—Re-surveys have been made of twelve station-grounds and three yard plans made.

## TRACK CENTERING.

The track has been recentred and curves spiralled for 134 miles on the Intercolonial Railway and 18 miles on the Prince Edward Island Railway.

## FENCING ERECTED.

*Intercolonial Railway.*—Forty-nine miles new wire fence.

*Prince Edward Island Railway.*—Fifteen miles new wire fence.

*National Transcontinental Railway.*—5.68 miles new wire fence and 9.49 miles snow fencing.

*Grand Trunk Pacific Railway.*—Forty-six miles new wire fence.

## DAMAGES.

No damages of very considerable extent took place either by flood or fire. The new washouts which occurred were soon repaired to cause the least possible delay to traffic.

## BRIDGES AND CULVERTS.

The bridges and culverts of the railways are being systematically repaired, strengthened, or renewed where necessary, steel and concrete being mostly used for renewals; 109 culverts were replaced on the I.C.R., 12,313 feet of culvert piping having been made by the railway forces. At mile 60, Winnipeg S.D., a 792-foot frame trestle was replaced by fill and 36-inch pipe culvert.

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## SUNDRIES.

A new turntable was installed at Boiestown, I.C.R. Ash pits at Ste. Rosalie and Chaudière Junction and Island yard were extended. A new track scale installed at Denmark, and others at Harvey Junction, La Tuque and St. Leonards, National Transcontinental Railway. The electrical lighting has been added to or improved where necessary.

## SIGNALS AND INTERLOCKING.

A mechanical interlocking plant was erected to protect the swing span of Grand Narrows bridge, and another at Ashton Junction, I.C.R. Fifty-three standard two-direction train-order signals were installed, and all other signals and crossings received the necessary care to be kept in good order.

## CAR FERRIES.

These steamers have received only slight repairs or alterations, such as repairs to heating or sanitation systems mostly. The bridge of steamer *Scotia No. 1* was moved forward to give better control of the vessel. Repairs to machinery were made to steamer *Scotia No. 2*.

## REPORT OF G. R. JOUGHINS, SUPERINTENDENT OF ROLLING STOCK.

## Equipment Renewals:—

62 locomotives, 55 of which were new, and  
7 second-hand.

## N.T.R. Consolidated Fund:—

51 locomotives, 30 of which were new, and  
21 second-hand.

## Passenger Cars—Equipment Renewals:—

18 sleeping cars, 8 new and 10 second-hand;

2 parlor, second-hand;  
2 Dining, second-hand;  
3 colonist, second-hand;  
2 first-class coaches, second-hand;  
4 postal; 2 new, 2 second-hand;  
1 baggage, second-hand;

10 hospital cars, second-hand; making a  
total of 42.

## N.T.R. Consolidated Fund:—

6 sleeping,  
6 lining,  
7 colonist,  
3 first-class coaches,  
4 second-class,  
5 baggage; all second-hand, making a  
total of 31.

## Freight Cars—Equipment renewals:—

108 Hart convertible cars; second-hand;  
1 Gas tank and car, new.

## N.T.R. Consolidated Fund:—

209 new stock cars;  
537 new steel-frame-50-ton box cars;  
239 Hart convertible cars, second-hand;  
131 Platform, second-hand;  
58 box, second-hand;  
3 gondolas, second-hand;  
2 steel coal cars, second-hand.

## Work Equipment—Equipment Renewals:—

10 all-steel snow ploughs, new;  
1 rail unloader, new;  
2 ballast side ploughs, second-hand;  
2 steam shovels, second-hand;  
1 Lidgerwood unloader, second-hand;  
1 center ballast plough, second-hand.

## Consolidated Revenue Fund:—

10 all-steel snow ploughs, new;  
2 wrecking cranes, new;  
2 rail unloaders, new;  
3 side ploughs, second-hand;  
1 center ballast plough, second-hand.  
4 ballast ploughs, second-hand;  
3 Rodger spreaders, second-hand;  
3 Jordan spreaders, second-hand;  
7 steam shovels, second-hand;  
1 track layer, second-hand;  
1 rotary plough, second-hand;  
1 wrecking crane, second-hand;  
1 steam locomotive crane, second-hand.

General Statement of work done in the Canadian Government Railways' shops during year ending March 31, 1917:—

## Locomotive Department:—

325 Engines received repairs.  
28 Engines were converted to superheat.  
Steam shovels, ditchers, unloaders, pile-drivers, cranes and other machinery received the necessary repairs.

## Car Department:—

50 new flat cars were built at Moncton.  
10 wrecking outfits were built at Moncton.

2 rail unloaders were built at Moncton.  
255 Other cars were either rebuilt or converted to other styles. Several freight and passenger cars received the necessary repairs. Other cars of all descriptions were also brought into proper condition for traffic.  
744 Freight cars were equipped with safety appliances.

A force of about two thousand men is employed to keep the rolling stock into proper condition for traffic.

CANADIAN GOVERNMENT RAILWAYS.

EASTERN AND WESTERN LINES—Statement showing the number of Locomotives and the various classes of other Rolling Stock on the Line, March 31, 1916, and March 31, 1917.

	Passenger Cars.											Freight Cars.																	
	Locomotives.	Sleeping cars.	Parlour cars.	Painting cars.	Colomist cars.	First class passenger cars.	Second class passenger cars.	Postal cars.	Baggage cars.	Hospital cars.	Vision test cars.	Box baggage cars.	Air brake instruction cars.	Steam motor cars.	Total passenger cars.	Box Cars.	Refrigerator cars.	Platform cars.	Pulp wood cars.	Oil tank cars.	Hopper cars.	Gondola cars.	20-ton coal cars.	Hart (his steel dump cars.	Stock cars.	Hart convertible dump cars.	Pit cars.	Vans.	Total freight cars.
On hand, serviceable and repairing, Mar. 31, 1916.	433	66	10	21	65	169	96	36	75	..	..	26	1	1	566	991	190	27	48	51	491	4	169	526	169	300	4	171	14783
To be replaced, March 31, 1916	1	..	..	..	..	..	..	..	..	..	..	..	..	..	186	8	497	4	1	106	1	297	17	..	..	..	13	10880	
Total equipment, March 31, 1916	434	66	10	21	65	169	96	36	75	..	..	26	1	1	566	10099	198	3239	52	53	610	5	376	526	185	300	4	184	15863
Purchased and built during the year on New Equipment Renewals Account	55	8	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purchased during the year on Consolidated New-rod Revenue Account	30	..	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rebuilt on Consolidated Revenue Account from box to vans 65, to stores car 1	21	6	6	7	3	3	4	5	..	..	..	..	..	..	58	..	131	..	..	..	..	..	..	..	..	..	..	..	..
Rebuilt on Equipment Renewals Account from box to vans 25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Converted in shops: box to boarding 11, to slanty 10, to pulp wood 175, to road repairs 7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total 2083	..	..	..	..	..	..	..	..	..	..	..	..	..	..	203	..	..	..	..	..	..	..	..	..	..	..	..	..	..
From flat to ender cars 49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Converted in shops, passenger to vision test 1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sleeper to baggage 2, parlour to baggage 2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*Total equipment, March 31, 1917	547	88	10	29	75	173	100	40	85	10	1	26	1	1	639	10400	198	3371	227	56	640	8	376	528	385	647	4	281	17121



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To be replaced March 31, 1916, as above	1								81	497	4	1	146	1	297	17		13	1086
Condemned year ending March 31, 1917									1	69	1		42	4	1	2		8	400
Total condemned and destroyed to March 31, 1917	1								186	566	5		188	5	208	19		21	1486
Purchased on Renewal Account to replace as above	1							5	404	5	2		108					21	108
Re-built and converted as shown above										175								21	196
Total to be replaced March 31, 1917									464	391	5	1	80	5	208	19			1182
Add serviceable and repairing	547	88	10	29	75	173	100	40	936	189	2980	222	55	560	3	168	528	366	15389
Total equipment, March 31, 1917	547	58	10	29	75	173	100	40	10400	198	3371	227	56	640	8	376	528	385	17121

\* Figures in italics show the number of cars converted to other styles.





PRINCE EDWARD ISLAND RAILWAY.

STATEMENT showing the number of Locomotives and the various classes of other Rolling Stock on the line, on March 31, 1916 and March 31, 1917.

	Passenger Cars.						Freight Cars.						Work Cars.						
	1st class passenger cars.	2nd class passenger cars.	Combined 2nd class and baggage cars.	Postal and smoking cars.	Combined postal and baggage cars.	Baggage cars.	Total passenger cars.	Box cars.	Refrigerator cars.	Stock cars.	Oil tank cars.	Hart convertible.	Coal cars.	Platform cars.	Vans.	Total freight cars.	Snow plows.	Flangers.	Steam shovels.
On hand, serviceable and repairing March 31, 1916	22	9	5	1	3	6	45	308	5	1	15	11	150	3	519	9	2	1	21
To be replaced at March 31, 1916	9	5	4	1	1	12	11	5	57	1	1	1	1	1	11	2	1	1	21
Total equipment at March 31, 1916	31	13	9	2	4	18	56	313	52	2	16	12	151	4	630	11	3	2	42
To be replaced at March 31, 1916 as above	9	5	4	1	1	12	11	5	57	1	1	1	1	1	11	2	1	1	21
Condemned during the year 1917	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total condemned at March 31, 1917	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rebuilt during the year	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
To be replaced at March 31, 1917	9	5	4	1	1	12	14	5	25	1	1	1	1	4	11	2	1	1	22
Add serviceable and repairing	22	9	5	1	3	6	45	308	5	1	15	11	150	3	519	9	2	1	21
Total equipment at March 31, 1917	31	13	9	2	4	18	59	313	57	2	16	12	151	4	630	11	3	2	42

SESSIONAL PAPER No. 20

REPORT OF J. E. LONG, SAFETY ENGINEER.

Meetings have been held monthly at different points on the railway, which has resulted in keeping up the interest in safety work. The correction of unsafe conditions and practices is being attended to promptly.

The grave danger of careless habits in the discharge of duties has been demonstrated by moving pictures at all important points, to over 10,000 employees, with most excellent results.

During the year the reports show that there were only thirteen employees killed and 629 injured. No passengers were reported killed, and only twenty-one reported injured.

A weekly bulletin service offering many suggestions for increased safety measures is being maintained.

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CANADIAN GOVERNMENT EMPLOYEES' RELIEF AND INSURANCE  
ASSOCIATION.

STATEMENT of Receipts and Expenditure during the year ended March 31, 1917.

	\$	cts.
Credit balance on June 30, 1916.....	56,890	59
The total receipts for the year from all sources were.....	135,671	05
	192,561	64
The total expenditures were.....	129,914	22
Leaving a credit balance of.....	62,647	42
Less estimated outstanding liabilities.....	10,250	00
Net surplus, June 30, 1917.....	52,397	42

*Sickness and Accident Fund.*

The expenditures in this fund last year were \$51,924.42, and this year they are shown to be \$53,556.97, an increase of \$1,632.55. A credit balance of \$39,085.82 is shown in this fund on June 30, 1917.

*Temporary Employees' Accident Fund.*

The expenditures in this fund during the year are shown to have been ..... \$ 18,293 50

*Death and Total Disability Fund.*

This statement shows that one hundred and twenty-four death and total disability claims were assessed and paid during the year.

Eighty-seven death claims due to natural causes, aggregating.....	\$	36,750	00
Fourteen death claims due to accidental injuries, aggregating.....		4,250	00
Seventeen death claims due to war, aggregating.....		6,500	00
	\$	47,500	00
Six total disability claims, aggregating.....		4,500	00
	\$	52,000	00
Amount paid last year from this fund was.....		53,000	06

Certified Correct,

C. B. TRITES,  
*Secretary.*

W. P. SEARS,  
*Auditor.*

STATEMENT showing the amount credited to the Canadian Government Railways Employees' Relief and Insurance Association, by the Canadian Government Railways, during the year ended June 30, 1917.

Amount of premiums collected from the Canadian Government Railways' pay lists.....	\$	112,418	23
Premiums collected from railways' vouchers.....		738	59
Annual contribution from the Canadian Government Railways.....		13,333	32
Canadian Government Railways' cash premiums.....		10	98
Total.....	\$	126,501	12

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INTERCOLONIAL AND PRINCE EDWARD ISLAND RAILWAYS  
EMPLOYEES' PROVIDENT FUND.

STATEMENT of Receipts and Expenditure during the year ended March 31, 1917.

	\$ cts.	\$ cts.
Balance at the credit of the Fund on March 31, 1916.....		348,502 74
The contributions made by the Employees during the year, being one and one-half per cent of their monthly salary and wages, were.....	163,141 28	
The contributions made by the Can. Government Railways were.....	100,000 00	
		263,141 28
Amounts received for refunds, etc.....		973 83
Interest accrued (at three per cent).....		9,555 18
		622,173 03
<p>The amount contributed by the Employees is shown to exceed by \$63,141.28 the amount contributed by the Railways.</p> <p>By reference to Section No. 4 of the Provident Fund Act, it will be noted that the maximum sum the Railways are authorized to contribute to the Fund in any one year must not exceed \$100,000.</p> <p style="text-align: center;">The Expenditures were:</p>		
For Retiring Allowances.....	257,888 52	
For contributions refunded in cases of deceased employees.....	5,620 69	
"    "    "    which were deducted in error.....	3,276 82	
"    "    "    to discharged employees, etc.....	744 91	
Medical examinations for probationers entering the service, etc.....	2,744 00	
"    "    "    employees retiring from service.....	103 50	
For Election Expenses.....	888 69	
"    Salaries and Travelling Expenses, Secretary's Office, and proportion of salary Chief Medical Officer.....	6,293 63	
"    Board Members—Time lost and Travelling Expenses.....	8 16	
"    Stationery, Printing, Postage, etc., etc.....	1,050 39	
		278,619 31
Balance to the credit of the Fund on March 31, 1917.....		343,553 72
<p>It will be noted by the above Statement of Receipts and Expenditures that the amount of the contributions received from the Railways and from the Employees during the year, were.....</p>		
And the Expenditures were.....	263,141 28	
	278,619 31	
Showing that during the year the Expenditures exceeded the Receipts.....	15,478 03	
The gross surplus, including interest, to the credit of the Fund on March 31, 1917, was.....		343,553 72

C. A. HAYES, *Chairman.*C. B. TRITES, *Secretary.*

REPORT OF THE COMPTROLLER AND TREASURER.

CAPITAL ACCOUNT.—(CANADIAN GOVERNMENT RAILWAYS.

1916.	Dr.	\$	cts.	1916.	Cr.	\$	cts.
Mar. 31	<i>Intercolonial Railway</i>			Mar. 31	By Dominion of Canada, I.C.R.	115,766,560	24
	To Cost of Intercolonial Railway to March 31, 1916.				Dominion of Canada, P.E.I. Ry.	10,841,372	44
	Anticreepers and tie plates.	17,777	71		Ry.	224,211	28
	Branch line—Sunny Brae to Mulgrave.	867	90		Dominion of Canada, Intl. Ry.	3,337	47
	Bridges—to strengthen.	235,222	30				
	Dartmouth to Deans branch line.	112,253	87				
	Halifax—docks and wharves.	46,000	00				
	Halifax—New terminal facilities.	3,591,563	66				
	Installation of block system in connection with operation.	3,734	03				
	Lewis—Improvements at.	3,368	82				
	Moncton—Locomotive and car shops with equipment.	25,519	27				
	Moncton—Elimination of level crossings.	9,398	72				
	Original construction.	28,214	52				
	Permanent farm crossings and culverts.	2,623	25				
	Power plants—Increased facilities.	1,000	00				
	Safety appliances for equipment.	23,315	52				
	St. John—Spar line to Courtenay Bay.	52,146	14				
	Surveys and inspections.	18,926	22				
	Increased accommodation and facilities along the line.	208,383	19				
	Pay claim of M. E. Keefe on Halifax engine house.	11,172	52				
	Water supply—to increase.	2,363	59				
	Grain elevator—St. John.	59,273	46				
	Purchase of steamer—"Northumberland".	54,000	00				
		4,507,046	69				
	Cr.						
	By Mulgrave—to provide car ferry.					1,430,472	56
	previous year's expenditure.	\$16,294	13				
	Halifax—Increased accommodation.	280	00				
		16,574	13				
	Dr.						
	<i>Prince Edward Island Railway.</i>						
	To Cost of Prince Edward Island Railway to March 31, 1916.					10,841,372	44



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To Bridges—to strengthen. . . . .	\$ 3,046 70			
Surveys and inspections. . . . .	1,000 00			
Increased accommodation and facilities along the line. . . . .	1,028 15			
Provide car ferry and necessary connections. . . . .	604,676 86	609,751 71	11,451,124 15	
<i>New Brunswick and Prince Edward Island Railway.</i>				
To Cost of New Brunswick and Prince Edward Island to March 31, 1916. . . . .	224,211 28			
Bringing line up to Intercolonial branch line standard. . . . .	46,579 38		270,790 66	
<i>International Railway.</i>				
To Cost of International Railway, March 31, 1916. . . . .	3,437 47			
Bringing line up to Intercolonial branch line standard. . . . .	3,724 98		7,662 45	
<i>National Transcontinental Railway.</i>				
To Grain elevator—Winnipeg terminals. . . . .	279,949 83		279,949 83	
Consolidated revenue during the year. . . . .			3,514,308 04	
			135,780,867 93	
		1917.		8,944,786 50
		Mar. 31		By Dominion of Canada . . . . .
				135,780,867 93

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## CANADIAN GOVERNMENT RAILWAYS.

## REVENUE ACCOUNT.

Working Expenses	\$	cts.	Earnings.	\$	cts.
Maintenance of way and structures..	4,727,351	83	Freight.....	16,839,658	74
Maintenance of equipment.....	4,426,200	05	Passenger.....	6,705,080	28
Traffic expenses.....	418,425	03	Mail and express.....	1,066,502	98
Transportation—Rail line.....	13,227,794	53		24,611,242	00
Transportation—Water line.....	370,229	23	Less miscellaneous.....	1,142,243	01
Miscellaneous operations.....	316,661	94		23,468,998	99
General expenses.....	443,735	45	Balance.....	1,158,272	49
Rental of leased lines.....	696,873	42		24,627,271	48
	24,627,261	48			

## CANADIAN GOVERNMENT RAILWAYS.

## GENERAL BALANCE.

DR.	\$	cts.	CR.	\$	cts.
To Cash.....		02	By Dominion of Canada.....	6,311,368	39
General stores.....	4,818,102	74	Equipment Renewal Account...	1,661,208	89
Cash in transit.....	49,343	29	Intercolonial and Prince Edward Island Railway Employees Provident Fund.....	343,553	72
Loss and damage freight suspense.	31,071	05	Rail Renewal Account.....	342,083	04
Unclaimed freight.....	3,522	64	Fire Renewal Account.....	297,442	59
Auditor's suspense.....	222,594	30	Unclaimed Wages Account...	2,048	30
Receiver General, Provident Fund Account.....	1,899,989	53	Employees Medical Fund Ac- count.....	5,501	55
Receiver General, Unclaimed Wages Account.....	4,514	36	Expenditure for Road and Equip- ment Suspense—Stores.....	18,672	95
Receiver General, Medical Fund Account.....	35,176	36	Apprentice Fund.....	2,509	76
Receiver General, Apprentice Fund Account.....	2,509	76	Suspense Account—Rental of Leased Roads.....	550,000	00
Commissary Stock.....	32,990	04	Freight in transit.....	71,776	62
Station Agents.....	495,514	05	Individuals and Companies Led- ger.....	109,927	93
Rail Loan Account.....	89,342	24	Individuals and Companies Led- ger—Suspense.....	29,499	64
Commissary Stock—Moncton Res- taurant.....	405	46	Traffic Ledger.....	31,253	32
Commissary Stock—Newcastle Restaurant.....	317	59	Car Service Ledger.....	10,255	20
Railway Equipment Service.....	7,009	38	Rents Ledger.....	166	74
Expenditure for Road and Equip- ment Suspense—Grand Trunk Pacific Railway.....	18,354	34			
Halifax Ocean Terminals.....	375,589	78			
Individuals and Companies Led- ger.....	1,352,816	63			
Individuals and Companies Led- ger—Suspense.....	54,396	61			
Traffic Ledger.....	212,754	41			
Car Service Ledger.....	19,517	41			
Rents Ledger.....	6,743	19			
Advances.....	54,693	46			
	9,787,268	64		9,787,268	64



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## EQUIPMENT RENEWAL ACCOUNT.

	DR.	CR.
	\$ cts.	\$ cts.
There was a credit balance at April 1, 1916 to the credit of Equipment Renewal Account of.....		3,064,700 62
During the year ended March 31, 1917, there was credited to the Equipment Renewal Account on account of charges to Improvements and Betterments.....		1,070,334 64
Cash received from sale of old Rolling Stock.....		40,266 01
		4,175,301 27
There has been charged during the year against the above account for Rolling Stock purchased:—		
10 Pacific Type Locomotives.....	247,720 05	
10 Santa Fe Locomotives.....	520,371 56	
20 Mikado Freight Locomotives.....	776,545 00	
1 Second-Hand Locomotive.....	19,600 00	
1 Locomotive, balance of contract of six from Canadian Allis-Chalmers, Ltd.....	21,575 00	
Balance on 15 Freight Locomotives, contract of 1915-16.....	187,058 41	
Applying Superheaters to Locomotives.....	97,497 10	
Freight charges on Locomotives purchased in 1915-16.....	715 80	
Repairs to Locomotives in transit purchased in 1915-16.....	341 50	
Pneumatic tools for Moncton Shops.....	840 00	
7 Steel Sleeping Cars.....	\$194,910 88	
2 Postal Cars.....	8,964 61	
	203,875 49	
12 Second Hand Sleeping Cars.....	18,000 00	
Repairs and alterations.....	18,240 14	
	36,240 14	
8 Second Hand Sleeping Cars.....	12,000 00	
Alterations and changing 6 to Hospital Cars.....	15,150 93	
	27,150 93	
2 Second Hand Dining Cars.....	14,000 00	
Repairs and alterations.....	1,354 72	
	15,354 72	
2 Second Hand Parlor Cars.....	3,000 00	
Alterations.....	262 21	
	3,262 21	
1 Second Hand Baggage and Mail Car.....	2,000 00	
1 " " " Passenger Car.....	2,000 00	
1 " " " Mail Car.....	2,000 00	
Changing to Dining Cars.....	1,475 68	
	7,475 68	
2 Second Hand Day Coaches.....	2,000 00	
Repairs and alterations.....	1,104 46	
	3,104 46	
2 Second Hand Tourist Cars.....	3,713 46	
1 " " " ".....	1,745 95	
Alterations to 10 Second Hand Tourist and 8 Second Hand Sleeping Cars, purchased in 1915-16.....	13,500 00	
Linen for 10 Second Hand Sleeping Cars.....	9,139 12	
Cost of changing 4 Sleeping Cars to Hospital Cars.....	3,500 06	
Bedding and Equipment for Sleeping Cars changed to Hospital Cars..	1,427 41	
Changing Postal Cars from oil to gas lighting.....	5,430 00	
Changing 3 Commissary Cars to Commissary and Dining Cars combined Equipment for " " ".....	1,228 70	
Freight charges paid on Second Hand Rolling Stock.....	236 00	
Expressage and Expenses Account Cars.....	1,163 26	
50 Platform Cars built in Moncton Shops.....	6 50	
Changing 25 Box Cars to Vans.....	12,409 82	
Equipping 490 Box Cars with draft arms and steel buffers.....	23,322 83	
Changing Centre Dump to Side Dump Cars.....	45,522 62	
Fitting up an old Box Car for the Electrical Department.....	800 87	
10 Steel Snow Plows.....	94 60	
1 Rail Loading Machine.....	67,873 59	
1 Gas Tank and Car.....	448 54	
	5,100 00	

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EQUIPMENT RENEWAL ACCOUNT—*Con.*

	Dr.	Cr.
	\$ cts.	\$ cts.
Rolling Stock purchased from the O'Brien Companies for Transcontinental Railway in 1915-16 and transferred to Intercolonial Railway:		
108 Hart Cars. ....	\$ 83,700 00	
1 60-ton Lidgerwood Unloader.....	4,300 00	
2 Ballast Side Plows .....	1,200 00	
1 Ballast Centre Plow .....	600 00	
6 Locomotives .....	45,000 00	
1 70-ton Bucyrus Shovel.....	8,000 00	
1 60-ton Marion Shovel.....	6,500 00	
	149,300 00	
Leaving a credit balance to the credit of Equipment Renewal Account on March 31, 1917.....		2,514,092 38
		1,661,208 89

## NEW BRUNSWICK AND PRINCE EDWARD RAILWAY.

## RENTAL ACCOUNT.

Dr.	\$ cts.	Cr.	\$ cts.
Mar. 31, 1917.. To rental of New Brunswick and Prince Edward Island Railway from August 1, 1915, to October 22, 1915—82 days—4% on \$170,000 .....	1,527 67	Mar. 31, 1917. By Dominion of Canada	5,673 42
From October 22, 1915, to March 3, 1916—4% on \$120,000 .....	1,749 04		
From March 3, 1916, to November 1, 1916—4% on \$90,000 .....	2,396 71		
	5,673 42		5,673 42

## INTERNATIONAL RAILWAY OF NEW BRUNSWICK.

## RENTAL ACCOUNT.

1917.	Dr.	\$ cts.	1917.	Cr.	\$ cts.
Mar. 31	To rental of International Railway of New Brunswick from February 1, 1916, to January 31, 1917. ....	90,000 00	Mar. 31	By Dominion of Canada. ....	90,000 00
		90,000 00			90,000 00

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## TRANSCONTINENTAL RAILWAY.

## RENTAL ACCOUNT.

		\$	cts.
Amount paid to Grand Trunk Pacific Railway for rental of Lake Superior branch from April 1, 1916, to March 31, 1917, inclusive, at \$50,000.00 per month .....		600,000	00

## VALE RAILWAY.

## RENTAL ACCOUNT.

1917.	DR.	\$	cts.	1917.	CR.	\$	cts.
March 31.	Amount paid Acadia Coal Company for one year's rental of the Vale Railway, from May 1, 1915, to April 30, 1916 .....	1,200	00	March 31.	By Dominion of Canada .....	1,200	00
		1,200	00			1,200	00

## ST. JOHN AND QUEBEC RAILWAY.—Revenue Account, Year ended March 31, 1917.

Expenditure.	\$	cts.	Earnings.	\$	cts.
Maintenance of ways and structures .....	31,237	01	Passenger .....	28,733	00
Maintenance of equipment .....	3,813	32	Freight .....	50,385	99
Traffic .....	3,007	57	Mail and express .....	1,614	27
Transportation—Rail line .....	56,534	45		80,733	26
General .....	3,708	07	LESS miscellaneous .....	9,973	64
			Balance .....	70,759	62
				27,540	80
	98,300	42		98,300	42

## ST JOHN AND QUEBEC RAILWAY—General Balance, year ended March 31, 1917.

Dr.	\$	cts.	Cr.	\$	cts.
To General Stores .....	104	33	Dominion of Canada .....	7,414	09
Cash in transit .....	65	23	Rails suspense .....	358	30
Freight in transit .....	70	53	Traffic ledger:		
Auditor's suspense .....	25	37	Canadian Government Railways .....	6	11
Province of New Brunswick .....	2,977	51	I. & C. ledger .....	626	02
Station agents .....	2,334	51			
Traffic ledger:					
Dept. of Militia and Defence .....	10	26			
I. & C. ledger suspense .....	145	60			
I. & C. ledger .....	2,671	18			
	8,404	52		8,404	52

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## ST. JOHN AND QUEBEC RAILWAY—Statement of Cash received, year ended March 31, 1917.

Dr.	\$ cts.	Cr.	\$ cts.
To Balance on hand April 1, 1916.....	Nil.	By Amounts deposited to the credit of the Honourable Receiver General of Canada during the year ended March 31, 1917.....	
Station agents.....	\$ 59,538 83		
Traffic ledger.....	21,067 95		
Individuals and Companies ledger.....	4,436 96		
Rents ledger.....	175 00		85,218 74
	85,218 74		
	85,218 74		85,218 74

## ST. JOHN AND QUEBEC RAILWAY—General Stores Account.

Dr.	\$ cts.	Cr.	\$ cts.
To Balance March 31, 1916.....	68 26	By Issues during year ended March 31, 1917.....	
To Purchases during the year ended March 31, 1917.....	1,321 89		1,285 82
	1,390 15	Balance March 31, 1917.....	104 33
			1,390 15

## APPENDIX III

## REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT.

OTTAWA, April 1, 1917.

SIR,—I have the honour to submit my annual report for the fiscal year ending March 31, 1917.

Attached hereto will be found the annual report of the Superintending Engineers of the several canals, the Superintendent of the Trent Canal, the acting Engineer in Charge of the Welland Ship Canal, the Engineer in Charge of the car ferry terminals at Cape Tormentine, the Chief Engineer of the Hudson Bay Railway, the Engineer in Charge of the Hudson Bay Railway terminus at Port Nelson.<sup>1</sup>

## CANALS.

The through water route between Montreal, at the head of ocean navigation, and Fort William and Port Arthur, on the west shore of Lake Superior, comprises 74 miles of canal, with forty-eight locks, and 1,155 miles of river and lake waters, or a total 1,229 miles. The minimum depth of water on this route is 14 feet. From Montreal to Duluth, on the southwest end of Lake Superior, the total distance is 1,354 miles, and to Chicago 1,286 miles. A summary of this route will be found in part VII, together with details of the several works thereon.<sup>1</sup> Connection is made with the Canadian Pacific Railway from points west and south at Fort William and Port Arthur (6 miles apart). From Fort William, connection with the main transcontinental line of the Canadian Government Railways is made by the branch line originally constructed by the Grand Trunk Pacific Railway, but now leased to and operated by the Canadian Government Railways.

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

Of the minor systems, the Murray, Trent, Rideau and Ottawa River Canals may be considered geographically as branches of the through east and west route. In operation, however, these canals serve a distinct traffic of more local nature. Isolated from the systems just mentioned, the navigation of the Richelieu River, from its junction with the St. Lawrence at Sorel to Lake Champlain, is effected by means of the St. Ours lock and the Chambly canal; while in the extreme east the St. Peter's canal provides communication between the Bras d'Or lakes of Cape Breton Island and the Atlantic Ocean.

Detailed information respecting the several canals is contained in an appendix.

<sup>1</sup> These reports are not printed.

<sup>2</sup> Not printed.



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With the exception of the Trent canal, where the construction of an extension of the present system to an outlet on Lake Ontario is still in progress, and the Welland Ship Canal, fully described further on in this report, the work executed during the past year has been almost wholly of the nature of improvements and repairs of existing works.

## LACHINE CANAL.

Traffic was carried on uninterruptedly during the entire season except during ten days of July, when repairs were being made at weir No. 2. The foundation of this weir had become undermined and a sudden collapse ensued. It was found necessary to reconstruct the weir and make other somewhat heavy repairs, all of which work was satisfactorily completed by the close of the navigation season. In addition to the foregoing, the tail-race at the Mill Street power station was rebuilt in concrete and its discharge capacity doubled, the head-race was widened for half its length, and the site of the dry dock was lowered 2 feet so that vessels of 12 feet draught can now be admitted.

## SOULANGES CANAL.

Small repairs and improvements only have been made on this canal during the past season. Among these might be mentioned the substitution of incandescent for arc lamps on the guard pier at Coteau Landing and the installation of cast-iron mooring posts set in concrete at various points between Rouge River bridge and the guard lock.

## ST. ANNE'S LOCK

The repairs made during the year at this lock were of minor importance. Navigation was maintained without interruption.

## ST. OURS' LOCK.

With the exception of the rebuilding of a pair of lock gates, the repairs made at this lock during the year do not merit special mention.

## CARILLON AND GRENVILLE CANALS.

A pair of gates for lock 6 were rebuilt during the year, and the gate lifter renewed. Beyond this no other repairs or improvements were made beyond those required for the usual maintenance of locks, buildings, roads, etc.

## CHAMBLY CANAL.

All syphon culverts under the canal were cleaned; the lower wing-wall of lock 4 on the west side was rebuilt, and the wooden site of lock 6 was renewed in concrete; the passing basin near bridge 6 was widened and deepened. Other lesser repairs were also attended to.

## BEAUHARNOIS CANAL.

This canal has been under lease to the Canadian Light and Power Company since 1907, and is, with the exception of a few minor works connected with it, no longer under the control of this department. Of these minor works the Hungry Bay and Ste. Barbe dikes, however, received some attention during the past year. The macadamized road on the top of the Hungry Bay dike was thoroughly repaired, as also was the stone

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protection wall which follows this road. Certain weak spots along the Ste. Barbe dike are to be repaired during the coming season with clay deposited at various points along it last summer.

## CORNWALL CANAL.

During the entire season the canal was operated without any serious interferences to traffic through accident or other cause.

Among the more important improvements and repairs effected during the past year the following may be noted: The old wooden service bridge over the large waste weir south of lock 17 was replaced by a reinforced concrete bridge. A reinforced concrete service bridge, 150 feet long, was constructed over the supply weir at lock 21. All the service bridges over the weirs and intakes of this canal, as well as the beams carrying valve-operating machinery, have now been reconstructed in reinforced concrete. Above the head of old lock 17, a pile dock, 180 feet by 24 feet, was built, replacing the former floating dock. The floor and floor timbers of the swing bridge over the canal at Cornwall were entirely renewed. In addition to the foregoing, a large number of minor renewals and repairs were attended to.

## FARRAN'S POINT CANAL.

Repairs of a minor nature only were found necessary for the efficient maintenance of this canal during the past season.

## RAPIDE PLAT CANAL.

A reinforced concrete service bridge, 80 feet long, was constructed over the supply weir to lock 24, and the wooden beams carrying the machinery for lifting valves in this supply weir were replaced by reinforced concrete beams. A number of minor repairs were also attended to.

## GALOPS CANAL.

On the south bank of this canal west of Iroquois, 2,300 feet of the stone protection was taken down and rebuilt, and on the north bank similar repairs for a length of 330 feet were made. The masonry wing walls of the south abutment of the headrace bridge at Iroquois, the foundations of which had badly settled, were taken down and rebuilt. A corrugated galvanized steel culvert, 92 feet long, was laid under the highway west of the Cardinal bridge, by means of which the land on the north side of the highway is now efficiently drained. The usual minor repairs and improvements to the canal lands were also attended to.

## MURRAY CANAL.

This canal was operated without accident or delay to navigation during the entire season. Stone protection walls were repaired or relaid for a length of 11,400 feet. Along the north bank the highway was regraded and gravelled. All bridges crossing the canal were painted and many other lesser repairs and renewals attended to.

## RIDEAU CANAL.

The repair and maintenance works were of the same character as in previous years. The chamber of lock 5 at Ottawa and the lower entrance at Jones' Falls were rebuilt. The old stone waste weir at Black Rapids was rebuilt in concrete, and the sill of the lock at this point renewed in concrete. The swing span of the Wellington bridge, and the west approach pier of Becketts Landing bridge were renewed.

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## TRENT CANAL.

The route of the Trent canal as now in operation and under construction lies between Trenton on the bay of Quinté, where direct connection is made with Lake Ontario and Honey Harbour on Georgian Bay, from which port the waters of the upper Great Lakes are at once accessible. The portions of the canal now under construction lie between Trenton and Rice Lake and between Lake Couchiching and Georgian Bay.

*Canal in Operation.*—The extent of the waterway open to navigation lies between Trent bridge and Washago, a distance of 160 miles. In addition to this, other channels maintained would approximate a total of 90 miles.

Of the various repairs and improvements made during the past year, the following may be noted as among the more important: In the river below Bobcaygeon considerable work was done in widening and straightening the channel, the rock being blasted and removed over an area of 49,000 square feet. The reservoir dams at Paint and Percy lakes, and the dam at Elliotts Falls were rebuilt. At the Boundary Road crossing of Grass river between the townships of Bealey and Eldon, the bridge heretofore maintained was replaced by a rock dump. The work of deepening and widening the channel of the Otonabee river below Peterborough was continued, and similar work carried on at Howden's bar, between George street, Peterborough, and Little Lake, and at Robinson's Island bar.

Satisfactory water conditions prevailed during the entire navigation season.

*Canal under construction.*

*Ontario.—Rice Lake Division.*—Under this division is included the portion of the canal which lies between Trenton and the easterly end of Rice Lake, a total distance of 56½ miles. For construction purposes this division has been subdivided into seven sections or contracts. The line of the river Trent has been followed throughout, and this portion of the system when completed will comprise 9½ miles of canal, 13 miles of subaqueous channels, and 34 miles of deep-river waterway. From the mouth of the canal at Trenton where the waters of Lake Ontario are connected with, to the normal navigation level of Rice Lake, there is a total rise of 369 feet. This difference of level is to be overcome by eighteen locks. For control of the river and canal levels, fourteen dams will be required. The locks have now all been completed and the lock gates put in place on the first seven locks above Trenton. Work on the dams is now fully completed with the exception of five sluices in the bottom of dam No. 10 which are not likely to be finished until the high-level Grand Trunk Railway bridge at Campbellford has been constructed. Nineteen bridges in all will be required on this division. Seventeen of these are already completed. Of the two remaining, one is the high-level bridge at Campbellford already mentioned, and the other the Gilmour Siding bridge below lock 1, part of the substructure of which has already been built. All these bridges with the exception of that at Campbellford are of either swing or bascule type. The locks are constructed of monolithic concrete, are 175 feet long and 33 feet wide, and provide for a depth of water over the sills of 8 feet. The entire work of this division of the canal will, when completed, have involved the removal of 1,500,000 cubic yards of earth, and 1,250,000 cubic yards of solid or loose rock, and the placing of 400,000 cubic yards of concrete. The estimated cost of this work is placed at \$5,100,000, of which sum 97 per cent has been expended to date. Very complete and interesting details in regard to the foregoing will be found in the report of the superintending engineer, appended hereto.<sup>1</sup>

<sup>1</sup> Not printed.

*Severn Division.*—Under this division is included the portion of the canal between Lake Couchiching and Port Severn, on Georgian Bay, a total distance of 43 miles. In this distance there will be included 4 miles of canal,  $5\frac{1}{4}$  miles of subaqueous channel, and  $33\frac{3}{4}$  miles of deep river and lake navigation. The rise of about 139 feet between the level of Lake Huron and that of Lake Couchiching will be overcome by five locks. For the regulation of the river levels, thirteen dams will be required. The route of the canal will be crossed by eight steel bridges, five for highway and three for railway traffic. Five of these bridges will be fixed spans, and the remainder swing spans. For construction purposes this division has been subdivided into four sections or contracts known as Sections 1, 2 and 3, and the Port Severn section. Section 1 is not yet under contract, and it is not likely that tenders on it will be called for until the close of the war. The work to be undertaken will include the construction of three locks and two regulating dams and will extend from deep water in Georgian Bay near Island No. 181, 17 miles easterly to a point a little above the Big Chute near the mouth of the Severn River. Section 2, now under contract, extends from the Big Chute to a point above McDonald's Rapids, a distance of  $11\frac{1}{2}$  miles. The work included in the contract comprises principally the construction of a dam at Pretty Channel, a dam lock and power-house at Swift Rapids, and the reconstruction of the Canadian Northern Railway bridge at Ragged Rapids. The dam at Pretty Channel was completed towards the close of 1915. The dam at Swift Rapids is about half finished, and will, it is anticipated, be completed during the coming season; the power-house was completed last December. Good progress has been made on the Swift Rapids lock, and it is expected that the work will be well advanced towards completion by the end of the coming navigation season. Work in connection with the railway bridge at Ragged Rapids is still under way. Section 3, which is about  $15\frac{1}{2}$  miles in length, extends from the easterly end of Section 2 to deep water in Couchiching Lake. The contract for the work to be undertaken includes the construction of a lock just north of Lake Couchiching, two highway swing bridges, one railway swing bridge, and several small dams near Washago, as well as a large amount of rock and earth excavation. The excavation for the lock has been taken out, and the concrete work will probably be completed this coming season. Of the two highway bridges included in the contract, that at Muskoka road was completed in 1915, as also the substructure of the Hamlet Highway bridge. The railway swing bridge was practically completed last January, but is not yet in commission. The excavation of the canal prism between the lock and Lake Couchiching is well advanced towards completion, as also is the dredging of the lake channel.

#### WELLAND CANAL.

During the past navigation season a total of 2,552 vessels passed through this canal, a decrease of a little over 8 per cent on the traffic of the year before. Of the various repairs and improvements carried out during the year, the following may be noted as among the more important: On the new canal a large number of arc lights were replaced by nitrogen-tungsten lights, a considerable economy being effected thereby. On the old canal, wooden foot bridges at four of the locks were replaced by reinforced concrete structures. At Thorold, concrete sidewalks were laid on both sides of the Albert Street bridge, and a concrete wing-wall constructed at the easterly abutment. The damages sustained last year at Dunnville, by bridges and other works on the canal feeder, were fully repaired. A small wooden highway bridge over the canal feeder at the Forks Road was renewed in reinforced concrete.

#### PORT COLBORNE ELEVATOR.

Although in actual bushels handled, the business of the grain elevator again showed a decrease owing to existing war conditions, the net earnings on the season's work were slightly in excess of those of the 1915 season, a fact that may be ascribed to

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the revenue derived from the sacking of oats for European shipment, a new undertaking for this elevator. Only slight repairs of a very unimportant nature were required during the past fiscal year.

## WELLAND SHIP CANAL.

Work on the new ship canal was continued up to the end of the fiscal year 1916-17, when, on account of the unusual conditions brought about through the present war, the department notified all contractors to suspend work for a period of one year. The work as carried on up to then was divided into nine sections, numbered in order from the Lake Ontario end of the canal. Up to the end of 1916, operations had been under way on sections 1, 2, 3, and 5.

*Section No. 1.*—The work included in this section covered principally the construction of the new harbour at the Lake Ontario end of the canal, and the lock and entrance to the canal connected therewith. Work had progressed very favourably up to the time of closing down, and is now two-thirds completed.

*Section No. 2.*—The work which has been carried on on this section has comprised the excavation of the canal prism and the building of embankments, the construction of two single locks with entrance walls, weirs, etc., and the building of the substructure of a number of bridges crossing the canal. Good progress was made on all these works, and of the total amount included in the contract more than half had been completed when work ceased.

*Section No. 3.*—The work which has been in progress on this section has included the excavation of canal prism and lock sites and the formation of embankment, the construction of one single and three twin locks, the building of a large earth dam with concrete core wall, and a diversion of a portion of the Welland Division of the Grand Trunk Railway to permit of a more satisfactory location for the canal. The work covered by this contract is about one-third completed.

*Section No. 5.*—The work on this section has included the widening, and deepening of the existing canal between Allanburg and Port Robinson, or for a distance of about  $2\frac{1}{2}$  miles. Work progressed satisfactorily up till the closing down of operations at the end of last year, when the undertaking covered by the contract was about two-thirds completed.

In the annual report of the engineer in charge, appended hereto,<sup>1</sup> complete and interesting details regarding the various works carried out up to the close of the 1916 season have been gone into. A full description of the whole scheme of the ship canal route will be found in the report of the engineer in charge for the year 1912-13.

## ST. PETER'S CANAL.

This canal, the reconstruction of and improvements to which are now nearing completion, connects the Bras d'Or lakes of Cape Breton island with St. Peter's Bay and the Atlantic Ocean on the south coast. It is operated by one tidal lock. During the season of 1916 the various works which have been under way since May, 1912, were practically brought to completion. The principal items of work yet to be done are the finishing of the dredging at the Atlantic end of the canal, the construction of a small crib, the building of a few hundred feet of concrete wall, and the general grading and trimming up of the entire work, all of which, it is confidently expected, will be accomplished during the coming season.

<sup>1</sup> Not printed.

## SAULT STE. MARIE CANAL.

During the past year there has been a very marked increase in the traffic which has passed through this canal, an increase of nearly 30 per cent having been shown over the previous year's figures. This increase may be ascribed both to the unusually heavy demand for iron ore and to the very favourable water conditions which prevailed throughout the season. Only one accident of importance occurred during the navigation season, and the damage caused thereby was repaired at slight expense. The work of renewing the top of the lower south pier, which was commenced two years ago, was continued: about 175 feet of pier was taken down to below water level, and the timber cribwork replaced by concrete walls filled with stone. A little over 300 feet of pier still remains to be reconstructed in a similar manner.

## RAILWAYS.

## CAR FERRY TERMINALS—NORTHUMBERLAND STRAIT.

This undertaking comprises the construction of harbour works, landing piers, etc., at Cape Tormentine, New Brunswick, and at Carleton Point, Prince Edward Island, and the building of about 3 miles of railway connecting the Cape Traverse branch of the Prince Edward Island Railway with the Carleton Point terminal. The width of Northumberland strait between Cape Tormentine and Carleton Point is 3 miles.

At Cape Tormentine, all work has now been completed except at the breakwater, where a considerable quantity of stone filling and capping stone will have to be placed during the coming season. The installation of an electric lighting plant, for which a contract has been let, has also still to be effected.

At the Carleton Point terminal all work is now complete except the dredging of the turning basin, which it is expected will be finished this year.

The Carleton Point Branch railway has been completed.

The transfer bridges at both terminals, which have been constructed under contract by the Dominion Bridge Company, are now practically ready for operation.

## HUDSON BAY RAILWAY.

During the past year grading has been carried as far as Port Nelson with the exception of a few gaps which amount, in all, to only 11 miles. Over a million yards of material have been handled. Main-line track, with the necessary sidings, has been laid to the second crossing of the Nelson river at Kettle rapids, distant about 90 miles from Port Nelson. Track is therefore now laid for upwards of 80 per cent of the entire 424 miles between Le Pas and Port Nelson. Ballasting and surfacing have been carried as far as mile 295, and sufficient deposits of suitable gravel have been found at convenient points to complete the ballasting of the entire line. The telegraph line has been installed as far as Kettle rapids. Water tanks have already been erected at two points. Work was begun on the substructure of the Kettle Rapids bridge last November, but only a commencement could be made before work was stopped by the severity of the winter weather. Work during the past year has been very much hampered through a shortage of labour.

## HUDSON BAY TERMINUS.

The deep-water development of this harbour, consisting of an artificially constructed island situated near the outer edge of the tidal flats, about one-half mile from shore, connected with the mainland by seventeen steel spans of 140 feet in length each, has progressed satisfactorily, considering the natural disadvantage of the climate and

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the handicap of an unusually stormy season. The supporting bridge piers were completed, as were the steel spans themselves, and the former withstood this year's spring ice shove successfully, a test which had been awaited with great interest. These piers had received large amounts of stone protection, which had been dredged 11 miles up the river, and every precaution had been taken to render them stable against the enormous forces of the Nelson River ice-shoves, but it was satisfactory to have their stability actually proven.

Of the island itself, about 1,600 feet of eribwork, 23 feet high, was completed and partially protected by backfilling for the winter.

Dredging was continued during the season, considerable timber was cut, driven down the Airhole river and rafted down the Nelson a total distance of 136 miles to the works, and various buildings, warehouses, and sews were built.

Navigation of the harbour for the season commenced on June 14, 1916, and the local dredging fleet, with attendant vessels, was floated and at work during the ensuing week. The steamer *Sheba* and *Durley Chine* each made two round trips from Halifax to Port Nelson, the first arrival from sea being on August 8, and the last to leave on October 10.

During the winter months the construction forces were reduced to about one hundred men, which number will be increased to 600 or 700 during the 1917 season.

W. A. BOWDEN,  
*Chief Engineer.*

## APPENDIX IV.

## REPORT OF THE CHIEF ENGINEER OF THE WESTERN DIVISION OF THE NATIONAL TRANSCONTINENTAL RAILWAY.

I have the honour to submit my annual report for the fiscal year ended the 31st of March, 1917, upon the Western division of the National Transcontinental Railway—Winnipeg to Prince Rupert—1,748 miles, including the  $3\frac{1}{2}$  miles on the shore line of the terminal grounds at the latter point.

The amount of certificates of expenditure up to the 31st of December, 1916, amounted to:—

Prairie section, 915 miles. . . . .	\$ 37,910,534 88
Mountain section, 833 miles. . . . .	93,160,195 76
Total . . . . .	<u>\$131,070,730 64</u>

Estimated value of work remaining to be executed to comply with the Acts of Parliament, contract and specification:—

Prairie section. . . . .	\$2,297,500 00	
Mountain section. . . . .	<u>2,330,385 00</u>	\$ 4,627,885 00
Total cost. . . . .		<u>\$135,698,615 64</u>

Or 1,748 miles at a cost of \$135,698,615.64 = \$77,630.79 per mile.

No further payments have been made up to this date.

There are, in my opinion, many items included in the certificates, which, under the usual term of cost of construction, would not be so treated, but under the contract, etc., they are covered as cost of construction.

I may here remark that the entire Western division is in good safe condition for operation of public traffic, although the track is not up to grade at certain points, embankments being narrow and certain temporary trestles yet to be made into solid embankments, but it must be kept in mind that it is absolutely necessary the road should be kept up to its present standard by careful and judicious maintenance.

The following is a detailed statement of the work remaining to be executed to bring the road up to the standard called for by the Acts of Parliament, contract, and specification:—

Between zero at Winnipeg and 280th mile west thereof, making the structures of a permanent character; and from the 280th mile to the crossing of Long Lake and Saskatchewan Railway, making 25 per cent of the open and box culverts and 50 per cent of pile bridges of a permanent character. . . . .	\$1,200,000 00
Filling embankments up to subgrade and widening to specification width between Winnipeg and Wolf Creek. . . . .	62,500 00
Building a mile of railway through Edmonton, and purchasing property therefor. . . . .	435,000 00



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Ballasting to be done to bring road up to specification standard between Winnipeg and Wolf Creek.....	\$ 600,000 00
Temporary trestles to be made into solid embankments, widening embankments and taking care of slides between Wolf Creek and Prince Rupert.....	310,500 00
Ballasting to bring road up to requirements of specification between Wolf Creek and Prince Rupert.....	375,000 00
Three divisional station houses to be built at Prince George, Endako and Smithers.....	75,000 00
Way station houses to be rebuilt at Lake Kathlyn and Ritchie.....	4,000 00
Round house to be completed at Pacific.....	10,000 00
Round house at Prince Rupert to be built.....	125,000 00
Machine shop at Prince Rupert to be built.....	75,000 00
Car shop at Prince Rupert to be built.....	9,000 00
Boiler shop at Prince Rupert to be built.....	90,000 00
Freight shed at Prince Rupert to be built.....	55,000 00
Dock for heavy shipping at Prince Rupert to be built.....	500,000 00
Bridges to be erected on foreshore at terminal yard to be erected.....	47,500 00
Station house at Prince Rupert to be erected.....	176,000 00
Stock yards to be built at Prince Rupert.....	2,000 00
Miscellaneous buildings at Prince Rupert to be built.....	30,000 00
Carpenter shop at Prince Rupert to be built.....	10,000 00
Warehouse on dock at Prince Rupert to be built.....	10,000 00
Riprapping to be done along line west of Wolf Creek.....	45,000 00
Fencing to be erected.....	36,000 00
Steel rails to be provided west of Wolf Creek.....	98,685 00
Track fastenings to be provided west of Wolf Creek.....	12,000 00
Switches to be provided west of Wolf Creek.....	15,750 00
Replacing second quality steel rails with those of first quality.....	1,950 00
Tracklaying in divisional yards west of Wolf Creek.....	10,000 00
Four divisional freight houses to be built at Prince George, Endako, Smithers and Pacific.....	16,000 00
Water services to be completed at Merricetown, New Hazelton and Tyee.....	15,000 00
To provide water service at Prince Rupert.....	25,000 00
Machinery and tools to be provided at divisional points west of Wolf Creek.....	100,000 00
Tool houses to be erected at Cariboo, Fort Fraser, Lake Kathlyn and Beamont.....	400 00
Divisional repair shops to be built at Smithers and Prince George.....	20,000 00
Bunk houses to be erected at Cariboo, Penny, Willow River, Fort Fraser, Burns Lake, Hazelton, Kitwanga and Terrace.....	4,800 00
Section houses to be erected at Cariboo, Penny, Willow River, Fort Fraser, Burns Lake, Hazelton, Kitwanga, Terrace and Prince Rupert.....	10,800 00
Machine shops to complete at divisional points.....	5,000 00
Miscellaneous buildings at divisional points.....	10,000 00
Total.....	\$4,627,885 00

I trust I have placed the position of the works of construction and the condition of the road for the operation of public traffic thereon on the 31st of December, 1916, in a plain and concise manner in which it can be readily understood.

COLLINGWOOD SCHREIBER,  
*Chief Engineer West. Div. N.T.Ry.*

## APPENDIX V.

## REPORT OF THE CHAIRMAN AND CHIEF ENGINEER, BOARD OF ENGINEERS, QUEBEC BRIDGE.

I beg to report progress of work in connection with the construction of the Quebec bridge for the fiscal year ending March 31, 1917, as follows:—

During the past season, fabrication of the entire structure was completed, as well as the erection of the south cantilever arm and the suspended span, thus completing the erection of the entire bridge with the exception of floating in and connecting up of the suspended span to the cantilever arms. The failure of a portion of the contractor's erection equipment at the time when the suspended span was being lifted into place, September 11, 1916, resulted in the loss of the suspended span, or about 5,000 tons of bridge material. As reported at the time, the St. Lawrence Bridge Company assumed the entire responsibility for the loss, and took immediate steps to replace this portion of the structure, at their own expense. Orders for the raw material were immediately placed at the mill in Pittsburgh, and, considering the overcrowded condition of all the mills at the time, remarkably quick delivery was promised, and at the present time, 95 per cent of the material has been rolled and delivered at the shops.

Fabrication has also been going ahead rapidly, and at the present time some 75 per cent of the bridge members have been manufactured and shipped to the site. It is expected that a start on the erection will be made about the middle of April, and that the span can be erected in place early in September.

C. N. MONSERRAT,  
*Chairman and Chief Engineer.*

## REPORT OF THE BOARD OF ENGINEERS QUEBEC BRIDGE.

OCTOBER 19th, 1916.

Your Board begs to submit herewith report on the accident which occurred on the morning of September 11th., resulting in the loss of the centre span while it was being lifted into position between the two cantilever arms of the Quebec Bridge.

A brief resumé of the operations leading up to this accident is as follows:

The span itself and the entire erection equipment and installation had been completed a week or ten days before the date of floating. During this time repeated studies of the whole programme were made, and the men specially drilled in all the mechanical operations that would be required in connection with the lifting of the span. Test loads were applied to the jacks up to 50% in excess of the loads they would have to carry under actual working conditions. Picked men were employed for all the mechanical operations and each man was assigned to a special post.

The centre span had been erected at Sillery, about  $3\frac{1}{2}$  miles below the bridge site, and supported during erection on steel falsework. This span was to be floated on six scows, each 132'-0" x 65'-0" and 11'-3" deep, three being placed under each end of the

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span. Valves were provided in the bottom of these scows and were kept open after being placed in position in order that the water would flow into them, providing against any lifting movement from the tides, before the appointed time. At one o'clock Monday morning, September 11th., the valves in the scows were closed, and as the tide rose the weight of the centre span was gradually transferred to the scows until at 3.40 a.m. they floated clear of the bottom. At 4.40 a.m. when the scows had lifted about  $2\frac{1}{2}$  feet the tugs began moving the span into the river. Four small tugs and one large tug were attached to the downstream side and two smaller tugs on the upstream side. One large tug was held in abeyance for emergencies, but was not required. At 5.15 a.m. the span had maneuvered into mid-stream and a start was made for the bridge site, the span being guided by the lower tugs against the current, and the speed being slightly accelerated by the two upper tugs. A quarter of a mile below the bridge site the speed of the span was checked in order to ascertain if it was under perfect control. The span was brought to a standstill within two or three minutes and held in that position without difficulty. At 6.35 a.m., the span reached its position between the cantilever arms. Steel cables from the hanging mooring trusses were then attached to the span and by means of hoisting engines it was warped into position and held there while the connection between the plate hangers and the span was made. At 7.40 a.m. all the plate hangers on the four corners had been connected up to the pins on the centre span, and a few minutes later the tugs cast off. The entire operation of floating the span and connecting it up to the plate hangers worked exactly in accordance with the schedule that had been mapped out. Nothing occurred that had not been foreseen and provided for. The weather was all that could be desired. There was very little wind and every condition was favourable. At 8.25 a.m. the hanger bars began to take some load as the tide continued to fall. At 8.50 a.m. the jacks began lifting and during the third lift of 2 feet the scows floated clear, leaving the span suspended about 20 feet above the water. As the remaining work of lifting the span into place was simply a repetition of mechanical operations which had already been successfully performed, it was felt by the officials and engineers present that the most difficult part of the work had been satisfactorily accomplished, and after one more lift of the jacks further operations were suspended for an hour to allow the men to go to breakfast.

At 10.30 a.m. lifting operations were resumed until five complete lifts were made on the north side and six on the south. The pins had been inserted connecting the links to the fixed jacking girders, thus transferring the load from the jacks direct to the cantilever trusses. The jacks had been released and the upper jacking girders were being lowered for another lift when a sharp report was heard and the span was seen to tilt towards the west and disappear into the river.

Immediately after the accident your Board, in conjunction with the officials of the St. Lawrence Bridge Company, started an investigation to determine the cause of the accident.

An examination of the main lifting apparatus was made immediately. The lifting hangers, lower supporting girders, jacking girders, jacks and upper supporting girders were in place, and although the lower lifting girders were scarred and scratched and the hangers slightly bent in a few places, this portion of the apparatus showed no sign of failure. (See photos 7 and 8.) As the jacks were idle at the time and the upper jacking girders were being lowered to take the next lift, the cause of the accident could not be ascribed to any failure in the lifting mechanism.

The theory that the span could have slipped off its supports due to some horizontal force created by the lifting operations was investigated. To effect a sliding motion on the supporting pin in the shoe, a very considerable horizontal force will be required. An eccentric concentration of the load on the lifting girders would, if sufficiently eccentric, tend to tip the girders and induce a horizontal force sufficient to cause sliding. Extreme care was taken throughout to prevent any such eccentric loading.

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After the span was lifted off the falsework at Sillery, the loading girders were suspended from the ends of the centre span by means of pin-connected bridles "A" (Drawing CS3) which would allow the girder to adjust itself by gravity in an exactly central position under its bearing. While the span was being towed to the site special centering plates "B" (Drawing CS3) were attached to the lower casting "C" (Drawing CS3) and fitted against the ribs of the middle casting "D" (Drawing CS3) in order to insure that both castings and pins must take their exact theoretical positions. These plates were fitted in the shop, match-marked, and shipped loose to the site. It was impossible, therefore, that the load could be distributed to the girder in any other way than as designed. The plates, castings and bearings were examined by our inspectors after being put in place on the morning of the 11th., and also after the load had been taken on the hangers. They were also examined by officials of the Bridge Company within twenty minutes of the time of the accident, and everything was found to be absolutely normal at these points. As there were no other conditions existing which could have created a horizontal force of any consequence, the theory that there was any eccentric load under the conditions existing up to the time of the accident or that there was any horizontal force sufficient to cause movement in a longitudinal direction must, therefore, be dismissed.

The lifting of one corner of the span more rapidly than another would produce a torsional deformation of the span. The trusses of the span are supported by their portal and lateral bracing. If one corner were allowed to deflect or were lifted higher than the other, the bracing would be subjected to further stress due to this movement, and if this action were allowed to go to extreme limits the bracing would fail. Such failure would leave the trusses unsupported, allowing them to buckle laterally. Every precaution, however, was taken to provide against any unequal movement of this nature. "Tell-tales" were attached to each jack at each corner. The "tell-tales" from each set of jacks at one corner were arranged so that, by means of a scale and pointers placed directly in front of the man operating the regulating valves of the jacks, it could be determined at all times during the movement whether the jacks were lifting at the same rate of speed. By manipulating the valves leading to the jacks the fingers of the "tell-tale" from each jack were kept absolutely opposite each other during the lifting operation. If one finger tended to advance ahead of the other this was corrected instantly by means of the controlling valves. "Tell-tales" were also placed at the centre of the operating platform where other controlling valves were situated and connected with each corner of the centre span. In the same way the operator at this point kept the fingers on the scale board exactly opposite, regulating the movement by means of the valves controlling the hydraulic system. This movement of these "tell-tales" was also carefully watched by Engineers of the Bridge Company. Special drills were held several days in advance covering this operation, and the men were thoroughly conversant with the working of the apparatus. When the jacks were raised the two feet required for each movement, as indicated on the gauge by the "tell-tales", the pins in each corner were inserted without further operation of the jacks. This shows conclusively that the "tell-tales" accurately indicated the actual movement of the jacks and that the corners at each end of the span were kept level at all times.

The theory that the span failed as a span from its own weight can be dismissed. There are no exceptional problems in the design of this span. It was designed on the same specification as the cantilevers, which withstood successfully the very severe shock to which they were subjected. Furthermore, it was not carrying at the time more than one-half of the load for which it was designed. The original stress sheets were checked and re-checked several times before this span was manufactured. A re-calculation has again been made, and the results agree with the original calculations. The estimated weight upon which the original dead load calculations were made checks within one-half of one per cent with the actual scale weights.

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Photograph No. 1 published a few days after the accident, showing the span actually falling, furnished indisputable evidence that the southwest corner fell first, and corroborated the conclusion that your Board had previously reached. The evidence of eye-witnesses, which is borne out by markings on the lifting girders, would indicate that the southeast corner fell next, and that the northeast and northwest corners fell last and practically simultaneously. In view of these facts, primary evidence to account for the loss of the span would naturally be sought at the southwest corner.

A minute examination of the southwest lower lifting girder (see photos 10 and 11 and Drawing CS1) furnishes unmistakable evidence of a failure of one of the erection steel castings which was temporarily supporting the span while being lifted. The strongest evidence of this fact is contributed by the centering plates "B" and "B1" and the suspender bridle "A". The northwest centering plate "B" has been crushed down vertically and across the pin with two of its bolts sheared off and two intact. The suspension bridle plates "A" have also been crushed down vertically and are lying over the centering plate. No evidence of sliding on these plates is to be seen as the paint has not been disturbed except from the effect of crushing. The southeast centering plate "B1" has been sheared off completely and is lying adjacent to its original position. This plate is also crumpled up, giving evidence of a vertical blow. The southwest and northeast centering plates have disappeared, but the bolts of these, as well, as of the southeast plate, have been sheared in a vertical direction, giving further evidence of a vertical blow. It is impossible that the middle casting "D" (Drawing CS3 and photo 9) could have slipped off the pin in its normal position without having carried away the northwest centering plate "B". The evidence is positive that the damage done to this latter plate was prior to any longitudinal movement of the truss or girder tending to dislodge this corner of the span from its support. Scoriations on the pin show a diagonal movement of some rough surface towards the northeast and the pin also rotated eastward on top about  $1\frac{1}{2}$ "', showing that the effect of whatever action took place kicked the girder south and rotated it horizontally through an angle of about  $30^\circ$ . The hitch angles "A1" for the east suspension bridle plate have been cut through at the same angle, showing the line of travel of the girder in relation to the truss. The south tie-plates "G1" of the box hangers "G" were bent slightly outward due to the rotation of the supporting girders about pin "X" (Drawing CS1) just above the lifting girders, but the connections "G2" of the box hangers to this girder were undisturbed. The lower end of the east plate hangers (See Drawing CS1) was also bent outward and scored, due to the action of cutting their way through the heavy horizontal strut joining the two ends of the trusses of the centre span.

On the assumption that the central erection casting "D" (Photo No. 9) at this corner, failed,—it is possible—in view of the further evidence at hand, to deduce the successive steps in the fall of the span. The failure of this casting would allow the southwest corner of the span to drop on the lower pin "P", or the top flange of the girder "G3" in such a manner as to kick it back towards the south and cause it to rotate about its upper pins. This rotation if sufficiently great, would allow this corner of the span to slip off the supporting girder. The immediate effect of this corner of the span being unsupported would be to cause a momentary rotation of the span about a diagonal axis extending from the northwest corner to the southeast corner and producing an overload at these two corners equal to the capacity of the bracing and end portal to transfer this load. As the bracing was not designed for any such emergency the southwest corner of the span would settle rapidly, tending to turn the span over on its side towards the west. As this movement increased the bracing would crumple up with the inevitable result that the chords would go out of line and trusses thus fail. As the bracing of the span would not be strong enough to distribute the distortion at the south end to the north, the latter ends of the trusses would remain on their bearing until both south ends had disappeared in the water, finally sliding off longitudinally, the inside lifting hangers tearing through the end cross strut in doing so. The

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evidence on the other three lifting girders substantially confirms this theory. An examination of the southeast lifting girder (See photos 12 and 13 and Drawing CS1) shows the lower pin missing and, what is somewhat remarkable, the upper pin "P1" resting in the lower casting "C". The four centering plates "B" are in place, three of them being flared outward at an angle of about 45°. The fourth, the northwest centering plate "B1", is still securely bolted to the casting, but its upper portion has been flattened downward into a horizontal position. The east suspension bridle is missing but the west bridle "A" is in place, but crushed downward. The east box hanger and plate hangers above are practically undamaged. The west hangers are badly bent outward and scored. The top of the girder is also badly marked and the west end of the girder has its flange angles and plates bent downward. The position and condition of the centering plates show that there could not have been any direct longitudinal sliding motion or the two plates towards the north would have been sheared off. The evidence indicates that when the southwest corner dropped there was a lateral rotation of the southeast end of the span on the lower longitudinal pin. When this motion had continued to such an extent that a lateral rather than a vertical force was directed against the lower pin, this pin was kicked out. The kicking out of the lower pin probably carried the middle casting with it, and the upper pin falling lodged in the pin groove of the lower casting. The rotation of this corner accounts for the crushing of the northwest centering plate and suspension bridles. The dropping of the southwest corner and the turning movement of this end of the span carried the east truss against the inside hanger, bending and mutilating it as it finally tore through the heavy end strut, as indicated by the markings on this hanger.

The condition of the northwest supporting girder and hangers is practically identical with that of the northeast corner. (See photos 14-15-16-17 and Drawing CS2). In each case the two north centering plates "B" (Photos 14 and 16) are in place and undamaged. The south centering plates have their bolts sheared off horizontally and one plate of each girder is missing. In both cases the inside plate hangers are bent to a certain extent and scored "H" (Photo 15) where they tore through the horizontal strut of the centre span. The outside box hangers and plate hangers are undamaged "H1" (Photo 16), with the exception that the north tie plate on the east box hanger is slightly bent outward due to rotation about the pin. The tops of the girders themselves were only slightly damaged on the south face due to the final slipping off of the span.

In view of the foregoing evidence your Board is satisfied that the primary cause of the accident was the failure of one of the temporary erection steel bearing castings (see photo 9) supporting the southwest corner of the centre span. These steel castings were manufactured at the works of the Canadian Steel Foundries, Ltd., Montreal, and the results of the specimen tests showed that the material had met the requirements of the specification in all respects. The machining of the castings was done at the works of the St. Lawrence Bridge Company, where they received careful inspection. They had also been subjected to a test load while at Sillery of about 10% in excess of the loads carried during lifting operations, due to the weight of material trains and temporary track, this track having been removed before floating. At the moment of the accident the castings under the other corners were subjected to an overload of from 70 to 100%, as evidenced by the elongation of the plate hangers supporting the ends of the span. Notwithstanding this fact there are no indications that any of the castings failed at these points. It is, therefore, your Board's opinion that the failure of the erection casting at the southwest corner was due to a flaw or other imperfection which could not be detected, and further that had the casting been sound no failure would have occurred.

The member that failed (Photo No. 9) was a part of the contractor's erection equipment, in use only during the erection and lifting into position of the centre span,

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and formed no part of the permanent structure. The St. Lawrence Bridge Company have advised your Board that they assume entire responsibility for the failure of this member and the resulting loss of the span, and have already taken the necessary steps towards replacing the lost structure. The length of time required to complete this work will depend upon the deliveries that can be obtained for raw material. We are advised, however, by the St. Lawrence Bridge Company that the mills have undertaken to complete delivery within five months and that rolling has already started. Since the proportion of the steelwork lost amounts to only 8% of the whole, and 92% is at present completely erected, there should be very little delay in the completion of the bridge if these promises are fulfilled.

When the weight of the centre span was taken up by the cantilevers, it caused an estimated deflection at the ends of the latter of about  $7\frac{1}{2}$  inches. The sudden release of this load caused the cantilevers to spring violently upward, setting up severe vibrations which were sufficient to throw persons off their feet. A very thorough examination of the cantilevers has since been made with the result that no sign of injury or movement has any where been found. The elevations of the pins in the trusses, as well as the alignment of the trusses and main posts have been checked by instruments and found unchanged. All joints and connections in the cantilevers, including bracing, have been examined and no evidence of any action can be detected. Rivets in sway bracing and other important connections have been carefully inspected and no loose rivets have been found. Your Board are absolutely satisfied that no damage of any kind has been done to the cantilevers.

Herewith is attached list of plans and photographs accompanying this report.

C. N. MONSARRAT,  
RALPH MODJESKI,  
H. P. BORDEN





DEPARTMENT OF RAILWAYS AND CANALS

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# CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1917

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA  
J. DE LABROQUERIE TACHÉ  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1918



*To His Excellency the Duke of Devonshire, K.G., P.C., G.C.M.G., G.C.V.O., etc.,  
etc., Governor General and Commander in Chief of the Dominion of Canada*

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency, Canada<sup>1</sup>  
Statistics for the year ended December 31, 1917.

All of which is respectfully submitted.

J. D. REID,

*Minister of Railways and Canals.*

To the Honourable J. D. REID,

Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Comptroller of Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1917.

I have the honour to be, sir,

Your obedient servant,

A. W. CAMPBELL,

*Deputy Minister of Railways and Canals.*

OFFICE OF THE COMPTROLLER OF STATISTICS,  
OTTAWA, May 1, 1918.

A. W. CAMPBELL, Esq., C.E.,  
Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit herewith Canal Statistics for the year ended December 31, 1917.

ABRIDGED REPORT.

Owing to war conditions, it has been deemed expedient for the year 1917 to materially reduce the volume of statistical matter published. The complete facts, however, have been tabulated and will be available when required.

VOLUME AND DISTRIBUTION OF TRAFFIC.

	Tons.	Increase.	Decrease.
		Tons.	Tons.
Sault Ste. Marie.....	15,447,092		1,366,557
Welland.....	2,490,542		54,422
St. Lawrence.....	3,391,144	23,080	
Chambly.....	434,818	35,841	
St. Peter's.....	62,254	52,625	
Murray.....	57,603	10,923	
Ottawa.....	214,835		22,816
Rideau.....	84,549		20,881
Trent.....	48,924	3,915	
St. Andrews.....	7,174		6,264
Total.....	22,238,935	126,384	1,470,940

GROSS TRAFFIC SINCE 1915.

	Tons.
1905.....	9,371,744
1906.....	10,523,185
1907.....	20,543,639
1908.....	17,502,820
1909.....	33,729,743
1910.....	42,990,603
1911.....	38,030,353
1912.....	47,587,245
1913.....	52,053,913
1914.....	37,023,237
1915.....	15,198,803
1916.....	23,583,491
1917.....	22,238,935

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## ANALYSIS OF TRAFFIC.

Canals.	Agricultural Products.	Animal Products.	Manufactures.	Products of Forest.	Products of Mines.	Total.
1917.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Sault Ste. Marie.....	2,670,744	172	322,113	32,889	12,421,174	15,447,092
Welland.....	562,669		184,290	243,965	1,499,618	2,490,542
St. Lawrence.....	564,185	4,899	236,197	469,433	2,116,430	2,391,144
Chambly.....	15,280	138	18,664	259,713	141,023	434,818
St. Peter's.....	6,601	2,721	6,931	2,218	43,783	62,254
Murray.....	325		6,956	9	50,313	57,603
Ottawa.....	3,467	3,410	24,682	98,539	84,737	214,835
Rideau.....	3,225	1,872	10,779	11,826	56,847	84,549
Trent.....	1,191	220	2,384	44,810	319	48,924
St. Andrews.....	5	7	162	7,000		7,174
Total.....	3,827,692	13,439	813,158	1,170,402	16,410,856	22,238,935

—	1912.	1913.	1914.	1915.	1916.	1917.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Agricultural products.....	14.51	16.40	21.51	34.11	21.96	17.21
Animal products.....	.04	.04	.04	.07	.04	.06
Manufactures.....	4.63	3.61	3.29	7.21	3.53	3.65
Products of forest.....	3.43	3.22	4.33	9.83	5.87	5.26
Products of mine.....	77.34	76.73	70.78	48.78	68.60	73.82

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## CANADIAN AND AMERICAN TRAFFIC.

Neither the canals of Canada nor those of the United States impose tolls. Perfect reciprocity prevails in the use of these artificial waterways.

## COMPARISON OF TRAFFIC.

Year.	Canadian Vessels.		U.S. Vessels.		Freight Tonnage.		
	No.	Tonnage.	No.	Tonnage.	Canada.	United States.	Total.
1908.....	29,040	6,789,789	7,489	4,835,320	5,012,147	12,190,673	17,502,820
1909.....	22,507	7,811,578	9,996	16,459,322	7,378,057	26,342,691	33,720,748
1910.....	25,337	8,931,790	11,462	21,777,297	7,883,614	33,106,994	42,990,608
1911.....	25,585	9,172,192	10,370	18,231,622	7,792,907	30,237,446	38,030,353
1912.....	27,371	10,237,335	11,785	24,636,190	9,376,529	38,210,716	47,587,245
1913.....	28,654	12,078,041	10,739	24,238,788	11,130,875	40,923,038	52,053,913
1914.....	26,125	12,050,856	7,742	15,636,414	9,382,206	27,641,031	37,023,237
1915.....	21,575	9,398,297	6,415	7,335,101	6,789,423	8,409,330	15,198,803
1916.....	23,002	9,833,029	6,809	10,659,839	7,486,962	16,096,529	23,583,491
1917.....	21,588	9,831,634	6,534	10,259,772	5,964,369	16,274,566	22,238,935

## TRANSPORTATION OF CANADIAN WHEAT.

Since 1895 the volume of Canadian wheat annually carried through the Canadian canal at Sault Ste. Marie has been as follows:---

	Bushels.
1895.....	1,087,800
1896.....	7,274,000
1897.....	9,130,167
1898.....	3,456,934
1899.....	7,699,267
1900.....	5,573,267
1901.....	5,893,034
1902.....	19,896,900
1903.....	25,807,800
1904.....	25,250,969
1905.....	22,603,500
1906.....	26,361,400
1907.....	34,602,000
1908.....	41,793,300
1909.....	48,047,833
1910.....	51,774,833
1911.....	63,641,000
1912.....	83,743,034
1913.....	101,066,133
1914.....	77,467,833
1915.....	48,727,911
1916.....	82,807,342
1917.....	60,551,243

## COMPARISON OF 1915, 1916 AND 1917.

	1915.	1916.	1917.
	Bushels.	Bushels.	
Through the Canadian canal.....	48,727,911	82,807,342	60,551,243
Through the American canal.....	121,389,950	102,196,325	98,023,019
Total.....	170,117,861	185,003,667	158,574,262

Canadian wheat, in the form of flour, had a total of 13,230,850 bushels. There were 2,940,189 barrels of flour, which were calculated into wheat on the basis of 4½ bushels to barrel.

The total volume of waterborne wheat in 1917 would thus be made up as follows:—

	Bushels.
Through the Canadian canal.....	60,551,243
Through the American canal.....	98,023,019
In the form of flour.....	13,230,850
Total.....	171,805,112

The distribution of Canadian wheat, moved through the Canadian and American canals at Sault Ste. Marie from Port Arthur-Fort William, was as follows:—

From	1915.	1916.	1917.
Port Arthur-Fort William.	Bushels.	Bushels.	Bushels.
To Montreal.....	3,512,410	1,233,982	1,280,170
“ Georgian Bay ports.....	25,065,999	46,406,749	52,453,042
“ other Canadian ports.....	33,067,613	28,029,847	31,369,487
“ Buffalo.....	106,784,542	106,349,943	72,872,692
Total.....	168,430,564	182,020,521	157,975,391

To the foregoing total for 1917 should be added 598,871 bushels of Canadian wheat shipped from Duluth to Montreal.

“Other Canadian ports” practically means Port Colborne at the western entrance to the Welland Canal.



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WHEAT MOVEMENT BY MONTHS, 1917.

1917.		April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
		Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
<i>Canadian Canal.</i>											
Fort William-Port Arthur to Montreal			45,000	205,500	158,980	129,000	164,266	301,800	17,200	40,000	1,064,746
" " Georgian Bay			5,728,500	6,393,880	1,658,806	1,020,640	277,000	4,157,397	5,113,078	2,860,700	27,210,601
" " Other Canadian Ports			2,427,000	1,549,402	2,650,883	2,126,000	1,960,675	2,470,000	3,657,700	573,000	17,420,660
" " Buffalo			4,088,087	2,177,215	363,600	276,500	567,650	2,608,087	4,428,850	345,219	14,855,236
Duluth-Superior to Montreal											
" " Georgian Bay											
" " Other Canadian Ports											
" " Buffalo											
Total			12,288,887	10,325,995	4,832,269	3,632,140	2,969,621	9,546,281	13,217,428	3,818,919	60,551,243
<i>American Canal.</i>											
Fort William-Port Arthur to Montreal			1,502,575	2,510,750	50,724		57,000	58,700	45,000		215,424
" " Georgian Bay					2,365,280	1,680,939	748,000	7,251,390	6,545,220	2,838,287	25,242,441
" " Other Canadian Ports											
" " Buffalo											
Duluth-Superior to Montreal			1,266,525	1,760,000	562,436	2,012,414	1,876,995	3,607,289	2,286,168	577,000	13,948,827
" " Georgian Bay			15,121,962	8,263,059	1,779,359	1,032,201	781,496	10,651,162	12,177,668	8,207,255	58,017,456
" " Other Canadian Ports											
" " Buffalo			387,991	210,880							598,871
Total			18,079,053	12,744,689	4,763,759	4,725,557	3,466,491	21,566,541	21,054,347	11,622,512	98,023,019
<i>Canadian and American Canals.</i>											
Fort William-Port Arthur to Montreal			45,000	205,500	215,701	129,000	521,266	361,500	62,200	40,000	1,280,170
" " Georgian Bay			7,031,075	8,904,640	4,024,086	2,701,579	1,035,000	11,408,787	11,658,898	5,698,987	52,453,042
" " Other Canadian Ports			3,693,525	3,309,402	3,213,319	4,138,414	3,837,670	6,083,289	5,943,868	1,150,000	31,369,487
" " Buffalo			19,210,049	10,410,272	2,142,659	1,308,704	1,352,176	13,259,249	16,606,809	8,552,474	72,872,692
Duluth-Superior to Montreal											
" " Georgian Bay											
" " Other Canadian Ports											
" " Buffalo			387,991	210,880							598,871
Grand Total			30,367,640	23,070,684	9,596,068	8,277,697	6,436,112	31,112,825	34,271,775	15,441,461	158,574,262

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There was a large volume of wheat moved during the year 1917 from Port Colborne to Montreal, which might properly be added to the foregoing total for Fort William-Port Arthur to Montreal. Port Colborne was used as a port of transfer. It might, in fact, be assumed that nearly all the wheat moved from the head of the Great Lakes to "other Canadian ports" actually went to Montreal.

A helpful light is thrown on the foregoing table when the monthly totals are reduced to a percentage basis, as follows:—

	1915.	1916.	1917.		1915.	1916.	1917.
April.....	4.8	8.6	....	September.....	7.3	6.1	4.1
May.....	5.5	16.9	19.2	October.....	27.5	8.7	19.6
June.....	2.0	11.9	14.5	November.....	29.7	12.0	21.6
July.....	1.9	14.4	6.1	December.....	20.0	9.6	9.7
August.....	1.3	11.8	5.2				

#### FREIGHT RATES BY WATER.

Carriers by water obtained exceptionally high rates on wheat during the season of 1917, which may be accepted as indicating heavy tolls for all commodities.

The rates of freight over the different routes during the year were as follows:—

	1915.	1916.	1917.
Port Arthur—Fort William to Montreal—			
Per ton per mile.....	0.132 cent.	0.205 cent.	0.265 cent.
Per bushel.....	4.99 "	7.55 "	9.78 "
Per ton.....	\$1.66	\$2.52	\$3.26
Port Arthur—Fort William to Georgian Bay—			
Per ton per mile.....	0.282 cent.	0.264 cent.	0.270 cent.
Per bushel.....	3.54 "	4.10 "	4.25 "
Per ton.....	\$1.18	\$1.37	\$1.42
Port Arthur—Fort William to other Canadian ports—			
Per ton per mile.....	0.124 cent.	0.169 cent.	0.185 cent.
Per bushel.....	2.84 "	3.68 "	4.18 "
Per ton.....	\$94.80 "	1.22 "	\$1.39
Port Arthur—Fort William to Buffalo—			
Per ton per mile.....	0.159 cent.	0.159 cent.	0.196 cent.
Per bushel.....	3.97 "	4.27 "	5.000 "
Per ton.....	\$1.32	\$1.42	\$1.67

The rates from Duluth were substantially the same as Port Arthur-Fort William.

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In order that the bearing of the foregoing freight rates may be properly understood in their relationship to gross earnings, allowance should be made for the following charges paid by ship owners on all cargoes of wheat moved between Fort William and Montreal :—

Clearing house at Fort William .....	·01 to ·03 cent per bush.
Trimmers at Fort William.....	·06 “ “
Elevation at Montreal .....	·30 “ “
Shovelling at Montreal.....	·20 “ “
Total .....	·59 cent per bushel.

To Port Colborne the average deductions would amount to ·44 per bushel to Buffalo ·41, and to Georgian Bay ports ·38.

## MOVEMENT OF OTHER GRAIN.

A considerable volume of other grain than wheat passed through the Canadian and American canals at Sault Ste. Marie in 1917. The facts for the past three years are as follows :—

	1915.	1916.	1917.
	Bushels.	Eushels	Bushels.
Oats.....	26,798,488	57,743,636	37,014,644
Barley.....	4,496,509	8,679,607	5,149,725
Flax seed.....	2,068,582	4,931,569	5,073,760
Total.....	33,363,579	71,354,812	47,238,129

VESSEL AND FREIGHT TONNAGE PASSED THROUGH THE SAULT STE. MARIE CANAL.

Years.	Canadian Vessels.		U.S. Vessels.		Total No.	Vessel Tonnage.	Freight Tonnage.		Lockages.	Days Open.	Remarks.	
	No.	Tonnage.	No.	Tonnage.			Canadian.	United States.				Total.
1895.....	609	126,534	583	623,092	1,192	749,626	.....	595,837	699	87	Canal first opened Sept. 9, 1895.	
1896.....	2,070	589,407	3,066	3,805,749	5,136	4,395,156	.....	4,577,399	3,042	218		
1897.....	1,969	405,546	2,359	3,391,936	4,268	3,797,482	.....	4,947,065	2,604	238		
1898.....	1,811	403,931	1,864	2,353,699	3,675	2,757,630	.....	3,055,387	2,520	243		
1899.....	2,000	558,552	1,769	2,389,457	3,769	2,948,009	.....	3,006,664	2,610	239		
1900.....	1,790	577,310	1,291	1,617,438	2,081	2,194,748	.....	2,035,677	2,205	238		
1901.....	2,796	775,151	1,408	1,674,597	4,204	2,449,748	.....	2,820,394	2,910	246		
1902.....	3,080	1,306,930	1,964	3,237,372	5,044	4,604,302	.....	4,729,268	3,418	264		
1903.....	2,711	1,615,939	1,640	3,116,897	4,351	4,762,746	.....	5,511,868	3,242	256		
1904.....	2,637	1,555,042	1,325	2,675,663	3,962	4,230,705	.....	5,030,705	3,022	241		
1905.....	3,970	1,803,299	1,692	2,734,349	5,662	5,537,637	.....	5,473,406	4,031	255		
1906.....	3,922	1,959,252	1,758	4,399,872	5,680	6,359,124	.....	6,574,039	4,152	253		
1907.....	3,217	2,154,688	3,132	9,061,281	6,349	12,115,969	.....	15,588,165	4,596	238		
1908.....	3,289	2,603,232	2,204	7,035,655	5,233	9,638,887	.....	2,092,231	3,667	235	Origin of cargo first shown.	
1909.....	2,597	988,956	3,734	14,830,738	6,331	17,839,671	.....	3,366,495	5,046	240		
1910.....	2,744	3,173,494	5,228	20,187,701	7,972	23,361,198	.....	2,345,619	6,110	248		
1911.....	2,713	3,108,880	4,068	16,252,340	6,781	19,361,220	.....	3,177,581	6,802	236		
1912.....	2,643	3,296,229	5,213	22,536,015	7,856	25,832,244	.....	4,000,362	6,200	240		
1913.....	3,279	3,793,431	5,006	22,181,007	8,285	25,974,441	.....	4,954,734	6,266	246		
1914.....	3,011	3,473,292	2,966	13,827,870	6,977	17,301,162	.....	3,603,747	4,712	239		
1915.....	3,000	3,041,063	1,331	5,443,812	4,331	8,484,815	.....	2,561,734	4,374	248		
1916.....	4,595	4,089,937	2,094	8,703,187	6,689	12,793,124	.....	4,155,911	4,777	245		
1917.....	3,199	3,182,967	2,138	8,712,694	5,337	11,895,564	.....	2,875,530	4,142	237		

I have the honor to be, sir,

Your obedient servant,

J. L. PAYNE,

Comptroller of Statistics.

# CANAL STATISTICS

TABLE 1.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation 1916 and 1917.

	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	United States.		
<b>1916.</b>														
Sault Ste. Marie.....	333,901	2,886,970	887,239	384,454	11,407,241	704,378	141,656	1,430,543	15,383,106	16,813,649	4,155,911	12,657,738		
Welland.....	157,060	675,282	3,057	148,046	55,361	1,350	1,311,643	499,621	2,045,313	2,544,964	1,054,480	1,490,484		
St. Lawrence.....	242,320	881,418	450,157	381	40	5,405	1,787,743	698,522	2,663,512	3,368,064	1,581,195	1,786,869		
Chambly.....	4,169	10,504	242,508				141,796	246,677	152,300	398,977	257,181	141,796		
St. Peters.....	5,471	4,158						5,471	4,158	9,629	9,629			
Murray.....	42,563	2,542					1,575	42,563	4,117	46,680	45,083	1,595		
Ottawa.....	11,796	160,809	54,474			10,572		22,368	215,283	237,651	226,381	11,270		
Rideau.....	58,488	40,165					6,777	58,488	46,942	105,430	98,653	6,777		
Trent.....	17,767	27,242						17,767	27,242	45,009	45,009			
St. Andrews.....	12,913	525						12,913	525	13,438	13,438			
Grand total.....	892,048	4,689,615	888,610	532,540	11,522,602	721,705	3,391,190	3,034,933	20,548,558	23,583,491	7,486,962	16,096,529		
<b>1917.</b>														
Sault Ste. Marie.....	248,394	1,946,779	676,264	449,710	11,113,538	886,465	112,094	1,598,417	13,848,675	15,447,092	2,875,590	12,571,502		
Welland.....	134,586	689,810	1,585	13,934	21,966	6,057	1,463,995	313,186	2,177,556	2,490,542	981,914	1,508,628		
St. Lawrence.....	263,933	795,228	292,214	17	50	5,257	2,004,666	561,421	2,829,733	3,391,144	1,370,533	2,020,611		
Chambly.....	3,200	8,906	253,353				153,841	256,553	178,265	434,818	281,292	153,526		
St. Peters.....	14,520	47,734						14,520	47,734	62,254	62,254			
Murray.....	51,987	2,418					3,198	51,987	5,616	57,603	54,405	3,198		
Ottawa.....	12,404	141,681	48,392			12,051		24,455	190,380	214,835	200,953	13,882		
Rideau.....	52,285	29,284					2,980	52,285	32,261	84,549	81,330	3,219		
Trent.....	15,678	33,246						15,678	33,246	48,924	48,924			
St. Andrews.....	7,003	171						7,003	171	7,174	7,174			
Grand total.....	803,990	3,695,267	771,528	463,661	11,135,554	909,830	3,744,081	2,895,505	19,343,430	22,238,955	5,964,369	16,274,586		

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TABLE 2.—Statement showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the Season of Navigation in 1917.

Vessels.	Total Number		From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
<b>CANADIAN VESSELS.</b>													
<i>Steam and Sail.</i>													
Sault Ste. Marie.....	3,199	1,259,940	113,847	152,676	71,498	106,081	233,702	39,535	1,624,728	1,458,232			3,182,960
Welland.....	2,551	467,069	612,605	1,079	25,952	3,328	1,897	727,406	1,116,523	1,168,350			2,984,873
St. Lawrence.....	7,327	929,503	912,546	164	37		308	876,970	1,722,306	1,789,689			3,511,986
Chambly.....	400	24,393	24,956					9,439	31,411	34,395			65,806
Ottawa.....	1,514	144,320	144,247				2,166			146,486			293,997
Rideau.....	1,504	50,889	54,724							50,942			105,666
St. Peter's.....	1,144	41,032	41,373	53						41,032			82,405
Trent Valley.....	2,967	72,571	70,408							72,571			142,979
Murray.....	806	70,285	62,307					759		71,863			134,929
St. Andrews.....	113	14,895	11,198							14,895			26,093
<b>Total, Canadian.....</b>	<b>21,588</b>	<b>3,029,638</b>	<b>3,018,236</b>	<b>1,527,559</b>	<b>97,487</b>	<b>109,409</b>	<b>238,073</b>	<b>1,654,333</b>	<b>4,892,757</b>	<b>4,938,937</b>			<b>9,831,694</b>
<b>UNITED STATES VESSELS.</b>													
Sault Ste. Marie.....	2,138	79,323	42,963	274,018	3,046,816	4,833,094	354,750	2,790	3,523,832	5,188,732			8,712,604
Welland.....	697	6,437	140,171	207	38,626	33,070	6,671	261,823	191,905	299,483			491,388
St. Lawrence.....	1,374	16,445	332,565	10,141	16,263	4,594	3,930	424,972	369,293	449,899			819,102
Chambly.....	2,060		98,666	3,713				100,104	98,666	101,301			202,970
Ottawa.....	282	7,436		13,768				6,322		13,758			29,085
Rideau.....	16	982							982				1,964
St. Peter's.....	2	89								89			89
Trent-Valley.....													
Murray.....													
St. Andrews.....	25	12	1,916	5	81	25	146	227	2,155	415			2,570
<b>Total, United States.....</b>	<b>6,594</b>	<b>110,724</b>	<b>616,281</b>	<b>301,850</b>	<b>3,101,786</b>	<b>4,869,783</b>	<b>371,819</b>	<b>791,477</b>	<b>4,200,610</b>	<b>6,059,162</b>			<b>10,259,772</b>
<b>Grand total, Canadian and United States.....</b>	<b>28,182</b>	<b>3,140,362</b>	<b>3,114,288</b>	<b>458,808</b>	<b>3,199,273</b>	<b>4,979,192</b>	<b>669,892</b>	<b>2,445,810</b>	<b>9,093,367</b>	<b>10,998,099</b>			<b>20,091,496</b>

TABLE 3—Statement showing the Number, Tonnage and Nationality of Vessels passed through the several Canals, during the season of Navigation in 1917.

Vessels.	Total Number.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
<b>SABLE STE. MARIE CANAL.</b>												
Canadian Vessels, Steam.....	2,923	1,181,697	1,239,275	411,081	452,496	71,498	106,081	233,702	39,187	1,597,978	1,537,039	3,135,017
"    Sail.....	276	23,984	29,665	2,766	180		348			26,750	21,193	47,943
Total Canadian.....	3,199	1,205,681	1,259,940	413,847	452,676	71,498	106,081	233,702	39,535	1,624,728	1,558,232	3,182,960
United States Vessels, Steam.....	2,107	78,688	78,763	42,963	271,593	3,046,811	4,833,084	353,553	2,790	3,522,012	5,186,230	8,708,242
"    Sail.....	31	635	87		2,425	5	10	1,200		1,840	2,522	4,362
Total, United States.....	2,138	79,323	78,850	42,968	274,018	3,046,816	4,833,094	354,753	2,790	3,523,852	5,188,752	8,712,604
Grand total, Sault Ste. Marie.....	4,337	1,285,004	1,338,790	456,810	426,694	3,118,314	4,939,175	588,452	42,325	5,148,530	6,746,984	11,895,504
<b>WELLAND CANAL.</b>												
Canadian Vessels, Steam.....	2,096	359,101	338,008	555,909	1,079	22,697	3,328	1,897	659,069	939,604	993,084	1,932,688
"    Sail.....	458	116,468	98,529	56,686		3,255			76,737	176,919	175,266	352,185
Total, Canadian.....	2,554	475,569	436,537	612,605	1,079	25,952	3,328	1,897	727,406	1,116,523	1,168,350	2,284,873
United States Vessels, Steam.....	631	2,752	2,017	128,236	117	36,769	31,391	6,271	242,294	173,948	275,849	449,797
"    Sail.....	66	3,705	2,336	11,955	90	1,917	1,679	400	19,529	17,957	23,634	41,591
Total, United States.....	697	6,457	4,353	140,171	207	38,626	33,070	6,671	261,823	191,905	299,483	491,388
Grand total, Welland Canal.....	3,251	482,026	440,890	752,776	1,286	64,578	36,398	8,568	989,229	1,308,428	1,467,833	2,776,261
<b>ST. LAWRENCE CANALS.</b>												
Canadian Vessels, Steam.....	4,068	558,115	532,455	657,214	164	37			734,285	1,215,365	1,266,002	2,482,268
"    Sail.....	3,259	371,888	380,093	135,244				308	142,085	506,940	522,778	1,029,718
Total Canadian.....	7,327	929,503	912,548	792,458	164	37		308	876,970	1,722,306	1,789,080	3,511,986
United States Vessels, Steam.....	1,026	1,161	1,434	328,781		16,263	3,294	223	422,428	346,428	427,206	773,634
"    Sail.....	348	15,284	9,708	3,781	10,141		300	3,707	2,544	22,775	22,693	54,468
Total, United States.....	1,374	16,445	11,192	332,565	10,141	16,263	3,594	3,930	424,972	369,203	449,899	819,102
Grand total, St. Lawrence Canals.....	8,701	945,948	923,738	1,125,023	10,305	16,300	3,594	4,238	1,301,942	2,091,509	2,239,579	4,331,088







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TABLE 7 (No. 1)—General Statement showing the Quantity of each Article Transported on the Sault Ste. Marie Canal during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian; U. States.	
Agricultural imple- ments	10,718								10,750		10,750	10,718	32
Barley	57,858		11,394		18,884			432	88,568		88,568	69,252	19,316
Cement, bricks, etc.	219								419		419	219	200
Coal, hard	150						99,509		169,550		169,550		169,550
Coal, soft	607						744,538		1,078,337		1,078,337		1,078,337
Coke							2,100		2,707		2,707		2,707
Dressed meats		1								1	1		
Flax		9,895			10,108				29,895		29,895	19,787	10,108
Flour	20	277,974			54,030				333,027		333,027	279,017	54,030
Hay		65							65		65		
Iron, pig and bloom.	2,961								2,961		2,961		
Iron and steel, all other.	7,876								14,844		15,868	6,600	9,268
Merchandise.	212,079		2,284		4,715		19,592	219	258,511		273,151	220,322	52,829
Oats	175,673				3,274		3,400		231,118		231,118	226,994	4,124
Other mill products.	29,656				240				29,896		29,896	29,656	240
Other woods.	883								1,036		3,570	3,417	153
Ore, all other					1,106		5,015		6,121		11,466	11,466	6,121
Ore, copper.									8,644		8,644		8,644
Ore, iron									17,457		11,109,577	137,706	10,989,328
Petroleum	501						15,457	100,548	560		560	501	59
Poultry, game and fish											57		
Pulpwood	1,500		11,564						13,064		21,314	13,814	7,500
Rye	411				7,500				5,733		5,733		5,733
Sawed lumber					5,732				411		6,586	3,667	2,919
Shingles	2,481				1,167			2,527	1,419		1,419		1,419
Sugar	1,508								1,508		1,508	1,508	
Salt	5,747								16,747		16,747	3,747	11,000
Sand and stone.									200		17,115	17,115	200
Wheat	3,000						200	4,968	3,000		1,949,422	1,814,737	137,685
Wines, liquors and beers.									149		149	149	
Wool									114		114		
Total Freight	248,394		13,848		676,264		886,465	112,094	1,598,417		15,447,092	2,875,590	12,571,502

TABLE 7 (No. 2) —General Statement showing the Quantity of each Article Transported on the Welland Canal during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. States.
Agricultural Implements.....	10,958						10,958		10,958	10,958	
Barley.....		24,437				1,434		25,871	25,871		
Coal, Hard.....			2,026		6,057		8,083		8,083		8,083
Coal, Soft.....					1,292,584		1,292,584		1,292,584		1,292,584
Coke.....					2,200		2,200		2,200		2,200
Corn.....		6,392					7,706		7,706		7,706
Flax.....		3,060					3,060		3,060		3,060
Flour.....		7,348					8,448		8,448		8,448
Iron, Pig and Bloom.....	1,651						1,651		1,651		1,651
Iron and Steel, all other.....	5,684						5,244		5,244		5,244
Merchandise.....	43,292		1,568	250		73	45,060	323	45,383	43,492	1,891
Oats.....		80,747					1,853	82,600	82,600	80,143	2,457
Other Woods.....						28		28	28		28
Ore, all other.....			8,206				9,106		9,106		9,106
Ore, Iron.....			1,014				1,014		1,014		1,014
Patrolmen.....	69				300		60		119,731	97,058	22,673
Pulpwood.....	70,923						225,587		225,587		225,587
Sawed Lumber.....					12,569		18,330		18,330		18,330
Square Timber.....	20						20		20		20
Sugar.....	860						860		860		860
Sand and Stone.....	1,275		1,120				5,080		176,478	50,021	126,457
Wheat.....		428,553					434,984		434,984		434,984
Wines, Liquors and Beers.....	463						463		463		463
Total Freight.....	134,586	689,810	13,934	21,966	6,057	1,463,995	313,186	2,177,356	2,491,542	981,914	1,508,628

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TABLE 7 (No. 3)—General Statement showing the Quantity of each Through Article Transported on the Welland Canal during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canada.	U.S.
Agricultural implements	10,958								10,958		10,958		10,958
Barley		24,437									25,871		25,871
Coal, hard			2,026				6,057		8,083		8,083		8,083
"    soft							1,259,263		1,259,263		1,259,263		1,259,263
Coke							2,200		2,200		2,200		2,200
Corn		6,390				1,316			7,706		7,706		7,706
Flax		3,060							3,060		3,060		3,060
Flour		7,348				1,100			8,448		8,448		8,448
Iron, pig and bloom	1,651								1,651		1,651		1,651
Iron and steel, all other.	5,084								5,244		5,244		5,244
Merchandise	43,242				1,568	250		73	45,010	323	45,333	43,442	1,891
Oats		80,747						1,853	82,600	28	82,600	80,143	2,457
Other woods											28		28
Ore, all other					8,206				9,106		9,106		9,106
"    Iron		900			1,014			10,153	1,014	10,153	11,167		11,167
"    Petroleum	60					300		26,157	60	105,844	83,171		22,673
Pulpwood	2,835								157,499		157,499	157,499	
Sawed lumber		79,327							18,330		18,330	1,585	16,745
Square timber	20					12,569			20		20		20
Sugar	860								860		860		860
Sand and stone					1,120			300	3,805	330	4,105	2,685	1,420
Wheat		428,553				6,431			434,984		434,984	428,553	6,431
Wines, liquors and beers	463								463		463		463
Total Freight	65,173	629,862	158,609	1,585	13,934	21,966	6,057	1,305,637	213,773	1,959,050	2,202,823	852,553	1,350,270

TABLE 7 (No 4)—General Statement showing the Quantity of each Article Way Transported on the Welland Canal during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian, U. States.	
Coal, soft											33,321		
Merchandise	50								50		50		
Petroleum	68,088	13,887							68,088		13,887		13,887
Pulpwood	1,275	46,001							1,275		171,098		68,088
Sand and Stone											172,373		47,336
Total Freight	69,413	59,948							69,413	218,306	287,719	129,361	158,358

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TABLE 7 (No. 5)—General Statement showing the Quantity of each Article Transported on the St. Lawrence Canals during the Season of Navigation 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.		Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Canadian.	U. States.
Agricultural Implem'ts.	133	1							133	1			134	
All other Animals	991	3,140							991	3,140			4,131	
Barley	23,075									23,075			23,075	
Buckwheat	4									7			12	3
Cement, Bricks, &c.	19,266	382							20,423	1,091			18,903	2,551
Coal, Hard	1,076	405							1,076	524,040			526,121	428
"    Soft	5,064	7,223	600						7,007	1,454,756			1,461,763	1,449,137
Corn	43	3,012							43	7,761			7,804	46
Dressed Meats.	19	34							19	34			53	7,758
Flax		2,276								2,276			2,276	
Flour	1,104	9,600							1,104	11,000			11,004	1,100
Fruits and Vegetables.	332	356							332	356			688	
Hay	5,019	1,943							5,019	1,943			6,962	
Hides and Leather.	2	33							3	33			36	1
Household Goods.	1,704	3,710							1,705	3,710			5,414	1
Iron, Pig and Bloom.	2,234	208							2,234	258			2,442	50
Iron and Steel, all other	5,765	15,180							5,966	15,180			21,145	1
Lave Stock	123	368							125	368			493	2
Merchandise	45,230	48,272							47,114	51,897			91,670	7,341
Oats	1,173	82,140							1,173	82,140			83,313	
Other Mill Products.	168	848							168	848			1,016	
Packing House														
"    Products	115	52							117	52			167	2
"    Woods	2,328	2,081							2,328	2,109			4,409	28
Ore, all other	150								150				150	
"    Iron										2,218			2,218	
Peas	5	26							5	26			31	
Petroleum	15,336	42,088							15,336	63,578			78,914	21,400
Poultry, Game and Fish		17								17			17	
Potatoes	25	176							25	176			201	
Pulpwood	70,134		291,974						362,108				362,108	
Rye	3								3				3	
Sawed Lumber	23,637	49,134							23,637	78,303			101,940	
Shingles		3							20	3			23	5
Square Timber	65	860							65	860			925	
Sugar	3,454	117							3,454	117			3,571	
Salt	1,318	200							1,318	200			1,518	
Sand and Stone	54,987	70,216							55,287	70,891			126,178	3,280
Wheat	449	426,251							449	426,251			426,700	
Wines, Liquors & Beers.	1,877	605							1,877	605			2,482	
Total Freight....	263,933	795,238	292,214	29,769	17	50	5,257	2,004,666	561,421	2,829,723	3,391,14	1,370,533	2,020,611	

TABLE 7 (No. 6.)—General Statement showing the Quantity of each Through Article Transported on the St. Lawrence Canals during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian	U. States.
All other Animals..	68	57							68	57	125	125	
Barley.....	2,228	23,075							2,228	23,075	23,075	23,075	
Cement, Bricks, etc..	900								900		519,457	519,457	
Coal, Hard.....											1,431,664	1,431,664	
"    Soft.....											5,034	5,034	
Corn.....		3,909									2,276	2,276	2,276
Flax.....		2,276									9,232	9,232	8,132
Fruit and Vegetables..		8,132		1,100							72	72	72
Household Goods.....		72									3,471	3,471	4,873
Iron, Pig and Bloom..	1,402	3,471							1,402	3,471	4,873	4,873	
Iron and Steel, all other.	1,584	1,584							1,584	1,584	1,584	1,584	
Merchandise.....	3,047	12,000	200						3,247	12,000	15,247	15,247	
Oats.....	35,422	36,486							35,422	36,486	71,908	71,908	
Other Woods.....	80,817	80,817							80,817	80,817	80,817	80,817	
Ore Iron.....										28	28	28	28
Peas.....										2,218	2,218	2,218	
Petroleum.....		5								5	5	5	5
Pulpwood.....	2,840	41,613							2,840	63,103	65,943	65,943	
Sugar.....	67,767	291,974							359,741		359,741	359,741	
Salt.....	2,904								2,904		2,904	2,904	
Wheat.....	33								33		33	33	
Wines, Liquors & Beers..	900	425,896							900	425,896	425,896	425,896	
Total Freight...	119,155	638,274	292,174	1,100			1,974,982	411,329	2,614,356	3,025,685	1,044,794	1,980,891	



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TABLE 7 (No. 7) — General Statement showing the Quantity of each Way Article Transported on the St. Lawrence Canals during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. States.
	Agricultural Implements.....	133	1							133	1	134	134
All other animals.....	923	3,083							923	3,083	4,006	4,006	
Buckwheat.....	4	5	3						7	5	12	9	3
Cement, bricks, etc.....	17,038	382					708		18,195	1,091	19,286	16,735	2,551
Coal, hard.....	1,676	465					4,583		1,676	4,988	6,664	428	6,236
"    soft.....	4,164	7,223	600				16,269		6,107	24,092	30,199	12,626	17,573
Corn.....	43	3					2,724		43	2,727	2,770	46	2,724
Dressed meats.....	19	31							19	31	53	53	
Flour.....	1,104	1,768							1,104	1,768	2,872	2,872	
Fruits and vegetables.....	332	284							332	284	616	616	
Hay.....	5,019	1,943							5,019	1,913	6,962	6,962	
Hides and leather.....	2	33	1						3	33	36	35	1
Household goods.....	302	239	1						303	239	541	541	1
Iron, pig and bloom.....	650	208		50					650	258	908	858	50
Iron and steel, all other.....	2,718	3,180							2,719	3,180	5,899	5,898	1
Live stock.....	123	368	1						125	368	493	491	2
Merchandise.....	9,808	11,786	15						11,692	15,411	27,103	19,762	7,341
Oats.....	1,173	1,323							1,173	1,323	2,496	2,496	
Other mill products.....	168	848							168	848	1,016	1,016	
"    packing house products.....	115	52		2					117	52	169	167	2
Other woods.....	2,328	2,081							2,328	2,081	4,409	4,409	
Ore, all other.....	150								150		150	150	
Peas.....	5	21							5	21	26	26	
Petroleum.....	12,496	475							12,496	475	12,971	12,971	
Poultry, game and fish.....	17	17							17	17	17	17	
Potatoes.....	25	176							25	176	201	201	
Pulpwood.....	2,367								2,367		2,367	2,367	
Rye.....	3								3		3	3	
Sawed lumber.....	23,637	49,134	20						23,637	78,303	101,940	101,940	
Shingles.....	65	860	3						65	860	925	925	
"    square timber.....	550	117							550	117	667	667	
Sugar.....	1,285	200							1,285	200	1,485	1,485	
Salt.....	54,987	70,216							55,287	70,891	126,178	122,948	3,230
Sand and stone.....	449	355					300		449	355	804	804	
Wheat.....	449	355							449	355	804	804	
Wines, liquors and beers.....	917	140							917	140	1,057	1,057	
Total Freight.....	144,778	156,964	41	50	16	50	5,257	28,584	150,092	215,367	365,459	325,759	39,720



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TABLE 7 (No. 9)—General Statement showing the Quantity of each Article Transported on the St. Peter's Canal during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. States.
Agricultural implements	2								2		2		2
All other animals	74								74		74		74
Barley		4								4			4
Cement, bricks, etc.	176	47							176	47	223		223
Coal, hard	88								88		88		88
" soft	140	41,805							140	41,805	41,945		41,945
Corn	12								12		12		12
Dressed meats	12								12		12		12
Flour	1,399	16							1,399	16	1,415		1,415
Fruits and vegetables	676	6							676	6	682		682
Hay	209	1							209	1	210		210
Hides and leather	1								1		1		1
Household goods	20	10							20	10	30		30
Iron and steel, all other	106								106		106		106
Lave stock	7								7		7		7
Merchandise	2,566	1,450							2,566	1,450	4,016		4,016
Oats	713	5							713	5	718		718
Other mill products	622	29							622	29	651		651
" packing-house products													
Other woods	260	5							260	5	265		265
Ore, all other	122								122		122		122
Ore, iron	865								865		865		865
Ore, iron	80								80		80		80
Peas	5								5		5		5
Petroleum	632	27							632	27	659		659
Poultry, game and fish	172	2,188							172	2,188	2,360		2,360
Potatoes	2,872	31							2,872	31	2,903		2,903
Sawn lumber	1,599	199							1,599	199	1,798		1,798
Shingles	190	84							190	84	274		274
Square timber	4								4		4		4
Sugar	131	16							131	16	147		147
Salt	1,708	40							1,708	40	1,748		1,748
Sand and stone		805								805	805		805
Wheat	1								1		1		1
Wool	1								1		1		1
Total Freight	14,520	47,734							14,520	47,734	62,254		62,254

TABLE 7 (No. 10)—General Statement showing the Quantity of each Article Transported on the Murray Canal, during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. States.
Coal, soft.....	90	100							90	3,298	3,388	190	3,198
Fruits and Vegetables.....	325								325		325		
Merchandise.....	4,539	2,309							4,539	2,309	6,848	6,848	
Sawed Lumber.....		9								9	9	9	
Sugar.....	108								108		108	108	
Sand.....	46,925								46,925		46,925	46,925	
Total Freight.....	51,987	2,418							51,987	5,616	57,603	54,405	3,198

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TABLE 7, No. 11—General Statement showing the Quantity of each Article Transported on the Ottawa Canals during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian, U. States.	
												Canadian.	U. States.
Agricultural implements	123	8							123	8	131	131	
All other animals	147	2,625							147	2,625	2,772	2,772	
Buckwheat	4								4		4	4	
Cement, bricks, &c.	1,643	115							1,643	115	1,758	1,758	
Coal, hard	632	775							949	775	1,724	8	1,716
" soft	135						307		3,808	307	4,115	125	3,990
Corn	30	1							30	1	31	31	
Dressed meats	14	7							14	7	21	21	
Flax	1								1		1	1	
Flour	526	106							526	106	632	632	
Fruits and vegetables	185	68							185	68	253	253	
Hay	40	1,352							40	1,352	1,392	1,392	
Hides and leather	2	38							2	38	40	40	
Household goods	144	85							144	85	229	229	
Iron, pig and bloom	211	16							211	16	227	227	
Iron and steel, all other.	799	159							799	159	949	949	
Live stock	97	349							97	349	446	446	
Merchandise	4,551	5,719							12,605	5,719	18,324	10,148	8,176
Oats	93	120							93	120	213	213	
Other mill products	108	502							108	502	610	610	
" packing house products.	87	29							87	29	116	116	
Other woods		10,139								10,139	10,139	10,139	
Peas	4	27							4	27	31	31	
Petroleum	536	87							536	87	623	623	
Poultry, game and fish.	15	15							15	15	15	15	
Potatoes	9	173							9	173	182	182	
Rye	5								5		5	5	
Sawed lumber	52	37,420							52	37,420	37,472	37,472	
Shingles	20								20		20	20	
Square timber	19	2,497							19	2,497	2,516	3,830	20
Sugar	376	66							376	66	442	442	
Salt	1,051	94							1,051	94	1,145	1,145	
Sand		78,898								78,898	78,898	78,898	
Wheat	89	21							89	21	110	110	
Wines, liquors and beers	695	156							695	156	851	851	
Total	12,404	141,681					307	12,051	24,455	190,350	214,835	200,953	13,882

TABLE 7 (No. 12)—General Statement showing the Quantity of each Article Transported on the Rideau Canal during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. States.
All other animals	372	1,301							372	1,301	1,673		
Cement, bricks, etc.	752	11							752	11	763		
Coal, hard	8	51							8	51	59		2,980
" soft	39	60					2,980		39	60	99		
Dressed meats	19	14							19	14	33		
Floor	4	51							4	51	55		
Fruits and vegetables	15	1							15	1	16		
Hay	2,530	424							2,530	424	2,954		
Hides and leather	30	30							30	30	60		
Household goods	127	1							127	1	128		
Iron, pig and bloom	984	15							984	15	999		
Iron and steel, all other.	4	4							4	4	8		
Live stock	1	1							1	1	2		
Merchandise	4,097	3,255							4,097	3,255	7,352		
Oats	67	67							67	67	134		
Other mill products	15	101							15	101	116		
" packing house pro- ducts	111	20							111	20	131		
" woods	287	624							287	624	911		
Peas	5	5							5	5	10		
Petroleum	52	27							52	27	79		
Potatoes	7	7							7	7	14		
Pulpwood	120	120							120	120	240		
Sawed lumber	3,511	5,019							3,511	5,019	8,530		
Shingles	48	48							48	48	96		
Square timber	217	33							217	33	250		
Sugar	68	33							68	33	101		
Salt	603	28							603	28	631		
Sand and stone	35,745	17,964							35,745	17,964	53,709		
Wheat	5	5							5	5	10		
Wines, liquors and beers	450	31							450	31	481		
Total Freight	52,285	29,284					2,980		52,285	32,264	84,549	81,330	3,219

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TABLE 7 (No. 13) — General Statement showing the Quantity of each Article Transported on the Trent Valley Canals during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. States.
Agricultural implements	38								38		38	38	
All other animals	8	43							8	43	51	51	
Cement, bricks, etc.	80	144							80	144	224	224	
Coal, hard	112	2							112	2	114	114	
“ soft	86	19							86	19	105	105	
Flour	22								22		22	22	
Fruits and vegetables	21								21		21	21	
Household goods	123	23							123	23	146	146	
Iron, pig and bloom	5	2							5	2	7	7	
Iron and steel, all other	3								3		3	3	
Live stock	121	48							121	48	169	169	
Merchandise	978	963							978	963	1,941	1,941	
Other mill products	43								43		43	43	
“ woods	12,083	16,800							12,083	16,800	28,883	28,883	
Peas	9	5							9	5	14	14	
Petroleum	13								13		13	13	
Potatoes	15	2							15	2	17	17	
Pulpwood											13,764	13,764	
Rye	24	24							24	24	48	48	
Sawed lumber	651	1,155							651	1,155	1,806	1,806	
Shingles	53	27							53	27	80	80	
Square timber	60	217							60	217	277	277	
Sugar	11								11		11	11	
Salt	1								1		1	1	
Sand and stone	100								100		100	100	
Wheat	1,018	8							1,018	8	1,026	1,026	
Total Freight	15,678	33,246							15,678	33,246	48,924	48,924	

TABLE 7 (No 14)—General Statement showing the Quantity of each Article Transported on the St. Andrews, during the Season of Navigation in 1917.

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. States.
Hay .....		5								5		5	
Lave stock .....		7								7		7	
Merchandise .....	3								3		162		162
Other woods .....	6,375								6,375		6,375		6,375
Sawed lumber .....	625								625		625		625
Total Freight .....	7,005	171							7,003	171	7,174		7,174



# RAILWAY STATISTICS

OF THE

DOMINION OF CANADA

FOR THE

YEAR ENDED JUNE 30

1917

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(From sworn Returns furnished by the several Railway Companies.)

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*PRINTED BY ORDER OF PARLIAMENT.*



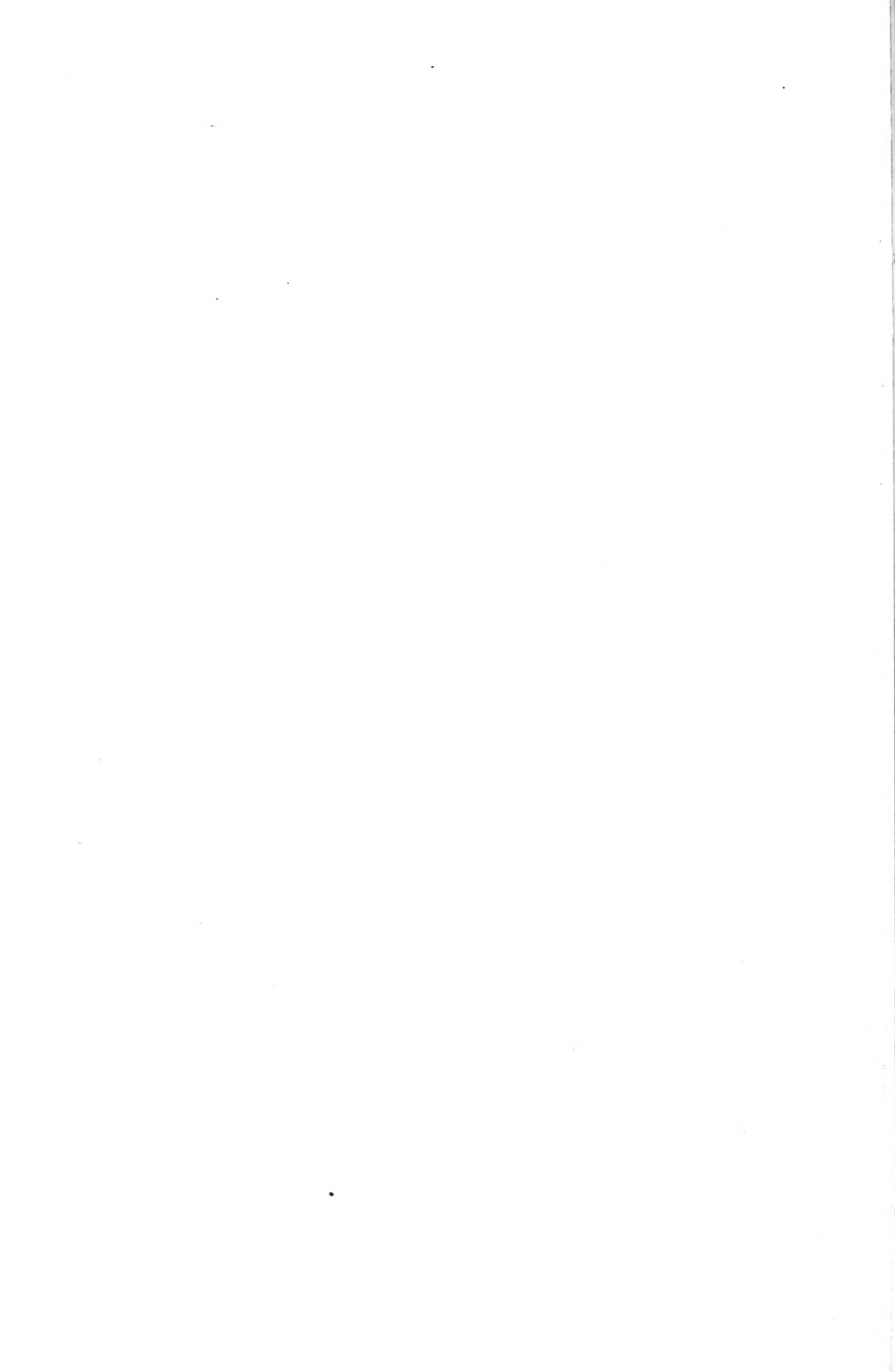
OTTAWA

J. DE LABROQUERIE TACHÉ

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1918

[ No. 20b—1918. ]



*To His Excellency the Duke of Devonshire, K.G., P.C., G.C.M.G., G.C.V.O., etc., etc.,  
Governor General and Commander in Chief of the Dominion 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, 1917.

J. D. REID,  
*Minister of Railways and Canals.*



OFFICE OF THE COMPTROLLER OF STATISTICS,  
OTTAWA, March 4, 1918.

A. W. CAMPBELL, Esq., C.E.,

Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit herewith Railway Statistics for the year ended June 30, 1917.

It will be seen that there was a substantial expansion in traffic and gross earnings during the year, despite the abnormal conditions developed by the European war.

In the tables which form the body of this report will be found some details respecting the operations of railways throughout the Dominion.

ABRIDGED REPORT.

Owing to the conditions created by the war, it has been deemed expedient to materially abridge the report for 1917. Statistical matter omitted will, however, be kept in the department, and will be available when required.

ELECTRIC RAILWAYS.

Statistical data in relation to electric railways appear in these introductory pages and in the body of the report.

RAILWAY MILEAGE.

There was an addition of 1,170·15 to operating mileage, which brought up the total to 38,604·20. The increment was located chiefly in the western provinces, and consisted of mileage which had in previous years being reported as under construction.

8 GEORGE V, A. 1918

The history of operating railway mileage in Canada, less trackage rights, is here brought down to the year 1917:—

Year.	Miles in operation	Year.	Miles in operation
1835.....	0	1865.....	2,240
1836.....	16	1868.....	2,270
1846.....	16	1873.....	3,832
1847.....	54	1878.....	6,226
1850.....	66	1883.....	9,577
1851.....	159	1888.....	12,163
1852.....	205	1893.....	15,005
1853.....	506	1898.....	16,870
1854.....	764	1903.....	18,988
1855.....	877	1908.....	22,966
1856.....	1,414	1914.....	30,795
1858.....	1,863	1915.....	35,578
1859.....	1,994	1916.....	37,434
1860.....	2,065	1917.....	38,604

The following statement shows the growth of railway mileage in the various provinces since 1907:—

Provinces.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
Ontario.....	7,638	7,933	8,229	8,230	8,322	8,546	9,000	9,255	10,702	11,320	11,049
Quebec.....	3,516	3,574	3,663	3,795	3,882	3,883	3,986	4,043	4,677	4,733	4,734
Manitoba.....	3,074	3,111	3,205	3,221	3,446	3,520	3,993	4,076	4,498	4,310	4,194
Saskatchewan.....	2,025	2,681	2,631	2,932	3,121	3,754	4,651	5,089	5,327	5,378	6,124
Alberta.....	1,323	1,323	1,321	1,488	1,494	1,897	2,212	2,545	3,174	3,894	4,444
British Columbia.....	1,686	1,733	1,796	1,832	1,842	1,855	1,951	1,978	3,100	3,604	3,885
New Brunswick.....	1,503	1,509	1,547	1,522	1,548	1,545	1,545	1,839	1,962	1,957	1,959
Nova Scotia.....	1,329	1,344	1,351	1,351	1,354	1,357	1,359	1,365	1,367	1,436	1,422
Prince Edward Island.....	267	267	269	269	269	269	279	279	275	275	278
Yukon.....	91	91	91	91	102	102	102	102	102	102	102
In United States.....							225	224	398	426	413

Second track was increased by 186·25 miles in 1917, bringing the total up to 2,674·91.

Yard track and sidings had an addition of 827·68 miles, making the total 9,224·15.

The totals of second track and yard track and sidings since 1907 are as follows:—

—	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
Double track.....	1,067	1,211	1,464	1,543	1,610	1,752	1,984	2,293	2,451	2,489	2,675
Yard track and sidings.....	4,092	4,546	4,761	5,155	5,550	6,149	6,935	7,518	7,852	8,396	9,224

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All tracks combined:—

Year.	Miles.	Increase.
1907.....	27,967	
1908.....	29,068	1,101
1909.....	30,329	1,261
1910.....	31,429	1,100
1911.....	32,559	1,130
1912.....	34,629	2,070
1913.....	38,223	3,594
1914.....	40,605	2,382
1915.....	45,885	5,280
1916.....	48,319	2,434
1917.....	50,503	2,184

Tables 1, 2, and 3 will afford information in detail with respect to railway mileage.

## RAILWAY CAPITAL.

The capitalization of railways in operation was \$1,985,119,991—an increase of \$91,242,172 for the year.

The actual increment was greater by \$15,142,633. That sum, representing a loan by Government to the Grand Trunk Railway, had for years been erroneously returned as part of the capitalization of the company. It was eliminated in 1917. There is the further qualification, that several lines regarded as being under construction in 1916 were in 1917 officially accepted as being in operation.

Distribution of capitalization:—

Stocks.....	\$ 872,829,993
Consolidated debenture stock (C.P.R.).....	216,284,882
Funded debt.....	896,005,116
Total.....	1,985,119,991

Distribution of funded debt:—

Bonds.....	\$ 812,420,116
Miscellaneous obligations.....	26,012,000
Income bonds.....	25,275,000
Equipment trust obligations.....	32,298,000
Total.....	896,005,116

## STOCKS.

	1914.	1915.	1916.	1917.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Dividend-paying.....	492,580,812 00	491,538,059 00	420,697,257 00	364,376,024 00
Non-dividend.....	360,529,841 00	356,263,042 00	427,572,186 00	508,453,969 00
Amount of dividends.....	30,434,601 00	32,341,337 00	32,277,874 00	26,865,424 00
Per cent on dividend-paying.....	6 17	6 58	7 68	7 37
Per cent on all stocks.....	3 56	3 81	3 81	3 02
Per mile, all stocks.....	30,138 00	27,358 00	25,950 00	25,400 00

## FUNDED DEBT.

	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Outstanding for this purpose.....	617,561,386 00	851,724,905 00	869,323,449 00	895,492,856 00
Per mile of line affected.....	23,481 00	28,129 00	27,282 00	26,892 00

## CONSOLIDATED DEBENTURE STOCK.

	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Amount outstanding (C.P.R.).....	173,307,470 00	176,284,882 00	176,284,882 00	216,284,882 00
Interest.....	6,809,520 00	7,008,942 00	7,051,395 00	10,278,672 00
Per mile of line affected.....	14,503 00	13,746 00	14,239 00	19,101 00

The statement with respect to stocks and dividends was thoroughly revised for 1917. Changes were made in the classification, which had the effect of reducing dividends and swelling interest on funded debt.

It must be borne in mind that railways owned and operated by Government have neither stocks nor bonds outstanding. In other cases, there may be stocks and no bonds. The foregoing calculations are based on the facts. Railways under construction are omitted.

The cost, including equipment, of government owned and operated lines, for which no capitalization is given in foregoing statements, is shown in the following table:—

	Miles.	Capital Cost.	Cost per Mile.
		\$	\$
Intercolonial.....	1,510	121,118,667	80,211
National Transcontinental.....	2,003	163,797,784	81,898
Prince Edward Island.....	278	11,459,026	41,223
Tenniskaming and Northern Ontario.....	329	20,737,832	63,033
New Brunswick Coal and Railway.....	58	1,936,600	32,217
Totals.....	4,178	319,049,909	.....

Since the foregoing figures were made up, and many calculations based thereon, it has been officially announced that the correct mileage of the Intercolonial is 1,518.39.

The following tabular statement shows the record of railway capitalization, by periods, since 1876:—

Year.	Stocks.	Debenture Stock	Funded Debt.	Total.
	\$	\$	\$	\$
1876.....	180,955,657	.....	76,079,531	257,035,188
1881.....	199,527,981	.....	84,891,313	284,418,293
1886.....	317,141,948	.....	169,359,306	486,501,254
1891.....	339,769,786	.....	292,291,654	632,061,440
1896.....	361,075,340	.....	336,137,601	697,212,941
1901.....	424,414,314	.....	391,696,523	816,110,837
1907.....	588,563,591	.....	583,369,217	1,171,937,808
1913.....	755,316,516	163,257,224	613,256,952	1,531,830,692
1914.....	853,110,653	173,307,470	782,402,638	1,808,820,761
1915.....	847,801,101	176,284,882	851,724,905	1,875,810,888
1916.....	848,269,488	176,284,882	869,323,449	1,893,877,819
1917.....	872,829,993	216,284,882	896,005,116	1,985,119,991



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The relationship of dividends and net earnings to share capital during the past eleven years is shown in the following table:—

Year.	Debenture Stock.	Interest on Debenture Stock.	Stocks.	Dividends on Stocks.	Per cent on Stocks.	Net Earnings.	Stocks and Debenture Stock.	Per cent
	\$	\$	\$	\$	\$	\$	\$	
1907			588,568,591	12,760,435	2-17	42,989,537	588,568,591	7-30
1908			607,891,349	12,955,243	2-11	39,614,171	607,891,349	6-51
1909			647,534,647	19,230,126	2-97	40,456,252	647,534,647	6-24
1910			687,557,387	21,747,914	3-16	53,550,777	687,557,387	7-78
1911			749,207,687	30,577,740	4-08	57,698,709	749,207,687	7-70
1912			770,459,351	31,164,791	4-04	68,677,213	770,459,351	8-91
1913	163,257,224	6,337,188	755,316,516	27,333,373	3-72	74,671,160	918,573,740	8-13
1914	173,307,470	6,805,320	853,110,653	30,434,601	3-56	64,108,280	1,026,418,123	6-25
1915	176,284,882	7,008,942	847,801,101	32,341,337	3-81	52,111,973	1,024,085,983	5-09
1916	176,284,882	7,051,395	848,269,488	32,277,874	3-81	81,346,395	1,024,554,325	7-94
1917	216,284,882	10,278,672	872,829,993	26,865,424	3-02	87,880,842	1,089,114,875	8-07

It should be explained that in 1917 the sum of \$6,555,300, which had been classified by the Grand Trunk as dividends, was transferred to interest on funded debt.

Net earnings in the foregoing statement are the difference between gross receipts and operating expenses. Net operating earnings, after deductions have been made for fixed charges and so on, will be found in Table 9 under the head of Income Account.

## AID TO RAILWAYS.

Cash subsidies paid to railways by the Dominion in 1917 amounted to \$774,285.68.

The particulars of aid given to railways since 1875 will be found in Table 5. The account respecting aid stood, on June 30, as follows:—

Year.	Dominion.	Provinces.	Municipalities.
	\$ cts.	\$ cts.	\$ cts.
1876	*18,564,352 37	4,203,240 43	5,384,005 70
1882	37,371,208 33	17,044,628 91	9,080,944 63
1888	c90,644,574 40	23,342,758 82	11,625,050 43
1894	102,087,290 06	29,368,697 75	14,374,610 99
1900	107,760,795 70	31,310,170 06	16,173,303 45
1906	118,474,316 04	43,278,022 12	17,576,538 15
1912	e154,075,235 09	35,945,515 16	18,051,323 60
1913	163,251,469 42	36,500,015 16	18,078,673 60
1914	178,834,528 74	37,023,275 16	f17,914,836 40
1915	183,479,192 91	37,437,895 16	17,914,836 40
1916	184,719,627 88	37,437,895 16	17,914,836 40
1917	185,493,913 56	37,437,895 16	17,914,836 40

\* Included loan \$2,311,666.67 to Northern Railway; not reported after this year.

c Eastern extension \$1,284,495.76, now included in I.C. Railway.

e This amount includes payments of \$6,263,715.86 to Grand Trunk Pacific under the Implement clause of the agreement between Government and the Company.

f This reduction is due to the repayment of a loan.

Included with the aid to the C.P.R. is the sum of \$37,785,319.54 for lines built by Government and handed over to the Company. In that total is \$6,639,581 for surveys.

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Following is an analysis of the cash subsidies paid by the various provinces since 1875:—

Year.	Ontario.		Quebec.		Nova Scotia		New Brunswick.		British Columbia.		Manitoba.		Totals.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
1875.....	3,183,037	02	1,578,443	27	823,330	00	2,754,000	00					8,338,810	29	
1881.....	5,984,007	52	3,276,071	81	1,653,903	68	3,865,165	00			386,250	00	16,674,174	01	
1893.....	6,391,932	74	7,864,561	83	2,121,944	55	4,425,281	81		37,500	00	2,623,286	77	23,464,507	70
1899.....	7,281,129	63	11,206,833	10	2,204,847	10	4,506,040	71		37,500	00	2,703,061	77	28,039,412	31
1905.....	8,562,504	47	12,259,285	66	3,991,193	75	4,580,934	71		37,500	00	2,872,887	02	32,304,304	61
1911.....	9,204,616	04	12,333,196	52	6,384,299	75	4,907,486	71		798,209	00	2,878,887	02	36,506,695	04
1915.....	9,669,236	04	12,333,196	52	6,987,849	75	4,907,486	71	1,284,572	00	2,878,887	02	37,437,895	16	

Additions were not made in succeeding years.

The cash aid given by municipalities is shown, by provinces, in the following table:—

Year.	Ontario.		Quebec.		Nova Scotia.		New Brunswick.		British Columbia.		Manitoba.		North-west Territories.		Totals.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1875.....	3,774,620	13	513,000	00			127,500	00							4,415,120	13
1881.....	5,988,300	01	1,864,144	62	250,000	00	293,500	00							8,305,944	63
1887.....	8,055,305	81	2,380,986	62	250,000	00	296,500	00	37,500	00	480,600	00			11,500,892	43
1893.....	10,289,453	37	2,840,718	62	277,685	00	336,500	00	37,500	00	490,600	00			14,272,456	99
1899.....	11,971,164	37	2,865,718	62	281,685	00	336,500	00	37,500	00	490,000	00	22,261,29		16,005,429	28
1905.....	12,930,290	81	3,126,036	08	471,898	10	341,500	00	37,500	00	490,600	00	22,261,29		17,420,085	65
1911.....	13,361,075	63	3,137,536	08	481,898	10	341,500	00	207,952	50	490,600	00	22,261,29		18,042,823	60
1912.....	13,361,075	63	3,137,536	08	481,898	10	341,500	00	216,452	50	490,600	00	22,261,29		18,051,323	60
1913.....	13,361,075	63	3,158,136	08	481,898	10	341,500	00	223,202	50	490,600	00	22,261,29		18,078,673	60
1914.....	13,361,075	63	3,186,501	38	481,898	10	341,500	00	37,500	00	490,600	00	22,261,29		17,914,836	40

In succeeding years additions were not made.

Following is an analysis of the various forms in which cash aid has been given to railways by the Dominion, by the provinces, and by municipalities:—

#### DOMINION.

Cash subsidies.....	\$ 110,708,290 57
Loans.....	25,576,533 33
Cost of lines handed over to C.P.R.....	37,785,319 97
Paid to Quebec Government.....	5,160,053 83
Implement clause, G.T.P., agreement.....	6,263,715 86
Total.....	\$ 185,493,913 56

The purchase of Grand Trunk Pacific bonds aggregating \$33,116,000 by the Government, could not properly be classified as cash aid. It is therefore omitted from this account, and appears in a later paragraph, among guarantees authorized.

The Dominion Government has also constructed and now operates, the Eastern Division of the National Transcontinental railway, on which an expenditure of \$163,797,784 had taken place up to March 31, 1917.

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## PROVINCES.

Cash Subsidies .....	\$ 29,940,865 16
Loans.....	7,197,030 00
Subscriptions to shares.....	300,000 00
Total.....	\$ 37,437,895 16

NOTE—\$4,447,000 was transferred from Subsidy to Loan Account.

## MUNICIPALITIES.

Cash subsidies.....	\$ 12,670,837 78
Loans.....	2,404,498 62
Subscriptions to shares.....	2,839,500 00
Total.....	\$ 17,914,836 40

NOTE—A loan of \$186,202.50 cancelled in 1914.

## LAND GRANTS.

Following have been the land grants to railways:—

	Aeres.
By the Dominion.....	31,864,074
By the province of Quebec.....	1,681,690
By the province of British Columbia.....	8,119,221
By the province of New Brunswick.....	1,647,772
By the province of Nova Scotia.....	160,000
By the province of Ontario.....	624,232
Total.....	44,096,989

\*See explanatory paragraph.

In the case of the province of Quebec the land grants have been on a special basis, and it is therefore necessary to have in mind the following facts:—

Aeres granted—convertible.....	13,324,950
Converted, at 52½ cents per acre.....	\$ 6,995,599
Amount of conversion.....	\$ 4,557,728
Aeres granted—not convertible.....	10,360,934
Aeres earned—not convertible.....	1,681,690

The facts with respect to grants of lands by the Dominion, as revised by the Railway Lands Branch of the Department of the Interior, are as follows:—

Name of Company	Area earned Aeres.
Alberta Railway and Irrigation Co. (formerly North West Coal and Navigation Co.).....	1,114,368
Calgary and Edmonton Railway Co.....	1,888,448
Canadian Northern Railway Co. (Ry. from point on C.P.R. to Hudson Bay).....	2,624,128
Canadian Northern Railway Co. (formerly Lake Manitoba Railway and Canal Co.).....	798,400
Canadian Pacific Railway Co.—Main Line.....	18,206,986
C.P.R., Pipestone Extension, Souris Branch.....	200,320
C.P.R., Souris Branch.....	1,408,704
Great North West Central Railway Co. (formerly North West Central Ry. Co.).....	320,000
Manitoba and North Western Railway Co.....	1,501,376
Manitoba South Western Colonization Railway Co.....	1,396,800
Canadian Northern Railway Co. (formerly Manitoba and South Eastern Ry. Co.).....	680,320
Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.....	1,625,344
Saskatchewan and Western Railway Co.....	98,880
Total.....	31,864,074

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The Dominion has not made any grants of lands in aid of railways since 1894.

### GUARANTEES.

Guarantees of bonds have been substituted in large measure for other forms of aid during recent years. It has been most difficult to get an accurate statement of the facts in this regard, particularly as to the precise amount of outstanding liability. The following table is based on official reports from the Dominion and Provincial Governments:—

	Authorized.	Bonds Executed.	Guarantees Earned.
	\$	\$	\$
Dominion.....	189,666,539	183,532,523	183,532,523
Manitoba.....	25,519,553	25,519,553	25,519,553
Alberta.....	59,495,900	45,120,450	45,120,450
Saskatchewan.....	47,725,000	28,095,345	22,683,994
Ontario.....	7,860,000	7,860,000	7,860,000
British Columbia.....	68,782,072	60,964,599	60,964,599
New Brunswick.....	7,763,000	7,763,000	6,431,562
Quebec.....	280,000	280,000	280,000
Total.....	407,092,064	359,135,470	352,392,681

It must be understood that \$33,116,000 worth of Grand Trunk Pacific bonds purchased by the Dominion Government, and referred to in a preceding paragraph, is included with the amount of guarantees authorized, although in such case the guarantee does not apply. There is, however, no other way of recording the amount in this connection.

The facts for the preceding six years, as respects the amount of guarantees authorized, are as follows:—

	1911.	1912.	1913.	1914.	1915.	1916.
	\$	\$	\$	\$	\$	\$
Dominion.....	52,439,865	91,983,553	95,486,590	188,965,063	188,965,063	189,666,539
Manitoba.....	20,899,660	20,899,660	24,059,447	25,221,580	25,221,580	25,221,580
Alberta.....	25,743,000	45,489,000	43,489,000	55,8104,50	59,410,450	58,736,750
Saskatchewan.....	11,999,000	32,500,000	33,735,000	41,625,000	41,625,000	47,725,000
Ontario.....	7,860,000	7,860,000	7,860,000	7,860,000	7,860,000	7,860,000
Nova Scotia.....	5,022,000	5,022,000	5,022,000			
British Columbia.....	23,196,832	38,946,832	59,262,072	80,322,072	80,322,072	80,322,072
New Brunswick.....	700,000	1,893,000	3,654,265	6,063,000	6,063,000	7,763,000
Quebec.....	476,000	476,000	392,000	392,000	392,000	308,000
Total.....	148,336,357	245,070,045	274,960,374	406,259,165	409,869,165	417,612,941

Following are the details according to official statements received from the Dominion and the various provinces:—

#### DOMINION.

The list of securities guaranteed by the Dominion prior to June 30, 1916, is as follows:—

1. The Canadian Northern Railway Company, chapter 7, Edward VII (1903).

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The guarantee is for the principal of £1,923,287 sterling, and interest thereon at the rate of 3 per cent per annum for fifty years.

2. The Canadian Northern Railway Company, chapter 11, 7-8 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 July 20, 1908, interest payable half yearly.

3. The Canadian Northern Ontario Railway Company, chapter 6, 1-2 George V (1911).

The guarantee is for the principal of £7,493,835 12s. 4d. sterling debenture stock and interest thereon at the rate of  $3\frac{1}{2}$  per cent per annum for fifty years, from May 19, 1911, interest payable half yearly, amount actually issued £7,350,000.

4. The Canadian Northern Alberta Railway Company, chapter 6, 9-10 Edward VII (1910) as amended by chapter 8, 2 George V (1912).

The guarantee is for the principal of £647,260 5s. 6d. sterling debenture stock and interest thereon at the rate of  $3\frac{1}{2}$  per cent per annum for fifty years, from May 4, 1910, interest payable half yearly.

5. The Grand Trunk Pacific Railway Company, chapter 71, 3 Edward VII (1903) and chapter 24, 4 Edward VII (1904) and chapter 98, Acts of 1905.

The guarantee is for 3 per cent bonds of the railway company to an amount equal to 75 per cent of the cost of construction of the Western Division of the National Transcontinental railway, but not exceeding \$13,000 per mile in respect of the Prairie section of the said railway. The amount of bonds issued and guaranteed is £7,200,000, of which £2,300,000 were issued in 1905, £2,000,000 in 1909, and £2,000,000 in 1910.

The total authorized issue was £14,000,000 and the balance of the issue not sold to the public—£6,800,000—was purchased by the Government under the authority of the Grand Trunk Pacific Bond Purchase Act, 1913. There is therefore no guarantee, as respects this part of the issue, outstanding.

6. The Canadian Northern Alberta Railway Company, chapter 6, 2 George V (1912).

The guarantee is for the principal of £733,561 12s. 10d. sterling debenture stock and interest thereon at the rate of  $3\frac{1}{2}$  per cent per annum for fifty years, from April 1, 1912, interest payable half yearly.

7. The Grand Trunk Pacific Railway Company, chapter 20 of the Acts of 1914.

Total guarantee authorized, \$16,000,000, interest at 4 per cent. Sold to the public, \$3,193,507; pledged with the Dominion Government against advances, \$7,500,000; pledged to Grand Trunk Railway Company, \$5,306,493.

8. The Canadian Northern Railway Company, chapter 20 of the Acts of 1914.

Guarantee authorized, \$45,000,000, at 4 per cent. Sold to the public, \$17,033,333; pledged with the Dominion Government against advances, \$12,500,000; pledged with Columbia Trust Coy., New York, against advances, \$15,333,333.

## ALBERTA.

Railway.	Authorized Mileage.	Par Bond Value.	Mileage executed by Government.	Par Bond Value.
		\$		\$
Canadian Northern.....	902.4	13,536,000	774.8	11,022,000
Canadian Northern Western.....	1,390.	22,530,000	662.57	11,222,250
Grand Trunk Pacific Branch Lines Co.....	259.5	4,182,500	259.5	4,182,500
Edmonton, Dunvegan and British Columbia Ry.....	471.	9,420,000	471.	9,420,000
Alberta and Great Waterways.....	350.	7,000,000	350.	7,000,000
Central Canada.....	114.	2,280,000	100.	2,000,000
Lacombe and Blindman Valley.....	39.1	547,400	39.1	273,700
Totals.....	3,526.0	59,495,900	2,656.97	45,120,450

## SASKATCHEWAN.

	Number of Miles.	Total Authorized Guarantees of \$15,000 per Mile.	Par value of Bonds sold.	Amount of earnings Released.
		\$ cts.	\$ cts.	\$ cts.
Canadian Northern Railway Company.....	1,155	17,325,000 00	13,709,400 00	10,456,495 25
Canadian Northern Saskatchewan Railway Co.....	255	3,825,000 00	1,174,813 33	782,210 60
Grand Trunk Pacific Branch Lines Co.....	760	11,400,000 00	11,328,892 00	9,908,627 53
Grand Trunk Pacific Saskatchewan Railway Co.....	605	9,075,000 00	Nil.	Nil.
		41,625,000 00	26,213,105 33	21,147,333 38
Bridges and Terminals—				
Canadian Northern Saskatchewan Ry. Co.....		1,000,000 00	Nil.	Nil.
Grand Trunk Pacific Branch Lines Co.....		5,100,000 00	1,882,240 00	1,536,660 62
Grand Trunk Pacific Saskatchewan Ry. Co.....				
		47,725,000 00	28,095,345 33	22,683,994 00

## ONTARIO.

To the Canadian Northern Ontario Railway Company—Guarantee of interest on bonds aggregating \$7,860,000.

## NOVA SCOTIA.

The aid given by the province of Nova Scotia to the Halifax and South-western Railway Company was not in the nature of a guarantee of bonds; but the facts of the case cannot very well be given under any other head. They are as follows:—

In the first instance the province advanced to the company \$13,500 per mile on 257.25 miles of its railway. The company gave a mortgage to the province covering the railway system for the total amount so advanced, and for interest on advances during construction, but could redeem the mortgage by repaying the said sum of \$13,500 per mile, less the sum of \$3,200 per mile. The \$3,200 per mile represents the sum which, under the provisions of a general Act on the subject, the province grants as a subsidy to a company constructing a railway.

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This arrangement existed until the new arrangement was made under chapter 27 of the Acts of 1912, as amended by chapter 64 of the Acts of 1913. The new arrangement provided for releasing the original mortgage, for crediting the railway company with the \$3,200 per mile, and interest thereon, for repayment to the company of the equivalent of £180,400 sterling which the company had paid as interest on the mortgage, and for adding that amount to the sums due by the company for principal. The equivalent of £180,400 sterling was paid to the Halifax and Southwestern Railway Company, but instead of being paid in cash it was paid by delivering to the company £180,400 of provincial debentures. The total amount the company owed the province under this arrangement was settled at \$4,447,000, in which is included the equivalent of £180,400 sterling.

As security for that amount the company delivered to the province its bonds guaranteed by the Canadian Northern Railway Company, aggregating \$4,447,000, these bonds being secured by a mortgage trust deed covering the railway system of the Halifax and Southwestern Railway Company, and the province still holds the bonds and collects the interest thereon as the same falls due.

Under the primary arrangement the railway company did not deliver bonds to the province, but merely executed the mortgage, which has been released and superseded by the new arrangement.

The advance of \$13,500 per mile was not made by the province delivering bonds to the company; it was made in cash, the province having borrowed the money in London by the issue and sale of inscribed stock. The interest on the guaranteed bonds that the province now holds offsets within about one-quarter per cent the interest payable on the inscribed stock, this difference being accounted for by the fact that the stock was issued below par.

After the guaranteed bonds of the Halifax and Southwestern Railway Company are paid, the amount of provincial aid it will have received will have been \$3,200 per mile.

## BRITISH COLUMBIA.

	Guarantee Authorized.	Par Value of Bonds Executed.	Amount of Guarantee.
	\$	\$	\$
Canadian North Pacific Ry.....	47,975,000	40,157,527	30,900,958
Pacific Great Eastern Ry.....	20,160,000	20,160,000	18,035,198
Nakusp and Slocan Ry.....	647,072	647,072	647,072
	68,782,072	60,964,599	49,583,228

In 1916 there was added to the above \$11,550,000 of bonds of the Pacific Great Eastern, the guarantee of which had been authorized by the Legislature. The official statement for 1917 omits the amount.

## MANITOBA.

To the Canadian Northern Railway Co., the following guarantees have been given:—

1,243.73 miles, main line and branches in Manitoba at \$10,000 per mile.....	\$12,437,286.66
332.3 " main line and branches in Manitoba at \$13,000 per mile....	4,320,000.00
287.28 " Port Arthur Division at \$20,000 per mile.....	5,745,586.67
Guarantees on Winnipeg Terminals.....	3,000,600.00
Total guarantees.....	\$25,502,873.33

Canadian Northern Manitoba Railway—

12.3 miles at \$13,000.00 per mile.....	\$ 16,680.00
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## NEW BRUNSWICK.

	Amount guaranteed.	Earned and paid.
	\$ cts.	\$ cts.
International.....	896,000 00	896,000 00
New Brunswick and Seaboard.....	297,000 00	297,000 00
Southampton.....	155,000 00	155,000 00
St. John and Quebec.....	4,250,000 00	3,597,898 70
St. John and Quebec.....	1,700,000 00	1,020,662 90
Fredericton and Grand Lake.....	465,000 00	465,000 00
Total.....	7,763,000 00	6,431,561 60

## QUEBEC.

Guarantee of bonds of the Montreal and Western Railway Company to the amount of \$280,000.

## INCOME ACCOUNT.

Net operating revenue.....		\$ 87,880,842 02
Outside operations—		
Revenue.....	\$ 5,572,488 50	
Expenses.....	3,560,828 50	
Net revenue.....	\$ 2,011,660 00	
Income—Other sources.....	17,731,038 52	
		19,742,698 52
		\$ 107,623,540 54
Less Taxes.....		4,726,462 17
Gross corporate income.....		\$ 102,897,078 37
Deductions—		
Lease of other roads.....	\$ 3,707,655 03	
Other rents.....	7,242,241 87	
Interest on funded debt.....	30,616,990 49	
Other interest.....	6,126,569 27	
Sinking funds.....	9,733 33	
Other deductions.....	3,472,208 82	
		51,175,398 81
Net corporate income.....		\$ 51,721,679 56
Disposal of net corporate income—		
Dividends—Common.....	\$ 26,696,343 75	
Dividends—Preferred.....	10,500,252 30	
Additions and betterments.....	1,697 82	
Reserves.....	93,671 85	
		37,291,965 72
Balance to profit and loss.....		\$ 14,429,713 84

It should be explained that the foregoing dividends are exaggerated by the inclusion of interest on the debenture stock of the Canadian Pacific Railway. In that case, it is really interest on a debenture of such a peculiar class that it neither belongs to stocks nor funded debt.

Details will be found in Table 9.

## CURRENT ASSETS AND LIABILITIES.

This year, for the first time, the facts with regard to current assets and liabilities are given. They will be found in Table 9A, and throw a helpful light on the financial position of railways.



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## PUBLIC SERVICE OF RAILWAYS.

The railways of Canada carried 53,749,680 passengers and 121,926,272 tons of freight in 1917. Both totals show material gains over the preceding year.

The history of passenger traffic since 1875 is as follows:—

Year.	Passengers carried.	Year.	Passengers carried.
1875.....	5,190,416	1911.....	37,097,718
1880.....	6,462,948	1912.....	41,124,181
1885.....	9,672,599	1913.....	46,203,765
1890.....	12,821,262	1914.....	46,702,280
1895.....	13,987,580	1915.....	49,322,035
1900.....	21,500,175	1916.....	49,027,671
1905.....	25,288,723	1917.....	53,749,680
1910.....	35,894,575		

The record of freight traffic is as follows:—

Year.	Tons of freight (2,000 lbs.)	Year.	Tons of freight (2,000 lbs.)
1875.....	5,670,837	1909.....	66,842,258
1880.....	9,938,858	1910.....	74,482,866
1885.....	14,659,271	1911.....	79,884,282
1890.....	20,787,469	1912.....	89,444,331
1895.....	21,524,421	1913.....	106,992,710
1900.....	35,946,183	1914.....	106,393,989
1905.....	50,793,957	1915.....	87,204,833
1906.....	57,966,713	1916.....	109,659,088
1907.....	63,866,135	1917.....	121,916,272
1908.....	63,071,167		

## PASSENGER TRAFFIC.

Passengers carried 1 mile:

1907.....	2,049,549,813	1913.....	3,265,656,080
1909.....	2,033,001,225	1915.....	2,483,708,745
1911.....	2,605,968,924	1917.....	3,150,127,428

Passengers carried 1 mile per mile of line:—

1907.....	90,921	1913.....	111,353
1909.....	84,342	1915.....	69,802
1911.....	102,597	1917.....	79,829

Passengers carried per mile of line:—

1907.....	1,431	1913.....	1,576
1909.....	1,355	1915.....	1,299
1911.....	1,560	1917.....	1,362

Average receipts per passenger per mile:—

1907.....	cents. 1.911	1913.....	cents. 1.973
1909.....	1.921	1915.....	1.021
1911.....	1.944	1917.....	1.946

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## Passenger revenue:—

1907.....	\$ 39,184,437	1913.....	\$ 64,441,430
1909.....	39,073,488	1915.....	50,173,267
1911.....	50,566,894	1917.....	61,290,291

## Passenger train revenue:—

1907.....	\$ 45,730,652	1913.....	\$ 74,431,994
1909.....	45,282,326	1915.....	60,699,935
1911.....	58,317,998	1917.....	80,767,114

## Average receipts per passenger:—

1907.....	\$1.219	1913.....	\$1.394
1909.....	1.195	1915.....	1.083
1911.....	1.360	1917.....	1.140

## Average number of passengers per train:—

1907.....	56	1913.....	62
1909.....	51	1915.....	50
1911.....	60	1917.....	59

## Average number of passengers per car:—

1913.....	11	1916.....	14
1914.....	14	1917.....	16
1915.....	14		

## Average number of cars per passenger train:—

1913.....	5.6	1915.....	5.4
1914.....	4.2	1916.....	5.5
		1917.....	5.7

## Average passenger journey—miles:—

1907.....	64	1913.....	71
1909.....	62	1915.....	54
1911.....	70	1917.....	59

The average earnings from passenger train service per passenger train mile were \$1.529, as compared with \$1.311 in 1916.

The average earnings per passenger car mile were 23.7 cents. This includes all classes of cars forming a passenger train.

## FREIGHT TRAFFIC.

Freight traffic aggregated 121,916,272 tons, representing an increase over 1916 of 12,257,184 tons, or 10.28 per cent.

## Tons hauled 1 mile:—

1907.....	11,687,711,830	1913.....	23,032,951,596
1909.....	13,160,567,550	1915.....	17,661,309,723
1911.....	16,048,478,295	1917.....	31,186,707,851

## Tons hauled 1 mile per mile of line:—

1907.....	518,486	1913.....	785,820
1909.....	545,991	1915.....	496,355
1911.....	631,829	1917.....	807,946

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## Average receipts per ton per mile:—

1907.....	0·815	1913.....	0·758
1909.....	0·727	1915.....	0·751
1911.....	0·777	1917.....	0·690

## Average trainload—tons:—

1907.....	260	1913.....	342
1909.....	278	1915.....	344
1911.....	305	1917.....	436

## Average number of loaded cars per freight train:—

1907.....	16·92	1913.....	18·00
1909.....	16·37	1915.....	18·06
1911.....	18·03	1917.....	19·59

## Average number of tons per loaded car:—

1907.....	15·37	1913.....	19·01
1909.....	16·98	1915.....	18·43
1911.....	16·91	1917.....	22·24

## Average length of haul—miles:—

1913.....	216	1915.....	202
1914.....	217	1916.....	257
		1917.....	256

## Average revenue per ton:—

1913.....	\$1·636	1916.....	\$1·679
1914.....	1·614	1917.....	1·765
1915.....	1·520		

Following is the record of freight tonnage per mile of line since 1875:—

1875.....	1,180	1904.....	2,475
1881.....	1,646	1910.....	3,012
1887.....	1,342	1916.....	2,929
1893.....	1,466	1917.....	3,159
1898.....	1,706		

Under the head of Earnings will be found further information with respect to freight business for 1917.

Details with regard to commodities are here given for 1913, 1915 and 1917:

	1913	1915	1917
	Tons	Tons	Tons
<b>Products agriculture—</b>			
Grain.....	10,386,282	9,159,793	16,491,090
Flour.....	2,374,198	2,514,609	3,374,965
Other mill products.....	1,310,167	1,486,665	1,684,176
Hay.....	1,172,022	1,211,835	1,042,395
Tobacco.....	65,489	38,580	44,482
Cotton.....	93,807	108,877	154,256
Fruit and vegetables.....	1,295,568	1,474,314	1,649,779
Other products of agriculture.....	499,269	391,236	686,311
<b>Products of animals—</b>			
Live stock.....	1,226,242	1,387,103	1,554,560
Dressed meats.....	616,274	608,062	645,094
Other packing-house products.....	371,663	395,364	596,349
Poultry, game, and fish.....	263,760	282,856	373,514
Wool.....	40,684	41,156	62,456
Hides and leather.....	205,583	211,411	249,794
Other products of animals.....	449,357	430,705	499,120
<b>Products of mines—</b>			
Anthracite coal.....	8,455,652	6,477,642	7,623,874
Bituminous coal.....	17,950,653	16,114,480	21,782,484
Coke.....	2,010,198	1,171,427	1,641,448
Ores.....	4,348,666	3,524,211	5,570,215
Stone, sand, etc.....	6,359,395	4,841,415	3,910,562
Other products of mines.....	1,104,978	998,360	2,006,054
<b>Products of forests—</b>			
Lumber.....	9,590,068	7,985,885	10,109,749
Other products of forests.....	7,019,032	5,990,670	8,989,933
<b>Manufactures—</b>			
Petroleum and other oils.....	807,062	868,214	1,414,800
Sugar.....	820,252	707,714	797,763
Naval Stores.....	19,898	28,961	108,958
Iron, pig and bloom.....	1,394,725	488,216	1,723,249
Iron and steel rails.....	1,304,551	450,764	1,100,245
Castings and machinery.....	1,499,084	891,063	1,920,301
Bar and sheet metal.....	1,305,682	635,150	1,562,313
Cement, brick and lime.....	3,958,419	2,419,240	2,698,166
Agricultural implements.....	593,470	285,491	469,142
Wagons, carriages, tools, etc.....	286,069	339,749	672,939
Wines, liquors, and beers.....	372,495	247,944	218,977
Household goods and furniture.....	493,629	295,496	438,483
Other manufactures.....	6,838,904	4,928,391	8,795,971
Merchandise.....	4,365,852	5,272,163	6,070,858
Miscellaneous.....	4,161,154	2,393,123	3,151,203

Separating the foregoing items into classes, and comparing the figures with those of preceding years, the result is as follows:—

	1907.	1909.	1911.	1913.	1915.	1917
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Products of agriculture.....	9,521,661	11,963,263	13,809,536	17,196,802	16,385,909	25,127,453
Products of animals.....	2,469,266	2,807,487	3,190,702	3,173,562	3,356,657	3,980,887
Products of mines.....	18,460,172	23,931,061	28,652,236	40,230,542	33,127,535	42,534,637
Products of forest.....	10,229,635	11,595,007	13,238,347	16,609,100	13,976,555	19,090,682
Manufactures.....	7,974,641	7,902,592	13,573,957	16,241,081	12,586,393	21,921,309
Merchandise.....	2,309,084	2,393,285	2,438,089	4,365,852	5,272,163	6,070,858
Miscellaneous.....	5,533,426	6,234,372	4,981,385	4,161,154	2,393,123	3,151,203
Totals.....	56,497,885	66,827,067	79,884,282	*106,992,710	b 87,204,838	c121,916,272

\* Undistributed 1,561,457 tons.    b Undistributed 106,503 tons.    c Undistributed 39,244 tons.

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Following is the ratio which each class bore to the total:—

	1907.	1909.	1911.	1913.	1915.	1917.
Products of agriculture.....	16.85	17.91	17.17	16.31	18.79	20.61
Products of animals.....	4.37	4.21	4.00	3.01	3.75	3.26
Products of mines.....	32.68	35.81	35.87	38.16	37.89	34.90
Products of forest.....	18.11	17.35	16.57	15.75	16.03	15.66
Manufactures.....	14.11	11.82	17.00	18.68	14.76	17.99
Merchandise.....	4.08	3.58	3.06†	4.14	6.04	4.98
Miscellaneous.....	9.79	9.32	6.33	3.95	2.74	2.60

The origin of freight in 1913, 1915 and 1917 is shown in the following table—

	1913.	1915.	1917.
	Tons.	Tons.	Tons.
Originating in Canada.....	56,829,297	49,257,996	67,134,164
Received from connecting roads.....	21,284,742	15,706,668	23,451,578
Received from U.S. roads.....	27,317,214	22,134,118	31,350,530
Undistributed.....	1,561,457	106,056	..
Total.....	106,992,710	87,204,838	121,916,272

It will be observed that the net tonnage for 1917 was 98,464,694. A connecting road is defined as being a road operating within the boundaries of Canada. Traffic received from a United States road applies to all tonnage brought into Canada by roads operating on both sides of the boundary, as well as freight delivered at the boundary to a Canadian line.

## EARNINGS AND OPERATING EXPENSES.

Gross earnings:—

1917.....	\$313,492,949
1916.....	263,527,157
Increase.....	\$ 49,965,792

Operating expenses:—

1917.....	\$223,574,598
1916.....	180,542,259
Increase.....	\$ 43,032,339

The foregoing totals include the results of five units which cannot be properly classified as railways. The Pullman Company is an example. Therefore, for the purposes of all calculations the total of gross earnings used is \$310,771,479 and of operating expenses \$222,890,637.

Year.	Gross earnings.	Operating expenses.	Percentage of operating expenses to earnings.
	\$	\$	
1875.....	19,470,539	15,075,532	81.1
1881.....	27,987,508	20,121,418	71.9
1887.....	38,841,609	27,624,683	71.1
1893.....	52,042,396	36,616,033	70.3
1899.....	62,243,784	40,706,217	65.3
1905.....	106,467,198	79,977,573	75.2
1911.....	188,733,494	131,033,785	69.4
1916.....	263,527,157	180,542,259	68.9
1917.....	310,771,479	222,890,637	71.7

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## EARNINGS.

Gross earnings for 1916 and 1917 came from the following sources:—

	1916.		1917.	
	\$	cts.	\$	cts.
<b>Rail line—</b>				
Freight.....	184,099,887	30	215,245,256	49
Passengers.....	53,097,642	59	61,290,290	70
Excess baggage.....	478,393	91	569,566	07
Sleeping cars.....	2,478,864	56	2,832,750	58
Parlour and chair cars.....	259,622	10	268,875	33
Mail.....	3,049,539	96	3,169,910	97
Express.....	6,845,234	69	8,999,073	85
Other passenger trains.....	69,728	85	72,110	40
Milk.....	493,234	12	538,486	82
Switching.....	1,706,280	33	2,380,706	18
Special service train.....	94,954	08	113,832	01
Other freight train.....	108,893	40	27,652	04
Water transfer—freight.....			41,518	50
<b>Totals.....</b>	<b>252,773,275</b>	<b>89</b>	<b>295,550,029</b>	<b>94</b>
<b>Water line—</b>				
Freight.....	136,443	76	2,265,118	77
Passenger.....	60,058	55	1,841,356	53
Excess baggage.....	117	60	3,023	04
Other passenger service.....	150	28	1,743	10
Mail.....			17,307	11
Express.....	6,596	36	55,957	82
Special service.....	11,702	00		
Other.....	203,783	61	158,804	93
<b>Totals.....</b>	<b>418,852</b>	<b>16</b>	<b>4,397,311</b>	<b>30</b>
<b>Incidental—</b>				
Dining and buffet.....	2,527,322	70	3,026,048	70
Hotel and restaurant.....	527,719	73	542,581	61
Station, train, etc., privileges.....	77,898	39	99,875	58
Parcel room.....	69,226	65	82,446	02
Storage—freight.....	216,063	08	247,132	61
Storage—baggage.....	65,118	58	77,134	48
Demurrage.....	729,054	46	1,526,214	72
Telegraph and telephone.....	155,057	82	328,295	29
Grain elevators.....	1,120,840	09	1,189,366	97
Stockyards.....	17,844	92	10,262	42
Rents of buildings, etc.....	1,625,137	53	1,457,494	70
Miscellaneous.....	1,518,168	63	1,820,245	80
<b>Totals.....</b>	<b>8,650,352</b>	<b>58</b>	<b>10,407,058</b>	<b>90</b>
Joint facilities, Cr. bal.....			46,173	34
<b>Gross earnings.....</b>	<b>\$ 261,888,653</b>	<b>97</b>	<b>\$310,771,479</b>	<b>10</b>

Table 9 will afford details with regard to net earnings.

Gross earnings per mile of line:—

1875.....	\$4,053	1911.....	\$7,430
1880.....	3,275	1912.....	8,209
1885.....	2,993	1913.....	8,760
1890.....	3,562	1914.....	7,894
1895.....	2,928	1915.....	5,616
1900.....	4,006	1916.....	6,943
1905.....	5,197	1917.....	8,051
1910.....	7,034		

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## Gross earnings per revenue train mile—all trains:—

1907.....	\$1-875	1913.....	\$2-263
1909.....	1-816	1915.....	2-143
1911.....	2-103	1917.....	2-683

## Freight earnings per ton:—

1907.....	\$1-472	1913.....	\$1-636
1909.....	1-432	1915.....	1-520
1911.....	1-561	1917.....	1-766

## Earnings per passenger:—

1907.....	\$1-219	1913.....	\$1-394
1909.....	1-195	1915.....	1-083
1911.....	1-363	1917.....	1-140

## Freight earnings per freight train mile:—

1907.....	\$2-069	1913.....	\$2-595
1909.....	2-041	1915.....	2-579
1911.....	2-376	1917.....	3-006

## Passenger earnings per passenger train mile:—

1907.....	\$1-263	1913.....	\$1-413
1909.....	1-150	1915.....	1-016
1911.....	1-348	1917.....	1-160

## Gross earnings for years preceding 1916 came from the following sources:—

Gross Earnings.	1910.		1912.		1914.	
	\$	cts.	\$	cts.	\$	cts.
Passengers.....	46,018,879	56	56,543,636	60	62,012,296	46
Mails.....	1,799,887	80	1,914,720	39	2,500,175	88
Express.....	4,143,837	52	5,294,388	08	6,444,214	02
Baggage, parlour cars, etc.....	993,613	63	1,295,414	59	1,607,516	84
Freight.....	117,497,604	03	149,961,140	13	165,753,730	45
Station and train privileges.....	679,061	12	1,086,687	37	1,044,737	28
Telegraphs, rents, etc.....	2,823,333	47	3,307,738	63	3,720,868	11
	173,956,217	13	219,403,752	79	243,083,539	04

Owing to the adoption of entirely new methods of accounting in 1907, it is not practicable to carry comparisons with respect to earnings back of that year. The amounts credited to the several sources of revenue in preceding years, and the ratio they bore to the total, are shown in the following table:—

Year.	Passenger.	Per cent.	Freight.	Per cent.	Mail and Express.	Per cent.	Other Sources.	Per cent.	Total.
	\$		\$		\$		\$		\$
1875.....	6,410,934	32-92	12,073,570	62-00	693,250	3-56	292,784	1-50	19,470,539
1881.....	8,223,254	29-34	18,666,982	66-69	946,159	3-37	145,332	0-51	27,987,508
1887.....	11,867,597	30-55	24,581,047	63-28	1,575,157	4-05	771,992	1-98	38,841,609
1893.....	15,087,299	29-12	32,935,028	63-28	2,151,769	4-13	1,868,298	3-59	52,042,396
1898.....	15,662,311	26-16	38,508,175	64-48	2,732,004	4-59	2,852,613	4-77	59,715,105
1903.....	24,862,109	25-88	63,089,448	65-67	3,596,145	3-53	4,716,823	4-91	96,064,526
1906.....	33,392,188	26-64	81,433,115	64-97	4,510,649	3-59	5,986,912	4-77	125,322,865

Details with respect to earnings are given in tables 6, 7, and 9 in the body of this report.

OPERATING EXPENSES.

The total operating expenses in 1917 was \$222,890,637.08—an increase for the year of \$42,348,378.10.

Operating expenses were equal to 71.74 per cent of gross earnings.

Per mile of line:—

	\$		\$
1875	3,138	1905	3,904
1880	2,341	1910	4,869
1885	2,229	1915	4,152
1890	2,503	1916	4,823
1895	2,050	1917	5,774
1990	2,360		

Per train mile—all trains:—

	Earnings per train mile.	Expenses per train mile.
	\$	\$
1899	1-192	0-779
1900	1-282	0-864
1901	1-366	0-944
1902	1-501	1-028
1903	1-591	1-117
1904	1-634	1-216
1905	1-614	1-213
1906	1-723	1-198
1907	1-953	1-381
1908	1-869	1-364
1909	1-816	1-309
1910	2-036	1-409
1911	2-103	1-460
1912	2-173	1-493
1913	2-263	1-604
1914	2-253	1-659
1915	2-144	1-585
1916	2-358	1-623
1917	2-683	1-925

The distribution of operating expenses in 1916 and 1917 was under the following heads:—

	1916.			1917.		
	\$	cts.	Per cent.	\$	cts.	Per cent.
Way and structures	36,040,945	06	19.96	41,154,193	11	18.46
Equipment	35,822,484	20	19.84	46,371,178	39	20.80
Traffic	5,560,515	12	3.08	6,236,810	91	2.79
Transportation—rail line	92,882,661	24	51.45	114,327,343	71	51.29
—water line	184,824	13	0.10	3,271,892	62	1.47
Miscellaneous operations	3,279,588	42	1.81	3,962,543	94	1.78
General expenses	6,781,574	19	3.75	7,584,851	55	3.40
Transportation for investment—Cr.	10,333	38	0.01	18,207	15	0.01
Total	180,542,258	98		222,890,637	08	



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It is impracticable to make accurate comparisons between the foregoing distribution of operating expenses and the figures of preceding years. The facts, however, are valuable, and are as follows:—

Operating Expenses.	1910.			1912.			1914.		
	\$	cts.	Per cent.	\$	cts.	Per cent.	\$	cts.	Per cent.
Way and structures.....	27,035,603	46	22.45	31,514,098	12	20.90	35,292,226	82	19.71
Equipment.....	29,002,301	30	21.59	29,811,510	09	19.78	36,375,330	87	20.32
Traffic expenses.....	4,366,176	92	3.63	5,293,699	75	3.51	6,546,602	45	3.65
Transportation.....	58,928,170	74	48.94	78,969,543	65	52.39	94,119,066	73	52.58
General expenses.....	4,073,188	00	3.395	5,137,688	26	3.42	6,612,032	03	3.74
Total.....							178,975,258	90	

Details with respect to operating expenses by reporting railways will be found in table 8.

Since special significance attaches to the maintenance of way and structures and to the upkeep of equipment, the following facts are given:—

Year.	Maintenance of Way.		Mileage.	Amount per Mile of Line.		Year.	Maintenance of Equipment.		Mileage.	Amount per Mile of Line.	
	\$	cts.		\$	cts.		\$	cts.		\$	cts.
1907.....	20,887,091	66	22,452	930 30	1907.....	21,666,373	08	22,452	965 01		
1909.....	21,153,274	46	24,104	877 58	1909.....	21,510,303	59	24,104	892 40		
1911.....	29,245,093	22	25,400	1,151 38	1911.....	26,127,638	12	25,400	1,028 65		
1913.....	35,933,322	78	29,336	1,224 92	1913.....	37,289,718	47	29,336	1,271 13		
1915.....	28,762,906	91	35,582	808 35	1915.....	28,156,261	08	35,582	791 32		
1916.....	36,040,045	06	37,434	962 79	1916.....	35,822,484	20	37,434	956 95		
1917.....	41,154,193	11	38,604	1,066 17	1917.....	46,371,178	39	38,604	1,201 32		

## EQUIPMENT.

Following are the facts with respect to equipment:—

	Number.	Increase.
Locomotives.....	5,626	126
Cars in passenger service.....	6,377	51
Cars in freight service.....	203,499	1,885
Cars in Companies' service.....	18,611	933

Classification of locomotives:—

Locomotives.	1907.	1909.	1911.	1913.	1915.	1916.	1917.
Passenger.....	964	1,056	1,215	1,474	1,840	1,744	1,389
Freight.....	2,206	2,539	2,659	3,011	2,912	3,077	3,490
Switching.....	334	384	435	634	734	669	747

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The reduction in passenger locomotives in 1917 was due to a revision of classification by the Canadian Northern Railway System.

## Locomotives and cars:—

Locomotives and cars.	1907.	1909.	1911.	1913.	1914.	1915.	1917.
Locomotives.....	3,504	3,969	4,219	5,119	5,447	5,486	5,626
Freight cars.....	107,407	117,779	127,158	182,221	201,190	201,690	203,499
Passenger cars.....	3,642	4,192	4,513	5,696	6,002	6,326	6,377

## Passenger cars:—

Cars in Passenger service.	1907.	1909.	1911.	1913.	1915.	1917.
First class.....	1,300	1,560	1,601	2,053	2,213	2,168
Second class.....	472	471	517	627	632	687
Combination.....	405	429	434	492	486	418
Emigrant.....	272	317	357	437	509	534
Dining.....	105	127	137	176	215	216
Parlour.....	63	60	80	117	138	155
Sleeping.....	212	261	306	440	538	562
Baggage, express, and postal.....	782	926	1,015	1,275	1,457	1,462
Other.....	31	41	36	74	138	175
Totals.....	3,642	4,192	4,513	5,696	6,326	6,377

## Freight cars:—

Cars in freight service.	1907.	1909.	1911.	1913.	1915.	1917.
Box.....	68,149	74,477	79,412	128,511	145,307	145,290
Flat.....	20,477	21,188	21,069	25,177	25,290	25,322
Stock.....	4,817	5,518	5,809	6,745	7,553	7,883
Coal.....	10,358	11,721	13,768	14,746	15,703	15,649
Tank.....	132	197	277	479	560	731
Refrigerator.....	1,917	2,466	2,807	3,911	4,713	5,234
Other.....	1,557	2,212	4,016	2,712	2,556	3,390
Totals.....	107,407	117,779	127,158	182,221	201,690	203,499

## Capacity of freight cars:—

—	1907.		1909.		1911.		1913.	
	No.	Capacity in tons.	No.	Capacity in tons.	No.	Capacity in tons.	No.	Capacity in tons.
Box.....	66,934	1,848,980	74,479	2,130,145	79,412	2,343,920	128,511	4,096,480
Flat.....	20,118	535,167	21,220	584,455	21,069	600,970	25,117	763,665
Stock.....	4,731	122,550	5,561	150,800	5,899	161,765	6,475	193,975
Coal.....	10,060	291,638	11,721	379,981	13,768	508,215	14,746	567,210
Tank.....	132	2,632	197	4,012	277	7,490	479	15,785
Refrigerator.....	1,745	48,745	2,465	71,085	2,807	81,815	3,911	115,455
Other.....	1,820	59,200	2,273	64,835	4,016	102,105	2,712	104,315
Totals.....	105,540	2,908,903	117,916	3,385,313	127,158	3,806,280	182,221	5,856,885

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Capacity of freight cars—*Concluded.*

	1915.		1917.	
	No.	Capacity in tons.	No.	Capacity in tons.
Box.....	145,307	4,825,543	145,290	4,899,651
Flat.....	25,315	798,671	25,322	816,245
Stock.....	7,638	226,190	7,882	232,185
Coal.....	15,703	611,020	15,649	538,609
Tank.....	463	14,604	731	25,134
Refrigerator.....	4,713	139,350	5,234	155,510
Other.....	2,551	99,677	3,390	137,122
Totals.....	201,690	6,731,265	203,499	6,798,456

The changes in 1916 and 1917 were few and unimportant. The facts for prior years, as respects classes, are given below:—

Class.	Capacity.	1908.	1910.	1912.	1914.
	Pounds.				
I.....	10,000	771	393	77	.....
II.....	20,000	1,995	1,245	742	457
III.....	30,000	3,227	2,412	3,277	3,118
IV.....	40,000	25,855	20,858	14,695	9,781
V.....	50,000	1,135	1,029	3,237	827
VI.....	60,000	69,416	76,610	89,512	117,984
VII.....	70,000	230	217	292	281
VIII.....	80,000	9,790	11,927	21,951	63,133
IX.....	90,000	.....	.....	.....	.....
X.....	100,000	3,448	4,992	7,135	8,603
XI.....	110,000	.....	.....	.....	.....
XII.....	120,000	.....	.....	.....	.....
All over	120,000	.....	.....	.....	.....
Total.....		115,867	119,713	140,918	204,190

## Locomotives and cars per 1,000 miles of line:—

Rolling stock.	Per 1,000 miles of line.					
	1907.	1909.	1911.	1913.	1915.	1917.
Locomotives.....	156	165	166	175	154	146
Freight cars.....	4,783	4,887	5,006	6,211	5,669	5,272
Passenger.....	162	174	177	194	178	165

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## TRAIN, CAR, AND LOCOMOTIVE MILEAGE.

Revenue train mileage:—

—	1907.	1909.	1911.	1913.	1915.	1917.
Passenger trains.....	30,220,461	32,295,730	36,985,911	45,652,365	41,648,243	44,083,575
Freight trains.....	38,923,890	40,304,906	46,220,813	60,275,896	43,661,573	62,863,724
Mixed trains.....	3,971,414	7,061,580	6,277,468	7,044,194	7,736,391	8,746,811
Special trains.....			232,341	464,753	172,272	102,990
Total.....	75,115,765	79,662,216	75,716,533	113,437,208	93,218,479	115,797,100

Non-revenue trains had a mileage of 3,627,901 in 1917.

Ratio of train mileage:—

The ratio which each class of train mileage in the above table bore to the total train mileage in alternate year since 1907 was as follows:—

—	1908.	1910.	1912.	1914.	1916.	1917.
Passenger trains.....	40.23	40.00	40.06	41.91	38.24	38.07
Freight trains.....	51.47	51.21	53.15	51.21	54.08	54.29
Mixed trains.....	7.90	7.54	6.41	6.60	7.66	7.55
Special trains.....		0.25	0.38	0.28	0.10	0.09

Following is the record of train mileage since 1875:—

Year.	Passenger Trains.	Freight Trains.	Mixed Trains.	Special Trains.	Total train Mileage.	Engine Mileage.
1875.....	5,206,353	10,910,181	1,563,644		17,680,178	19,633,026
1880.....	7,312,168	10,775,380	4,157,292		22,427,449	26,575,969
1885.....	9,511,455	16,382,553	4,729,681		30,623,689	38,749,239
1890.....	14,362,879	22,428,249	5,058,210		41,849,329	49,512,530
1895.....	15,362,276	19,939,699	5,389,915		40,661,890	51,339,885
1900.....	20,922,098	24,662,906	9,592,867		55,177,871	67,712,252
1905.....	25,428,018	34,372,998	6,133,098		65,934,114	84,335,732
1910.....	35,022,541	43,742,668	6,441,440	202,592	85,409,241	106,019,475
1915.....	41,648,243	43,661,573	7,736,391	172,272	93,218,479	116,354,044
1916.....	42,449,022	60,036,984	8,499,073	90,811	111,075,890	144,966,448
1917.....	44,083,575	62,863,724	8,746,811	102,990	115,797,100	150,264,298

For the purposes of all calculations the mileage of freight trains includes the mileage of mixed trains. The same is true of all passenger train mileage.

The record of car mileage since the facts were first available is as follows:—

Freight Car Mileage	1910	1912	1914	1916	1917
Loaded freight cars.....	910,858,711	1,102,719,543	1,147,533,071	1,348,212,128	1,402,552,028
Empty freight cars.....	280,255,329	310,974,528	413,463,359	576,255,686	561,127,805
Caboose cars.....	45,367,459	55,692,091	57,553,172	63,344,375	66,728,241
Total.....	1,236,481,409	1,469,386,162	1,618,549,602	1,987,812,189	2,030,408,074

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Passenger Car Mileage.	1913	1915	1917
Passenger cars.....	153,301,893	126,421,006	135,419,724
Sleeping, parlor, etc.....	52,738,619	53,632,104	59,489,362
Other cars.....	92,977,602	86,630,228	108,416,453
Total.....	299,018,114	266,683,338	303,325,539

Following is a comparison of locomotive mileage covering the past ten years:—

Class of locomotive.	1908.	1910.	1912.	1914.	1916.	1917.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Freight.....	42,291,082	47,239,088	57,143,590	58,675,214	66,491,134	68,983,629
Passenger.....	30,504,171	34,758,088	40,944,058	45,069,967	42,215,551	44,005,835
Mixed.....	7,410,971	8,211,350	7,742,514	10,276,245	7,610,281	8,612,666
Switching.....	15,941,179	15,581,077	21,159,394	22,937,611	23,586,669	28,509,069
Special.....	5,474,838	229,872	411,924	169,719	5,062,813	153,099
Total.....	100,622,241	106,019,475	127,401,480	137,128,756	144,966,448	150,264,298

## FUEL CONSUMED BY LOCOMOTIVES.

Fuel consumed, ——— tons:—

Class of Locomotives.	1908.	1910.	1914.	1916.	1917.
	Tons.	Tons.	Tons.	Tons.	Tons.
Freight.....	3,318,283	3,597,541	4,820,646	5,273,546	5,675,606
Passenger.....	1,446,919	1,636,454	2,161,144	1,938,619	2,127,621
Mixed.....	350,921	388,692	559,115	421,425	524,917
Switching.....	598,092	620,303	999,457	1,053,739	1,463,820
Construction and special.....	256,576	9,063	7,313	307,794	338,835
Total.....	5,970,791	6,252,054	8,547,675	8,995,123	10,130,799

Cost per ton:—

1913.....	\$ 3 07	1915.....	\$ 3 02
1914.....	3 12	1916.....	3 11
		1917.....	3 63

Volume and cost of fuel:—

Year.	Tons.	Cost.
		\$
1907.....	5,608,954	15,137,504
1909.....	6,832,108	17,544,449
1911.....	6,800,648	20,182,193
1913.....	9,263,984	28,426,355
1915.....	6,903,418	20,889,055
1917.....	10,130,799	36,784,642

## Fuel analysis for 1917:—

Class of Locomotive.	Coal.		Wood.		Other Fuel.		Total.	Miles Run.
	Anthracite.	Bituminous.	Hard.	Soft.	Oil.	Charcoal		
	Tons.	Tons.	Cords.	Cords.	Gallons.	Bushels.	Tons.	
Freight.....	2,700	5,474,665	360	20,351	31,460,382	62,130	5,675,606	68,983,629
Passenger.....	1,194	2,026,452	240	10,113	15,859,198	39,812	2,127,621	44,005,835
Mixed.....	1,006	515,564	125	4,643	995,070	3,965	524,917	8,612,666
Switching.....		1,436,563	100	7,916	3,871,171	20,747	1,463,820	28,509,069
Special.....		330,280		1,805	1,285,448	207	338,835	153,099
Total.....	4,900	9,783,524	825	44,828	53,471,269	126,861	10,130,799	150,264,298

## Fuel consumed per 100 locomotive miles:—

Class of Locomotive.	Fuel Consumed per 100 Locomotive Miles.				
	1909.	1911.	1913.	1915.	1917.
	Tons.	Tons.	Tons.	Tons.	Tons.
Freight.....	8.85	7.78	8.31	7.63	8.23
Passenger.....	5.68	4.91	4.89	4.85	4.83
Mixed.....	5.67	5.10	5.59	5.01	6.09
Switching.....	5.01	4.14	4.47	4.29	5.13
Construction or special.....	4.14	4.48	5.46	2.49	2.18

## Cost per 100 locomotive miles:—

Class of Locomotive.	Cost of Fuel per 100 Locomotive Miles.				
	1909.	1911.	1913.	1915.	1917.
	\$	\$	\$	\$	\$
Freight.....	22.65	22.17	25.51	23.04	29.87
Passenger.....	14.54	14.28	15.01	14.64	17.53
Mixed.....	14.51	14.84	17.16	15.13	22.10
Switching.....	12.82	12.04	13.72	12.95	18.62
Construction or special.....	10.59	13.03	16.76	7.51	7.91

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## ACCIDENTS.

Killed and injured:—

	Movement of trains.		Non-movement of trains.	
	Killed.	Injured.	Killed.	Injured.
Passengers.....	24	410		28
Employees.....	177	1,909	32	2,681
Trespassers.....	150	124		
Non-trespassers.....	64	193		
Postal clerks and others.....	4	46	1	38
Total.....	419	2,682	33	2,747

	Killed.					Injured.				
	1909.	1911.	1913.	1914.	1917.	1909.	1911.	1913.	1915.	1917.
Passengers.....	36	28	38	17	24	281	288	650	304	410
Employees.....	182	202	298	102	177	897	1,314	1,834	946	1,909
Trespassers.....	190	185	309	168	150	95	154	284	147	124
Non-trespassers.....	67	48	63	73	64	89	135	171	167	193
Postal clerks, etc.....		2	2		4	25	15	27	14	46
Other persons.....	3					17				
Total.....	478	465	710	360	419	1,404	1,906	2,966	1,578	2,682

Accidents to passengers:—

Causes—Accidents to Passengers.	Killed.					Injured.				
	1909.	1911.	1913.	1915.	1917.	1909.	1911.	1913.	1915.	1917.
Collisions.....	6	4	3	1	6	83	43	108	90	88
Deraillments.....	1	1	15			99	88	347	53	129
Parting of trains.....									2	7
Falling from trains, etc.....	11	10	8	7	5	11	34	49	30	33
Jumping on or off.....	14	11	7	4	7	57	67	72	62	56
Struck at highways.....	1		1				4	3	1	1
“ stations.....	1	1	1	2	1	5	2	6	3	14
“ other points.....		1	2	1	2	1		3	4	1
Other causes.....	2		1	2	3	25	50	62	59	81
Total.....	36	28	38	17	24	281	288	650	304	410

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## Accidents to employees:—

Causes—Accidents to Employees.	Killed.					Injured.				
	1909.	1911.	1913.	1915.	1917.	1909.	1911.	1913.	1915.	1917.
Coupling or uncoupling.....	18	13	27	9	16	125	191	182	78	187
Collisions.....	40	34	40	11	15	86	119	210	74	137
Deraillments.....	15	10	22	9	13	65	67	88	53	72
Parting of trains.....			1	1		9	13	16	10	43
Locomotive or cars breaking down.....	1			1	1	6	12	13	17	30
Falling from trains or cars.....	28	26	45	17	30	142	253	356	182	311
Jumping on or off.....	9	15	22	3	12	95	141	180	120	233
Struck by trains, etc.....	53	72	97	44	75	88	121	136	70	115
Overhead obstructions.....		3	1	1	4	11	17	31	28	52
Other causes.....	18	29	43	6	11	270	380	612	314	749
Total.....	182	202	298	102	177	987	1,314	1,834	946	1,909

## Classes of employees:—

Employees.	Killed.					Injured.				
	1909.	1911.	1913.	1915.	1917.	1909.	1911.	1913.	1915.	1917.
Trainmen.....	113	101	167	50	102	693	972	1,277	628	1,439
Trackmen.....	37	44	59	24	39	71	158	245	95	135
Switch tenders, etc.....	3	6	8	9	4	27	11	41	26	34
Stationmen.....	2	5	9		6	10	6	39	13	28
Shopmen.....	7	18	15	6	10	16	64	59	59	93
Telegraph employees.....		3				3	4	11	3	7
Other employees.....	20	25	40	13	16	77	99	162	122	173
Total.....	182	202	298	102	177	897	1,314	1,834	946	1,909

## From other causes than the movement of trains:—

	Killed.			Injured.		
	1913.	1915.	1917.	1913.	1915.	1917.
Passengers.....	3			17	26	22
Trackmen, etc.....	6	4	8	488	429	653
Stationmen.....				147	32	371
Shopmen.....	5	1	7	472	574	952
Other employees.....	15	8	17	466	488	711
Other persons.....	3	6	1	16	34	38
Total.....	32	19	33	1,606	1,583	2,747



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The record of accidents from the movement of trains, since 1887, is as follows:—

Years.	Passengers.		Employees.		Others.		Total.		Passengers.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	One killed in every	One injured in every
1888.....	20	70	107	619	104	86	213	775	534,931	152,837
1890.....	11	52	83	682	124	101	218	835	1,165,569	246,562
1895.....	9	47	51	489	127	122	187	658	1,554,175	297,608
1900.....	7	131	123	941	195	245	325	1,303	3,071,453	164,123
1905.....	35	244	206	920	227	193	468	1,537	722,535	103,624
1910.....	60	270	214	926	250	245	524	1,441	598,243	132,943
1911.....	28	288	202	1,314	235	304	465	1,906	1,324,919	124,489
1912.....	47	485	215	1,606	283	346	545	2,437	872,855	84,792
1913.....	38	650	298	1,834	374	482	710	2,966	1,216,599	71,124
1914.....	25	402	200	1,475	340	410	565	2,287	1,868,091	116,175
1915.....	17	304	108	1,578	241	328	366	1,578	2,724,825	140,369
1916.....	20	291	149	1,468	268	299	437	2,058	2,451,383	168,480
1917.....	24	410	177	1,909	218	363	419	2,682	2,281,237	131,097

## ACCIDENTS AT HIGHWAY CROSSINGS.

Class of Highway Crossing.	Killed.					Injured.				
	1909.	1911.	1913.	1915.	1917.	1909.	1911.	1913.	1915.	1917.
Urban.....	33	22	32	30	29	41	70	69	68	88
Rural.....	43	14	31	36	29	31	38	35	44	56
Total.....	76	36	63	66	58	72	108	104	112	144

## HIGHWAY CROSSINGS.

Protected and unprotected crossings:—

Year.	Protected Crossings.		Unprotected Crossings.	
	Urban.	Rural.	Urban.	Rural.
1909.....	587	492	1,767	15,426
1910.....	630	557	1,902	16,923
1911.....	692	661	2,026	16,655
1912.....	788	680	3,039	17,268
1913.....	844	827	2,658	18,681
1914.....	894	823	3,493	20,642
1915.....	948	1,032	2,759	20,105
1916.....	1,003	1,090	2,867	21,265
1917.....	987	1,085	3,886	23,379

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## Form of protection:—

	Rural.	Urban.
By gates.....	59	202
By bridges.....	301	190
By subways.....	429	293
By electric bells, etc.....	271	187
By watchmen.....	25	115
	1,085	987

## Protected crossings in preceding years:—

Crossings—How Protected.	1911.		1913.		1916.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
By gates.....	28	153	71	178	88	189
By bridges.....	232	128	274	158	312	208
By subways.....	269	182	276	227	407	290
By bells.....	104	115	179	155	259	187
By watchmen.....	19	123	27	126	24	129
Total.....	652	701	827	844	1,090	1,003

## RAILWAY EMPLOYEES.

## Numbers:—

1911.....	141,224	1914.....	159,142
1912.....	155,901	1915.....	124,142
1913.....	178,652	1916.....	144,770
		1917.....	146,175

## Compensation:—

1911.....	\$ 74,613,738	1914.....	\$111,762,972
1912.....	94,237,623	1915.....	90,215,727
1913.....	115,749,825	1916.....	104,300,647
		1917.....	129,626,187

## Relating to earnings and operating expenses:—

Year.	Salaries and wages.	Ratio to gross earnings.	Ratio to operating expenses.
	\$		
1907.....	58,719,493	40·01	56·70
1908.....	60,376,607	41·09	56·26
1909.....	63,216,662	43·58	60·43
1910.....	67,167,793	38·61	55·78
1911.....	74,613,738	39·53	56·94
1912.....	94,237,623	39·79	57·92
1913.....	115,749,825	45·09	63·59
1914.....	111,762,972	45·97	62·43
1915.....	90,215,727	45·15	61·09
1916.....	104,300,647	39·82	57·95
1917.....	129,626,187	41·85	58·34

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No.	Compensation.	Number of Employees.	Hours on Duty.	Compensation.	Average per Hour.
				§ cts.	
1	General officers.....	777	2,314,903	2,910,171 14	
2	Division officers.....	1,013	3,272,496	1,887,088 63	
3	Clerks.....	12,705	34,153,764	9,555,812 52	28.0
4	Messengers and attendants.....	369	1,392,469	163,002 82	11.7
5	Asst. engineers and draftsman.....	451	1,242,447	441,630 32	35.5
6	M.W. & S. foreman (ex. 7 and 25).....	648	2,008,757	713,642 84	35.5
7	Section foremen.....	5,832	19,299,840	5,397,783 05	27.9
8	General foremen, M.E. department.....	184	534,926	260,703 73	48.7
9	Gang and other foremen, M.E. department.....	1,298	4,066,162	1,568,447 59	38.5
10	Machinists.....	3,922	10,072,052	4,251,507 54	42.2
11	Boiler makers.....	715	2,141,920	843,804 00	39.4
12	Blacksmiths.....	529	1,475,482	535,100 33	25.0
13	Masons and bricklayers.....	95	207,924	72,812 03	35.0
14	Structural iron workers.....	58	127,324	38,916 79	30.5
15	Carpenters.....	4,981	13,175,477	4,015,516 96	30.4
16	Painters and upholsterers.....	1,411	3,536,731	1,048,862 04	29.6
17	Electricians.....	328	957,421	309,338 75	32.3
18	Air-brake men.....	210	660,886	255,766 60	38.7
19	Car inspectors.....	870	2,912,976	869,889 08	29.8
20	Car repairers.....	3,343	9,608,956	2,527,250 87	26.3
21	Other skilled labour.....	5,663	16,334,439	4,840,634 26	29.6
22	M'cs, helpers and apprentices.....	6,544	17,722,913	4,214,039 01	23.7
23	Section men.....	19,728	58,694,748	12,104,867 66	20.6
24	Other unskilled labour.....	11,675	33,864,036	7,447,231 24	21.9
25	Foremen of construction gangs and WT.....	205	603,913	219,613 77	36.3
26	Other men in construction gangs and WT.....	2,844	7,992,569	1,701,583 07	21.2
27	Travelling agents and solicitors.....	335	993,348	470,223 20	47.3
28	Employees in outside agencies.....	130	352,616	196,552 58	55.7
29	Other traffic employees.....	44	124,654	48,531 20	38.8
30	Train despatchers and directors.....	514	1,506,286	938,421 26	62.3
31	Telegraph, telephone and block operators.....	1,601	5,283,017	1,632,013 20	30.8
32	Telegraph, telephone operating inter'ks.....	49	183,811	49,459 29	25.8
33	Levermen (non-telegraphers).....	402	1,602,088	289,644 59	18.7
34	Telegraphers—clerks.....	491	1,613,128	458,583 16	28.4
35	Agent—telegraphers.....	2,818	9,531,074	3,035,653 46	31.8
36	Station agents (non-telegraphers).....	703	2,330,131	752,375 58	32.2
37	Station masters and assistants.....	223	638,615	154,990 45	24.3
38	Station service.....	9,704	30,906,051	6,965,185 84	22.5
39	Yardmasters.....	233	797,942	365,709 18	45.8
40	Yardmaster's assistants.....	181	699,250	233,103 22	33.3
41	Yard engineers and motormen.....	995	3,802,909	1,606,077 34	42.2
42	Yard firemen and helpers.....	1,033	3,766,478	995,500 40	26.4
43	Yard conductors.....	1,055	3,824,310	1,490,756 79	38.9
44	Yard brakemen.....	2,142	7,122,205	2,673,645 66	37.5
45	Yard switch tenders.....	368	1,317,924	265,983 65	20.1
46	Other yard employees.....	272	942,436	154,267 63	16.3
47	Hostlers.....	717	1,827,762	519,948 55	28.4
48	Enginehouse watchmen and labourers.....	4,179	14,260,503	3,025,146 30	21.2
49	Road freight engineers.....	3,107	11,034,880	5,974,136 09	53.8
50	Road freight firemen and helpers.....	3,373	11,170,706	4,070,205 03	36.4
51	Road freight conductors.....	2,637	9,615,946	4,644,495 98	48.3
52	Road freight brakemen and flagmen.....	5,348	18,908,229	6,141,295 28	32.4
53	Road passenger engineers.....	1,085	2,958,553	2,038,021 16	68.8
54	Road passenger firemen and helpers.....	1,082	2,918,048	1,307,259 22	41.3
55	Road passenger conductors.....	833	2,429,858	1,431,332 24	58.9
56	Road passenger baggagemen.....	673	1,962,515	736,296 70	37.5
57	Road passenger brakemen and flagmen.....	952	2,596,284	966,056 93	37.2
58	Other road trainmen.....	83	230,854	68,376 78	29.6
59	Crossing flagmen and gatemen.....	513	1,958,459	286,651 55	14.6
60	Drawbridge operators.....	113	407,262	77,019 58	18.9
61	Floating—equipment employees.....	2,082	10,509,397	1,401,500 31	13.3
62	Express—service employees.....	249	881,500	151,266 66	17.1
63	Policemen and watchmen.....	610	2,255,477	494,988 00	21.9
64	All other transportation employees.....	1,601	4,657,164	989,963 99	21.3
65	All other employees.....	7,247	22,931,332	4,330,500 57	18.8
	Total.....	146,175	449,278,533	129,626,187 24	

In 1917, for the first time, the unit of compensation was made the hour. The general classification was also changed and elaborated. This new basis makes it impracticable to compare the results of 1917 with those of preceding years. Therefore, the facts prior to 1917 are not given in this report.

## RAILWAY TIES.

The consumption of ties, apart from construction work on new mileage, has been as follows:—

Class.	Number of Ties.				Cost of Ties.			
	1912.	1914.	1916.	1917.	1912.	1914.	1916.	1917.
					§	§	§	§
Cedar.....	875,561	939,014	834,276	631,673	378,236	411,962	392,569	293,659
Oak.....	314,579	582,704	364,372	460,903	214,084	415,837	259,334	334,210
Hemlock.....	268,044	593,796	157,871	197,118	85,627	234,841	57,199	73,281
Spruce.....	13,635	175,051	98,857	196,087	3,969	48,794	22,922	54,635
Fir.....	15,656	103,101	58,342	62,483	4,423	34,007	22,689	23,220
Tamarack.....	1,064,297	2,506,368	245,790	813,697	580,009	1,385,395	97,886	379,608
Pine.....	437,493	437,822	368,347	1,309,852	274,101	201,633	182,610	634,373
Chestnut.....	36,899	896,311	46,170	134,087	19,152	588,278	26,269	76,788
Soft wood.....	498,404	764,210	22,425	11,457	159,489	259,831	7,843	5,338
Hardwood.....	24,506	29,850	14,888	10,776	6,304	8,810	13,480	2,694
Treated.....	157,105	3,183,397	3,084,234	3,106,636	125,731	1,515,709	1,631,069	1,624,436
Unclassified.....	3,642,957	214,929	1,090,892	1,918,092	1,436,555	79,211	480,602	865,854
Total.....	7,349,136	10,426,583	6,386,464	8,852,861	3,287,683	5,184,308	3,194,472	4,368,124

Average cost of ties:—

Class.	Average Cost per Tie.			
	1911.	1913.	1915.	1917.
	cts.	cts.	cts.	cts.
Cedar.....	42.9	45.0	49.9	46.4
Oak.....	67.2	61.9	82.6	72.4
Hemlock.....	29.6	39.4	39.0	37.1
Spruce.....	23.5	30.4	22.4	22.2
Fir.....	30.0	41.8	32.6	37.1
Tamarack.....	41.3	48.9	40.4	46.6
Pine.....	65.3	52.6	56.3	48.4
Chestnut.....	62.3	63.0	64.8	57.2
Soft wood.....	30.0	34.4	51.8	46.6
Hardwood.....	28.2	23.3	56.9	25.0
Treated.....		85.6	52.2	52.2
Unclassified.....	42.5	33.6	37.4	45.1
Total.....	43.8	47.8	53.7	49.3

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## TAXATION OF RAILWAYS.

The tax bill of Canadian Railways, by provinces, is shown in the following summary:—

	Provincial Tax.		Municipal Tax.		Total Tax.	
	\$	cts.	\$	cts.	\$	cts.
Nova Scotia.....		50 00		387 36		437 36
New Brunswick.....	53,690	00	5,050	06	58,740	06
Quebec.....	127,009	99	532,039	60	659,049	59
Ontario.....	1,102,227	69	1,045,913	43	2,148,141	12
Manitoba.....	299,060	53	97,863	99	396,924	52
Alberta.....	113,829	77	75,982	80	189,812	57
Saskatchewan.....	82,785	00	168,790	68	251,575	68
British Columbia.....	141,494	20	184,628	31	326,122	51
Yukon Territory.....		6,805 27				6,805 27
Outside Canada.....		275,928 49		40,635 35		316,563 84
		2,202,880 94		2,151,291 58		4,354,172 52

Taxation in previous years:—

Province.	1911.		1913.		1915.	
	\$	cts.	\$	cts.	\$	cts.
Nova Scotia.....	645	70	742	24	2,163	06
New Brunswick.....	842	16	1,950	11	2,390	60
Prince Edward Island.....		50 00		100 00	558,889	31
Quebec.....	372,914	32	520,093	24	1,404,933	87
Ontario.....	790,280	14	985,993	90	248,198	37
Manitoba.....	154,783	10	224,154	14	145,383	02
Alberta.....	90,785	16	116,223	44	96,477	85
Saskatchewan.....	79,019	28	73,284	28	285,003	03
British Columbia.....	196,971	26	247,936	55	6,816	81
Yukon.....		5,894 38		3,528 20		118,636 59
Undistributed.....		90,466 40				
Outside of Canada.....		173,089 68		270,954 58		180,735 11
Total.....		1,955,741 58		2,444,960 68		3,049,727 62

## DESPATCHING BY TELEPHONE.

The situation with respect to despatching is shown in the following comparative statement of facts as reported:—

	1915. miles of line.	1916 miles of line.	1917 miles of line.
By telegraph.....	19,934	22,473	21,581
By telephone.....	6,189	8,797	8,456
By telegraph and telephone.....	7,530	2,937	7,923

**ELECTRIC RAILWAYS.**  
**MILEAGE.**

First track mileage:—

1901.....	*674·58	1909.....	988·97
1902.....	557·59	1910.....	1,047·07
1903.....	759·36	1911.....	1,223·73
1904.....	766·50	1912.....	1,308·17
1905.....	793·12	1913.....	1,356·63
1906.....	813·47	1914.....	1,560·82
1907.....	814·52	1915.....	1,590·29
1908.....	992·03	1916.....	1,724·71
		1917.....	1,743·54

\*Including some second track.

Analysis of mileage:—

Length of Tracks.	1912.	1914.	1916.	1917.
	Miles.	Miles.	Miles.	Miles.
Length of first main track.....	1,308·17	1,560·82	1,724·71	1,743·54
Length of second main track.....	294·50	338·91	276·52	345·72
Total length of main track.....	1,602·67	1,899·73	2,059·45	2,089·26
Length of sidings and turnouts.....	120·84	152·71	189·12	188·70
Total, computed as single track.....	1,723·51	2,052·44	2,248·57	2,277·96

Table 1, following steam railways, will afford information in detail with respect to mileage.

**CAPITALIZATION.**

Stocks and funded debt:—

Year.	Stocks.	Funded Debt.	Total.
	\$	\$	\$
1907.....	43,491,746	31,166,976	74,658,722
1908.....	50,295,266	37,114,619	87,409,885
1909.....	51,946,433	39,658,556	91,604,989
1910.....	58,653,826	43,391,153	102,044,979
1911.....	62,251,203	49,281,144	111,532,347
1912.....	70,829,448	52,022,828	122,841,946
1913.....	62,079,767	79,155,864	141,235,631
1914.....	66,311,098	81,284,244	147,595,342
1915.....	66,696,675	83,647,327	150,344,002
1916.....	67,738,275	87,157,309	154,895,584
1917.....	70,606,520	90,628,219	161,234,793

Details will be found in table 2. It may be explained, however, that the foregoing capitalization does not include \$493,346 of cash aid given to electric railways by governments and municipalities.

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## INCOME ACCOUNT.

EARNINGS AND INCOME—		
Gross earnings from operation.....	\$30,237,663 54	
Operating expenses.....	20,098,634 35	
Gross corporate income.....		\$10,139,029 19
Miscellaneous income.....		2,292,200 76
Total corporate income.....		\$12,431,229 95
DEDUCTIONS FROM INCOME—		
Taxes.....	\$ 1,851,845 91	
Interest—funded debt.....	2,512,028 79	
“ floating debt.....	2,363,626 95	
Other deductions.....	824,866 90	
Total deductions.....		7,552,368 55
Total net income.....		\$ 4,878,861 40
DISPOSAL OF NET INCOME—		
Reserves, etc.....	\$ 1,285,654 22	
Dividends.....	2,468,686 61	
Total.....		3,754,340 83
Surplus.....		\$ 1,124,520 57

## EARNINGS AND OPERATING EXPENSES.

Gross earnings in 1917 aggregated \$30,237,663.54, as compared with \$27,416,284.60 in 1916.

Operating expenses amounted to \$20,098,634.35, as against \$18,099,905.65 in 1916.

The ratio of operating expenses to gross earnings was 66.47. In 1916 it was 67.24.

Gross earnings, during the past three years, came from the following sources:—

	1914.	1916.	1917.
	\$ cts.	\$ cts.	\$ cts.
Car earnings—			
Passengers.....	21,181,328 13	18,937,327 86	27,621,582 36
Freight.....	1,123,909 53	1,218,763 88	1,547,919 60
Mails and express.....	84,515 13	112,309 43	132,401 46
Other car earnings.....	105,162 34	134,359 96	464,402 18
	22,494,915 13	20,402,761 13	29,766,305 60
Miscellaneous earnings—			
Advertising.....	82,960 87	89,198 97	89,972 70
Rent of land and buildings.....	22,051 32	24,608 34	30,942 29
Rent of tracks.....	6,838 41	19,450 83	22,100 97
Rent of equipment.....	20,005 62	21,358 86	24,776 64
Sale of power.....	85,171 67	59,325 27	80,265 22
Other miscellaneous earnings.....	154,425 05	189,816 10	223,300 12
Total miscellaneous earnings.....	371,452 94	403,758 47	471,357 94
Gross earnings undistributed.....	6,824,639 22	6,609,765 00	.....
Gross earnings from operation.....	29,691,007 29	27,416,284 60	30,237,663 54

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Since 1901 the record of gross earnings is as follows:—

Year.	Gross Earnings.	Year.	Gross Earnings.
	\$		\$
1901.....	5,768,283	1910.....	17,100,789
1902.....	6,486,438	1911.....	20,356,952
1903.....	7,233,677	1912.....	23,499,250
1904.....	8,453,609	1913.....	28,216,111
1905.....	9,357,125	1914.....	29,691,607
1906.....	10,966,871	1915.....	26,922,900
1907.....	12,630,430	1916.....	27,416,285
1908.....	14,007,049	1917.....	30,237,664
1909.....	14,611,481		

Following is a statement of gross car earnings, and the sources thereof, for the past eleven years:—

Year.	Passengers.	Freight.	Mail, etc.	Other.	Total.
	\$	\$	\$	\$	\$
1907.....	12,013,421	344,367	41,951	233,190	12,630,430
1908.....	13,233,724	346,021	54,883	372,421	14,007,049
1909.....	14,080,755	386,092	110,452	34,185	14,611,484
1910.....	16,125,945	575,537	68,604	51,241	16,821,377
1911.....	19,130,376	744,179	88,233	100,930	20,063,719
1912.....	22,007,750	1,025,372	78,819	67,022	23,499,250
1913.....	*19,794,400	1,211,871	72,516	85,793	21,164,580
1914.....	*21,181,328	1,123,910	84,515	105,162	22,494,915
1915.....	*18,879,689	982,041	79,696	82,672	20,024,099
1916.....	*18,937,328	1,218,764	112,309	134,360	20,402,761
1917.....	27,621,582	1,547,920	132,402	464,402	29,766,306

\*Omit facts relating to Montreal Tramways Co.

Tables 4 and 5 will afford details with respect to gross earnings and operating expenses.

Following was the distribution of operating expenses in 1917, with a comparison for 1914, 1915 and 1916:—

Operating Expenses.	1914.	1915.	1916.	1917.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Maintenance of way and structures.....	1,169,610 64	1,062,973 61	984,627 53	1,209,900 62
Maintenance of equipment.....	1,762,785 14	1,572,889 24	1,386,227 87	1,646,611 02
Operation of power plant.....	2,737,268 84	2,848,063 13	2,921,725 58	3,012,809 71
Operation of cars.....	7,323,842 67	7,109,405 70	6,929,133 37	7,581,389 37
General.....	2,031,646 14	1,824,514 06	2,171,138 30	2,046,151 79
Total.....	*19,107,817 60	†18,131,842 18	‡18,099,905 65	§20,098,634 35

\*Items lacking for \$4,082,664.27. †Item lacking for \$3,713,996.44. ‡Item lacking for \$3,707,053.00.  
§Items lacking for \$4,601,771.84.



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Following is a complete statement showing the various items which made up operating expenses in 1917 and the years 1914 and 1916.

	1914.		1916.		1917.	
	\$	cts.	\$	cts.	\$	cts.
Maintenance of way and structures—						
Track and roadway.....	854,798	86	727,142	31	869,681	53
Electric line.....	221,974	85	208,008	12	275,443	73
Buildings and fixtures.....	92,836	93	49,477	10	54,775	36
Maintenance and equipment—						
Steam plant.....	73,167	42	32,795	82	25,892	83
Electric plant.....	175,834	23	44,086	82	56,385	18
Cars.....	823,583	66	665,449	04	781,736	48
Electric equipment of cars.....	513,016	03	443,440	50	575,391	48
Miscellaneous equipment.....	102,358	38	80,572	57	126,589	29
Miscellaneous shop expenses.....	74,825	42	119,883	12	80,615	76
Transportation—Operation of power plant—						
Power plant wages.....	185,254	97	200,417	07	169,473	67
Fuel for power.....	113,837	76	84,173	68	65,870	56
Water for power.....	16,754	01	12,873	60	12,226	36
Lubricants and waste for power plant.....	5,198	40	2,052	96	3,587	02
Miscellaneous supplies and expenses.....	83,214	15	56,153	18	69,784	14
Hired power.....	2,333,009	55	2,566,055	09	2,691,867	96
Transportation—Operation of cars—						
Superintendence.....	380,309	53	422,980	44	471,538	28
Wages of conductors.....	2,662,486	53	2,498,861	01	2,702,328	31
Wages of motormen.....	2,617,373	31	2,483,270	42	2,700,387	88
Wages, miscellaneous car service.....	273,273	22	446,821	55	233,548	12
Wages, car house employees.....	653,919	76	277,160	00	309,944	69
Car service supplies.....	114,546	85	88,611	14	105,440	51
Miscellaneous car service expenses.....	320,344	51	352,096	94	648,476	06
Hired equipment.....	127,853	01	121,925	21	171,283	98
Cleaning and sanding track.....	69,852	99	55,286	85	73,573	24
Removal of snow and ice.....	103,882	96	182,119	81	164,868	30
General—						
Salaries of general officers.....	379,298	16	259,453	88	281,891	18
Salaries of clerks.....	463,984	74	387,886	05	398,985	76
Printing and stationery.....	43,769	39	62,277	31	58,839	12
Miscellaneous office expenses.....	72,859	36	58,959	43	58,900	29
Store expenses.....	33,253	11	43,859	11	44,962	84
Stable expenses.....	31,314	44	46,974	84	36,599	70
Advertising and attractions.....	30,535	14	46,288	30	61,873	57
Miscellaneous general expenses.....	219,486	07	250,294	20	320,516	50
Damages.....	385,105	42	465,722	49	321,514	69
Legal expenses.....	18,505	62	33,384	48	20,132	03
Miscellaneous legal expenses.....	33,631	04	41,836	09	57,366	10
Rent of land and buildings.....	31,776	00	43,906	29	47,278	03
Rent of track and terminals.....	115,404	19	168,772	15	123,985	68
Insurance.....	171,723	46	261,523	68	213,306	30

It must be borne in mind that for the years to which the foregoing tabular statement relates details of operating expenses were not received from certain corporations.

## PUBLIC SERVICE.

The number of fare passengers carried in 1917 was 629,441,997, as against 580,094,167 in 1916.

The total of freight hauled was 2,333,539 tons showing an increase over 1916 of 396,865 tons.

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## Passenger traffic:—

1901	120,934,656
1902	137,681,402
1903	155,662,812
1904	181,689,998
1905	203,467,317
1906	237,655,074
1907	273,999,404
1908	299,099,309
1909	314,026,671
1910	360,964,876
1911	426,296,792
1912	488,865,682
1913	597,863,801
1914	614,709,819
1915	562,302,373
1916	580,094,167
1917	629,441,997

## Car mileage:—

Car mileage—	
Passenger cars.....	80,899,906
Other cars.....	3,173,140
Total.....	<u>84,073,046</u>

## EQUIPMENT.

The following statement will show the number and classes of cars in service in 1917, with the figures for the years 1911, 1913 and 1915.

Classes of Cars, etc.	1911.	1913.	1915.	1917.
Passenger, closed.....	1,985	2,042	2,447	2,041
Passenger, open.....	990	863	824	447
Passenger, combination.....	455	930	792	628
Freight.....	357	591	693	621
Mail, express and baggage.....	33	35	40	49
Combination, freight.....	5	9	23	16
Work.....	108	211	216	198
Snow ploughs.....	60	61	58	48
Sweepers.....	106	123	127	99
Miscellaneous.....	2,252	124	109	148
Total.....	<u>4,325</u>	<u>4,689</u>	<u>5,329</u>	<u>4,295</u>

The absence of reports from two large corporations has materially lowered the total of equipment for the past four years.

## EMPLOYEES.

## Numbers:—

Numbers—	
1916.....	10,622
1917.....	11,696

## Salaries and wages:—

Salaries and wages—	
1916.....	\$ 8,767,734 17
1917.....	9,451,685 31

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Salaries and wages were equal to 47.02 per cent of operating expenses. The ratio was 48.44 in 1916.

Employees.	1910.	1912.	1914.	1916.	1917.
General administration—					
General officers.....	150	159	146	140	148
General office clerks.....	553	744	950	583	601
Maintenance—					
Superintendents.....	71	90	102	103	84
Other employees.....	3,633	4,922	5,077	2,008	3,112
Transportation.....	102	118	151	112	110
Other employees.....	6,881	8,727	9,769	7,676	7,626
Total.....	11,390	14,760	16,195	10,622	*11,696

\*21 undistributed.

ACCIDENTS.

Year.	Killed.			Injured.			Passengers.				
	Passengers	Employees.	Others.	Total.	Passengers.	Employees.	Others.	Total.	Number carried.	Killed, one in every.	Injured, one in every.
1901.....	3	1	11	15	158	58	98	314	120,934,656	40,311,552	255,437
1902.....	9	1	22	32	410	33	120	563	137,681,402	15,297,933	335,808
1903.....	10	7	22	39	501	62	212	778	155,662,812	15,566,281	308,855
1904.....	10	3	40	53	508	61	272	844	181,689,998	18,168,999	357,657
1905.....	30	3	23	56	862	87	347	1,296	203,467,317	6,782,243	236,041
1906.....	11	2	34	47	1,085	127	441	1,653	237,655,074	21,605,006	219,327
1907.....	27	7	37	71	988	216	532	1,736	273,999,404	10,148,126	277,327
1908.....	18	6	43	67	1,156	188	539	1,883	299,099,309	16,616,628	258,736
1909.....	11	7	50	68	1,305	218	618	2,139	314,026,671	28,547,879	241,001
1910.....	14	13	68	95	1,595	227	716	2,538	380,964,876	25,783,205	226,310
1911.....	11	8	83	102	1,784	300	586	2,670	426,296,792	38,754,254	238,955
1912.....	16	8	86	110	1,950	442	736	3,128	488,865,682	30,554,180	156,287
1913.....	17	12	44	73	1,662	392	490	2,544	.....	.....	.....
1914.....	9	13	42	64	1,757	469	581	2,807	.....	.....	.....
1915.....	11	6	44	64	1,554	413	638	2,605	.....	.....	.....
1916.....	18	4	28	50	1,905	305	819	3,029	.....	.....	.....
1917.....	11	10	42	63	1,541	395	792	2,728	.....	.....	.....

I have the honour to be, sir,  
 Your obedient servant,  
 J. L. PAYNE,  
 Comptroller of Statistics.

# RAILWAY STATISTICS

8 GEORGE V, A. 1918

TABLE 1.—Summary of Mileage Operates for the

Number.	Name of Railway.	Single Track.						
		Line represented by Capital Stock.		Line of Proprietary Companies.	Line operated under Lease.	Line operated under Contract, etc.	Line operated under Track- age Rights.	Total mileage operated.
		Main line.	Branches and spurs.					
1	Algoma Central & Hudson Bay...	317-25	21-32		9-23		0-98	348-78
2	Algoma Eastern.....	83-89	4-04		1-52		2-39	91-84
3	Atlantic, Quebec & Western.....	102-44	0-64					103-08
4	Alberta & Great Waterways.....	113-20						113-20
5	Bedlington & Nelson, Not operating.....							
6	Brandon, Sask'n & Hudson Bay.....	69-45						69-45
7	British Yukon.....	85-80	15-32					101-12
8	Canada Southern.....	226-18	154-36				16-91	397-45
9	Canada & Gulf Terminal.....	35-80						35-80
10	Canadian Gov't. Rys. (Intercolonial).....	1,479-12	31-28				39-27	1,549-67
11	Canadian Gov't. Rys. (P.E.I.).....	275-20	2-58					277-78
12	Canadian Northern System.....			8,757-99	393-46	253-99	59-21	9,464-65
13	Canadian Pacific.....	2,894-80	4,879-70	3,548-20	1,445-90	126-80	93-90	12,989-30
14	Cape Breton.....	31-00						31-00
15	Caraquet.....	84-78						84-78
16	Central Vermont.....	116-60	8-60					125-20
17	Crow's Nest Southern.....	74-18						74-18
18	Cumberland Ry. & Coal Co.....	32-00						32-00
19	Central Canada.....	48-50						48-50
20	Detroit River Tunnel Co.....	1-45						1-45
21	Dominion Atlantic.....	169-98	72-49		31-69		14-29	288-45
22	Eastern British Columbia.....	14-00						14-00
23	Edmonton, Dunvegan & British Columbia.....	357-00	49-80					406-80
24	Elgin & Havelock.....	27-00						27-00
25	Esquimaux & Nanaimo.....	159-70	59-50					199-20
26	Essex Terminal.....	9-00	2-00					11-00
27	Fredericton & Grand Lake.....	35-00						35-00
28	Grand Trunk.....	3,343-36			223-76		8-96	3,576-08
29	Grand Trunk Pacific.....	1,746-02	27-01		1-70	2-18	3-54	1,780-45
30	Grand Trunk Pacific Branch Lines.....	991-67	8-28			32-11	3-96	1,036-02
31	Hereford.....	52-85	0-21					53-06
32	International of New Brunswick.....	111-30						111-30
33	Inverness Ry. & Coal Co.....	60-91						60-91
34	Kent Northern.....	27-00						27-00
35	Kettle Valley.....	308-51			47-17		38-15	394-19
36	Klondike Mines.....	31-81						31-81
37	Lotbiniere & Megantic.....	30-00						30-00
38	Maganetawan River.....	1-91						1-91
39	Maine Central.....	5-10						5-10
40	Manitoba Great Northern.....	91-77					0-99	92-76
41	Maritime Coal Ry. & Power Co.....	12-00	3-00					15-00
42	Massawippi Valley.....				35-46		2-95	38-41
43	Montreal & Atlantic.....	102-40			82-00			184-40
44	Moncton & Buctouche.....	32-00	2-00					34-00
45	Morrissey, Fernie & Michel.....		5-82		5-03			10-85
46	Midland of Manitoba.....	6-40					69-02	75-42
47	Napierville Junction.....	27-06						27-06
48	National Transcontinental.....	1,811-28			191-75			2,003-03
49	Nelson & Fort Sheppard.....	55-42					5-44	60-86
50	New Brunswick Coal & Ry. Co.....	58-00						58-00
51	New Brunswick & P.E. Island.....	36-05						36-05
52	New Westminster Southern.....	15-18						15-18
53	North Shore.....	6-13	2-50					8-63
54	Northern New Brunswick & Seaboard.....	19-80						19-80
55	Nosbonsing & Nipissing.....	5-50						5-50
56	Ottawa & New York.....	56-90					1-90	58-80

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year ending June 30, 1917—All tracks.

Steel rails.	Second Track.						Number.	
	Line represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.	Line operated under trackage rights.	Total mileage operated.		Steel rails.
	Main line.	Branches and spurs.						
347-80							1	
89-45							2	
103-08							3	
113-20							4	
							5	
69-45							6	
101-12							7	
380-54	226-18	16-86			1-60	244-64	243-04	
35-80							9	
*1,510-40	29-89				37-03	66-92	29-89	
277-78							11	
9,405-44			1-15			1-15	1-15	
12,895-49	1,157-20			265-90		1,423-10	1,423-10	
31-00							14	
84-78							15	
125-20							16	
74-18							17	
32-00							18	
43-50							19	
1-45							20	
274-16					13-85	13-85	21	
14-00							22	
							23	
406-80							23	
27-00							24	
199-20							25	
11-00							26	
35-00							27	
3,567-12	711-48			12-25	3-74	727-47	723-73	
1,776-91	14-94				1-00	15-94	14-94	
							29	
1,032-06							30	
53-06							31	
111-30							32	
60-91							33	
27-00							34	
355-68							35	
31-81							36	
30-00							37	
1-91							38	
5-10							38	
91-77							40	
15-00							41	
35-46							42	
184-40	6-50					6-50	6-50	
34-00							44	
10-85							45	
6-40							46	
27-06							47	
2,003-03	9-29					9-29	9-29	
55-42							49	
58-00							50	
36-05							51	
15-18							52	
8-63							53	
							54	
19-80							54	
5-50							55	
56-90							56	

\*Revised mileage 1,518-39.

8 GEORGE V, A. 1918

TABLE 1.—Summary of Mileage Operated for the

Number.	Name of Railway.	Single Track.					Total mileage operated.	
		Line represented by Capital Stock.		Line of Proprietary Companies.	Line operated under Lease.	Line operated under Contract, etc.		Line operated under Track- age Rights.
		Main line.	Branches and spurs.					
57	Pacific Great Eastern.....	180-27					180-27	
58	Pere Marquette.....	198-81				137-84	336-65	
59	Philipsburg Ry. & Quarry Co.....	6-00					6-00	
60	Quebec Central.....	138-00	139-60				277-00	
61	Quebec Oriental.....	100-00					100-00	
62	Quebec Ry. Light & Power.....	27-50				3-32	30-82	
63	Quebec, Montreal & Southern.....	190-78	1-40				192-18	
64	Red Mountain.....	9-59					9-59	
65	Roberval—Saguenay.....	20-00	16-80				36-80	
66	Rutland & Noyan.....	3-39					3-39	
67	Salisbury & Albert.....	45-00					45-00	
68	St. Lawrence & Adirondack.....	32-82			13-30	14-26	60-38	
69	St. Martins.....	30-00					30-00	
70	St. John & Quebec.....	119-87					119-87	
71	St. Clair Tunnel.....	1-23					1-23	
72	Sydney & Louisburg.....	39-17	28-85	1-05	1-20		70-27	
73	Temiscouata.....	113-00					113-00	
74	Temiskaming & Northern Ontario.....	252-29	76-21				328-50	
75	Thousand Islands.....	6-08	25				6-33	
76	Toronto, Hamilton & Buffalo.....	79-88	20-42			4-36	104-66	
77	Vancouver, Victoria and Eastern.....	271-22				92-40	363-62	
78	Victoria & Sidney, B.C.....	15-97					15-97	
79	Victoria Terminal Ry. & Ferry Co.....	0-99					0-99	
80	Wabash (in Canada).....					245-40	245-40	
81	York and Carleton.....	10-50					10-50	
	Final totals.....	17,762-01	5,633-38	12,307-24	2,483-17	418-40	856-48	39,460-68



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year ending June 30, 1917—All tracks—*Concluded.*

Steel rails.	Second Track.						Steel rails.	Number.
	Line represented by Capital Stock.		Line of proprietary companies.	Line operated under lease.	Line operated under trackage rights.	Total mileage operated.		
	Main line.	Branches and spurs.						
180-27							57	
198-81					136-57	136-57	58	
6-00							59	
277-00							60	
100-00							61	
30-82	9-50					9-50	62	
192-18							63	
9-59							64	
36-80							65	
3-39							66	
45-00							67	
46-12							68	
30-00							69	
119-87							70	
1-23							71	
70-27	1-00					1-00	72	
113-00							73	
328-50	1-70					1-70	74	
6-33							75	
100-30	9-79				0-37	10-16	76	
271-22	7-12					7-12	77	
15-97							78	
0-99							79	
10-50							80	
							81	
38,604-20	2,184-59	16-86	1-15	278-15	194-16	2,674-91	2,480-75	



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year ending June 30, 1917—All tracks—Continued.

Steetrails	Total Mileage Operated—All Tracks.								Number.	
	Line represented by Capital Stock.		Line of proprietary companies	Line operated under lease.	Line operated under contract, etc.	Line operated under trackage rights.	Total mileage operated.	Iron.		Steel rails
	Main line.	Branches and spurs.								
40-61	343-95	22-00		22-46		0-98	389-39		388-41	1
12-20	91-84	4-04		5-77		3-43	105-08		101-65	2
1-80	104-24	0-64					104-88		104-88	3
7-18	120-38						120-38		120-38	4
										5
10-61	80-06						80-06		80-06	6
	85-80	15-32					101-12		101-12	7
229-95	633-41	220-12				26-16	879-69		853-53	8
2-00	37-80						37-80		37-80	9
494-15	2-003-16	31-28				76-30	2,110-74		2,034-44	10
31-30	305-50	2-58					309-08		309-08	11
1,447-97			10,019-46	521-61	313-49	60-25	10,914-81		10,854-56	12
3,810-50	6,708-50	4,879-70	3,548-20	2,865-80	126-80	93-90	18,222-90		18,129-00	13
	31-00						31-00		31-00	14
3-05	87-83						87-83		87-83	15
7-93	124-53	8-60					133-13		133-13	16
14-10	88-28						88-28		88-28	17
16-00	48-00						48-00		48-00	18
3-44	51-94						51-94		51-94	19
	1-45						1-45		1-45	20
33-70	185-72	84-95		37-19		34-14	342-00		307-86	21
2-19	16-19						16-19		16-19	22
30-27	382-35	54-72					437-07		437-07	23
	27-00						27-00		27-00	24
47-10	186-80	59-50					246-30		246-30	25
	9-00	2-00					11-00		11-00	26
	35-00						35-00		35-00	27
1,382-62	5,394-74			278-73		12-70	5,686-17		5,673-47	28
404-42	2,163-07	27-01		1-70	4-49	18-42	2,214-69		2,196-27	29
119-55	1,111-22	8-28			32-11	3-96	1,155-57		1,151-61	30
8-18	61-23	0-21					61-44	0-20	61-24	31
5-42	116-72						116-72		116-72	32
8-20	69-11						69-11		69-11	33
	27-00						27-00		27-00	34
29-89	332-12			53-45		40-80	426-37		385-57	35
2-00	33-81						33-81		33-81	36
3-00	33-00						33-00		33-00	37
	1-91						1-91		1-91	38
	5-10						5-10		5-10	39
9-61	101-38					0-99	102-37		101-38	40
3-00	12-00	6-00					18-00		18-00	41
10-58				46-04		2-95	48-99		46-04	42
41-10	150-00			82-00			232-00		232-00	43
	32-00	2-00					34-00		34-04	44
		5-82		5-03			10-85		10-85	45
11-11	17-51					69-02	86-53		17-51	46
3-36	30-32						30-42		30-42	47
396-68	2,154-49			254-51			2,409-00		2,409-00	48
3-13	58-55					5-44	63-99		58-55	49
7-00	65-00						65-00		65-00	50
4-30	40-35						40-35		40-35	51
1-31	16-49						16-49		16-49	52
1-37	7-50	2-50					10-00		10-00	53
	19-80						19-80		19-80	54
	5-50						5-50		5-50	55
11-30	68-20					1-90	70-10		68-20	56
19-11	199-38						199-38		199-38	57
75-05	273-86					297-44	571-30		273-86	58
	6-00						6-00		6-00	59

TABLE 1.—Summary of Mileage Operated for the

Number.	Name of Railway.	Yard Track and Sidings.						Iron rail.	
		Line represented by Capital Stock		Line of Proprietary Companies.	Line operated under Lease.	Line operated under contract, etc.	Line operated under track- age rights.		Total mileage operated.
		Mainline	Branches and-purs.						
60	Quebec Central .....								
61	Quebec Oriental .....	3-10						3-10	
62	Quebec Ry., Light & Power Co. ....		6-93					6-93	
63	Quebec, Montreal & Southern .....	23-96	4-09					28-05	
64	Red Mountain .....	2-99						2-99	
65	Roberval-Saguenay .....								
66	Rutland & Noyan .....	0-39						0-39	
67	Salisbury & Albert .....	5-00						5-00	
68	St. Lawrence & Adirondack .....	9-05		2-56				11-61	
69	St. Martins .....								
70	St. John & Quebec .....	8-00						8-00	
71	St. Clair Tunnel .....	0-35						0-35	
72	Sydney & Louis-burg .....		52-79					52-79	
73	Temiscouata .....	9-40						9-40	
74	Temiskaming & Northern Ontario .....	87-96	21-24					109-20	
75	Thousand Islands .....	1-00						1-00	
76	Toronto, Hamilton and Buffalo .....	62-56	4-07					66-63	
77	Vancouver, Victoria & Eastern .....	54-00						54-00	
78	Victoria & Sidney, B.C. ....	1-66						1-66	
79	Victoria Terminal Ry. & Ferry Co. ....	0-58						0-58	
80	Wabash (in Canada) .....								
81	York and Carleton .....								
	Final total .....	6,257-98	159-08	1,260-32	1,430-03	61-81	54-93	9,224-15	0-20

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year ending June 30, 1917—All tracks—*Concluded.*

Total Mileage Operated—All Tracks.									
Steetrails	Line represented by Capital Stock.		Line of proprietary companies	Line operated under lease.	Line operated under contract, etc.	Line operated under trackage rights.	Total mileage operated.	Iron.	Steel rails
	Main line.	Branches and spurs.							
.....	138-00	139-00	.....	.....	.....	.....	277-00	.....	277-00 60
3-10	103-10	.....	.....	.....	.....	.....	103-10	.....	103-10 61
6-93	37-00	6-93	.....	.....	3-32	.....	47-25	.....	47-25 62
28-05	214-74	5-49	.....	.....	.....	.....	220-23	.....	220-23 63
2-99	12-58	.....	.....	.....	.....	.....	12-58	.....	12-58 64
.....	20-00	16-80	.....	.....	.....	.....	36-80	.....	36-80 65
0-39	3-78	.....	.....	.....	.....	.....	3-78	.....	3-78 66
5-00	50-00	.....	.....	.....	.....	.....	50-00	.....	50-00 67
11-61	41-87	.....	.....	15-86	.....	14-26	71-99	.....	57-73 68
.....	30-00	.....	.....	.....	.....	.....	30-00	.....	30-00 69
8-00	127-87	.....	.....	.....	.....	.....	127-87	.....	127-87 60
0-35	1-58	.....	.....	.....	.....	.....	1-58	.....	1-58 71
52-79	40-17	81-64	1-05	1-20	.....	.....	124-06	.....	124-06 72
9-40	122-40	.....	.....	.....	.....	.....	122-40	.....	122-40 73
109-20	341-95	97-45	.....	.....	.....	.....	439-40	.....	439-40 74
1-00	7-08	0-25	.....	.....	.....	.....	7-33	.....	7-33 75
66-63	152-23	24-49	.....	.....	.....	4-73	181-45	.....	176-72 76
54-00	332-34	.....	.....	.....	.....	92-40	424-74	.....	332-34 77
1-66	17-63	.....	.....	.....	.....	.....	17-63	.....	17-63 78
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
0-58	1-57	.....	.....	.....	.....	.....	1-57	.....	1-57 79
.....	.....	.....	.....	.....	.....	245-40	245-40	.....	..... 80
.....	10-50	.....	.....	.....	.....	.....	10-50	.....	10-50 81
9,169-02	26,204-58	5,809-32	13,568-71	4,191-35	480-21	1,105-57	51,359-74	0-20	50,253-97

8 GEORGE V, A. 1918

TABLE 4.—Amount of Railway Capital at the

Number.	1	2	3	4	5	6
	Name of Railway.	Stocks.			Funded	
		Amount Outstanding.	Amount per Mile of Line.	Proportion to Total Railway Capital.	Amount Outstanding Cols. 8+9+10+11	Amount per Mile of Line.
				100 x Col. 2. Col. 12.		
	\$	\$	p c.	\$	\$	
1	Algoma Central & Hudson Bay	10,000,000	29,200	48.10	10,788,800	31,503
2	Algoma Eastern	3,000,000	34,118	51.73	2,804,500	31,894
3	Atlantic, Quebec and Western	2,000,000	19,512	43.90	2,548,675	24,865
4	Alberta and Great Waterways	50,000	442	67	7,400,000	65,371
5	Bedlington & Nelson*	1,000,000	83,056			
6	Brandon, Saskatchewan & Hudson Bay	2,150,000	30,958	100.00		
7	British Yukon	2,934,119	29,016	58.92	2,044,760	20,221
8	Canada & Gulf Terminal	600,000	16,760	45.00	740,000	20,670
9	Canada Southern	15,000,000	39,418	39.86	22,630,000	59,468
10	Canadian Northern System	100,000,000	9,980	23.39	327,441,921	32,678
11	Canadian Pacific	556,966,803	49,171	97.54	14,230,000	1,256
12	Atlantic & North West				6,453,200	32,089
13	Calgary and Edmonton				5,458,894	9,945
14	Lindsay, Bobcaygeon & Pontypool				500,000	12,920
15	Manitoba, South Western Colonization				2,544,000	11,810
16	Guelph Junction	170,000	11,200	100.00		
17	New Brunswick				7,821,127	38,189
18	New Brunswick and Canada				170,000	1,411
19	Fredericton				100,000	4,525
20	St. John & Maine				216,664	2,312
21	New Brunswick Southern				500,000	6,173
22	Ontario & Quebec	21,502,591	45,288	100.00		
23	St. Lawrence & Ottawa				973,333	16,695
24	St. Stephen & Milltown	50,000	10,869	100.00		
25	Shuswap & Okanagan				108,527	2,128
26	Joliette & Brandon				125,000	11,363
27	Toronto, Grey & Bruce				3,500,000	18,431
28	Cape Breton	1,000,000	32,258	100.00		
29	Caracquet	1,250,000	18,382	71.43	500,000	5,882
30	Crow's Nest Southern	4,210,000	56,754	100.00		
	Central Vermont:					
31	Montreal & Province Line	1,000,000	17,064	83.33	200,000	4,926
32	Montreal & Vermont Junction	1,000,000	42,373	100.00		
33	Stanstead, Shefford & Chambly	608,750	14,157	79.00	155,865	3,624
34	Central Canada	625,000	12,887	23.81	2,000,000	41,031
35	Detroit River Tunnel	3,000,000		14.28	18,000,000	
36	Dominion Atlantic	2,433,333	9,804	28.34	5,998,166	24,786
37	Eastern British Columbia	420,000	30,000	100.00		
38	Edmonton, Dunvegan & British Columbia	250,000	615	2.59	9,420,000	23,156
39	Elgin & Havelock	44,900	1,551	45.56	50,000	1,852
40	Essex Terminal	360,000	27,273	41.67	420,000	38,181
41	Esquimalt & Nanaimo	2,500,000	12,556	34.09	4,832,000	24,267
42	Fredericton & Grand Lake	140,000	4,000	23.53	465,000	13,286
43	Grand Trunk	241,237,589	72,162	57.44	178,847,227	53,499
44	Buffalo & Lake Huron	2,605,632	14,967	39.48	4,279,456	22,942
45	Central Counties	500,000	12,990	56.81	380,000	9,873
46	Pembroke Southern	178,090	8,334	54.27	150,000	7,022
47	Grand Trunk Pacific	24,942,000	12,667	12.55	173,782,100	88,259
48	G.T.P. Branch Lines	1,000,000	1,000	6.91	13,469,004	13,470
49	Hereford	800,000	15,137	50.00	800,000	15,137
50	International Bridge Co.	1,500,000		75.00	512,260	

\*Line abandoned and tracks removed.

†This includes \$216,284,882 of Consolidated Debenture Stock.

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close of the year ending June 30, 1917.

7	8	9	10	11	12	13	
Debt.	Designation of Funded Debt.				Summary.		
Proportion to Total Railway Capital. 100 x 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.	Number.
Col. 12.							
p.c.	\$	\$	\$	\$	\$	\$	
51-90	10,398,800			390,000	20,788,800	60,703	1
48-27	2,500,000			304,500	5,804,500	66,012	2
56-10	2,548,675				4,548,675	44,377	3
99-33	7,400,000				7,450,000	65,813	4
					1,000,000	83,056	5
					2,150,000	30,958	6
41-07	2,044,760				4,978,879	49,237	7
55-00	740,000				1,340,000	37,430	8
60-14	22,630,000				37,630,000	98,886	9
76-61	287,595,421		25,000,000	14,846,500	427,441,921	42,658	10
2-46	3,650,000			10,580,000	571,196,803	50,427	11
100-00	6,453,200				6,453,200	32,089	12
100-00	5,458,894				5,458,894	9,945	13
100-00	500,000				500,000	12,920	14
					2,544,000	11,810	15
100-00	2,544,000				170,000	11,200	16
					7,821,127	38,189	17
100-00	7,821,127				170,000	1,411	18
100-00	170,000				109,000	4,525	19
100-00	100,000				216,664	2,312	20
100-00	216,664				500,000	6,173	21
100-00	500,000				21,502,591	45,288	22
					973,333	16,695	23
					50,000	10,869	24
100-00	973,333				108,527	2,128	25
100-00	108,527				125,000	11,363	26
100-00	125,000				3,500,000	18,431	27
100-00	3,500,000				1,000,000	32,258	28
					1,750,000	24,264	29
28-57	500,000				4,210,000	56,754	30
					1,200,000	21,990	31
16-67	200,000				1,000,000	42,373	32
					761,615	17,781	33
20-40	155,865				2,625,000	53,918	34
76-19		2,000,000			21,000,000		35
85-72		18,000,000			8,431,499	34,590	36
71-66	5,998,166				420,000	30,000	37
					9,670,000	23,771	38
97-41	9,420,000				94,900	3,403	39
54-44	50,000				720,000	65,454	40
58-33	420,000				7,332,000	36,823	41
65-91	4,832,000				605,000	17,286	42
76-47	465,000				420,084,816	125,661	43
42-56	173,570,227			5,277,000	6,885,088	37,909	44
60-52	4,279,456				880,000	22,863	45
43-19	380,000				328,000	15,356	46
45-73	150,000				198,724,100	100,926	47
87-45	173,782,100				14,469,004	14,470	45
93-09	13,469,004				1,600,000	30,274	49
50-00	800,000				2,012,260		50
25-00	512,260						

TABLE 4.—Amount of Railway Capital at the

Number.	1	2	3	4	5	6
	Name of Railway.	Stocks.			Funded	
		Amount Outstanding.	Amount per Mile of Line.	Proportion to Total Railway Capital. 100 x Col. 2.	Amount Outstanding Cols. 8+9+10+11	Amount per Mile of Line.
	\$	\$	p c	\$	\$	
51	Kent Northern.....	75,000	2,778	69.50	32,000	1,185
52	Kettle Valley*.....	375,000	17,000	100.00		34,305
53	Klondike Mines.....	1,375,000	44,355	56.00	1,091,250	15,090
54	Lake Erie & Detroit River.....	1,400,000	7,042	31.88	3,000,000	6,248
55	Lake Champlain & St. Lawrence Junction.....	600,000	9,917	61.35		
56	Lotbiniere & Megantic.....	50,000	1,666	100.00		
57	Manitoba Great Northern.....	2,066,000	22,513	100.00		
58	Massawippi Valley.....	800,000	22,560	100.00		
59	Midland of Manitoba.....	4,300,000	671,875	100.00		
60	Montreal & Atlantic.....	3,200,000	31,098	71.34	1,065,000	10,350
61	Moncton & Buctouche.....	250,000	7,812	80.65	60,000	1,875
62	Morrissey, Fernie & Michel.....	1,263,000	217,010	100.00		
63	Napierville Junction.....	600,000	22,173	100.00		
64	Nelson & Fort Sheppard.....	2,846,800	51,338	100.00		
65	New Westminster Southern.....	600,000	39,526	100.00		
66	North Shore (N.B.).....	98,000	11,355	73.68	35,000	4,056
67	Northern New Brunswick & Seaboard.....	298,500	15,075	51.00	297,000	15,000
68	Ottawa & New York.....	1,000,000	17,575	38.46	1,600,000	28,119
69	Pacific Great Eastern.....	25,000,000	138,888	55.36	20,160,000	112,000
70	Pere Marquette (Canada).....				5,870,000	29,500
71	Philipsburg Ry. & Quarry Co.....	124,500	20,750	75.70	40,000	6,666
72	Quebec Central.....	3,381,603	15,233	35.17	6,233,406	28,079
73	Quebec, Montreal & Southern.....	1,000,000	5,208	14.27	6,000,000	31,248
74	Quebec Oriental.....	119,500	1,195	4.55	2,026,894	20,269
75	Red Mountain.....	412,600	43,024	100.00		
76	Roberval-Saguenay.....	2,000,000	54,347	61.13	1,272,000	34,565
77	Rutland & Noyan.....	100,000	29,499	50.00	100,000	29,499
78	Salisbury & Albert.....	150,000	3,333	37.50	250,000	5,555
79	St. Clair Tunnel.....	700,000		21.90	2,500,000	
80	St. Lawrence & Adirondack.....	1,230,655	37,497	57.37	914,418	27,862
81	St. Martins.....	99,000	3,300	52.38	90,000	3,000
82	Temiscouata.....	1,000,000	8,849	24.41	3,099,669	27,401
83	Thousand Islands.....	60,000	8,186	54.54	50,000	6,821
84	Toronto, Hamilton & Buffalo.....	4,512,500	44,336	42.21	6,180,000	60,719
85	Vancouver, Victoria & Eastern.....	20,850,000	79,861	100.00		
86	Victoria & Sidney.....	103,000	6,449	27.00	300,000	18,785
87	Victoria, Terminal & Ferry Co.....	500	505	100.00		
88	York & Carleton.....	105,000	10,000	100.00		
	Final Totals.....	1,089,114,875			896,005,116	

\*On 22.19 miles only.



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close of the year ending June 30, 1917—*Concluded.*

7	8	9	10	11	12	13	Number.
Debt.	Designation of Funded Debt.				Summary.		
Proportion to Total Railway Capital. 100 x 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.	
Col. 12.							
p.c.	\$	\$	\$	\$	\$	\$	
30-50	32,000				107,000	3,963	51
					375,000	17,000	52
44-00	1,091,250				2,466,250	78,660	53
68-12	3,000,000				4,400,000	22,132	54
38-65	378,000				978,000	16,165	55
					50,000	1,666	56
					2,066,000	22,513	57
					800,000	22,560	58
					4,300,000	671,875	59
28-66	1,065,000				4,265,000	41,448	60
19-35	60,000				310,000	9,687	61
					1,263,000	217,010	62
					600,000	22,173	63
					2,846,000	51,368	64
					600,000	39,526	65
					133,000	15,411	66
26-32	35,000				595,500	30,075	67
49-00	297,000				2,600,000	45,694	68
61-54	1,325,000		275,000		45,160,000		69
44-64	20,160,000				5,870,000	29,500	70
100-00	5,870,000				164,500	27,416	71
24-30	40,000				9,615,009	43,312	72
64-83	6,233,406				7,000,000	36,456	73
85-73		6,000,000			2,146,194	21,464	74
94-45	2,026,894				412,600	43,024	75
					3,272,000	88,912	76
38-87	1,260,000	12,000			200,000	58,998	77
50-00	100,000				400,000	8,888	78
62-50	250,000				3,200,000	1,428,571	79
78-10	2,500,000				2,145,073	65,359	80
42-63	914,418				189,000	6,300	81
47-62	90,000				4,099,669	36,250	82
75-59	3,099,669				110,000	15,006	83
45-46	50,000				10,692,500	105,055	84
57-79	5,280,000			900,000	20,850,000	79,861	85
					403,000	25,234	86
73-00	300,000				500	505	87
					105,000	10,000	88
	\$12,420,116	26,012,000	25,275,000	32,298,000	1,985,119,991		

TABLE 5.—Statement of Aid, granted and paid to Railways

No.	Name of Railway.	By Dominion Government.			By Provincial	
		Subsidy Granted.	Subsidy Paid up.	Loan.	Name of Province.	Subsidy Granted.
		\$ cts.	\$ cts.	\$ cts.		\$ cts.
1	Albert Southern abandoned	50,460 00	50,460 00		New Brunswick	48,650 00
2	Harvey Branch	5,553 57	5,553 57		"	9,000 00
3	*Alberta Central (C.P.Ry.)	404,480 00	404,480 00			
4	Algoma Central and Hud- son Bay.	2,048,704 00	2,048,704 00		Ontario.....	199,620 00
5	Algoma Eastern.....	547,648 00	547,648 00		"	265,000 00
6	Atlantic, Quebec and West- ern.....	902,800 00	902,800 00			
7	Bruce Mines and Algoma, now, Lake Huron and N. Ontario.....	53,920 00	53,920 00		Ontario.....	50,918 00
8	Canada and Gulf Terminal.	210,053 59	210,053 59		Quebec.....	
9	Canada Southern, including, 10 Sarnia, Chatham and Erie				Ontario.....	
11	Leamington and St. Clair	51,200 00	51,200 00		"	147,859 00
12	Can. Govt. R'lys.—					
13	Intercolonial, including, Canada Eastern.....	374,839 84	378,839 84			
14	Drummond County.....	423,936 00	423,936 00		Quebec.....	
15	Federicton and St. Mary's Bridge.....	30,000 00	30,000 00			
16	Nova Scotia Steel and Coal Co.'s Ry.....	40,000 00	39,840 00		Nova Scotia....	40,000 00
17	Prince Edward Island.....					
18	Canadian Northern, includ- ing.....	374,606 00	374,606 00			
19	Bay of Quinte.....	350,455 25	350,455 25		Ontario.....	84,000 00
20	Brookville, Westport and Northwestern.....	140,800 00	140,800 00		"	
21	Central Ontario and Marmora R'ly. and Mining Co.....	205,862 79	205,862 79		"	278,000 00
22		30,720 00	30,720 00		"	19,149 39
23	Edmonton, Yukon and Pacific.....	160,000 00	91,200 00			
24	Inverness R'ly. and Coal Co.....	627,000 00	368,545 97		Nova Scotia....	272,000 00
25	Irondale, Bancroft and Ottawa.....	144,000 00	144,000 00		Ontario.....	315,000 00
26	Manitoba.....				Manitoba.....	641,575 25
27	Ontario and Rainy River	1,534,526 00	1,534,526 00		Ontario.....	1,072,800 00
28	Port Arthur, Duluth and Western.....	271,200 00	271,200 00		"	255,571 00
29	Halifax and South Western	819,874 93	819,874 93		Nova Scotia.....	
30	Central of N.S. and N.S. Southern.....	653,776 00	653,776 00		"	
31	Halifax and Yarmouth.	160,000 00	160,000 00		"	156,499 33
32	Liverpool and Milton.	32,000 00	32,000 00			
33	Middleton and Victoria Beach.....	125,760 00	125,760 00			
34	Quebec and Lake St. John.	1,454,635 00	1,261,463 50		Quebec.....	2,533,000 00
35	Can. Northern Ontario.....	14,775,872 00	14,386,762 51		Ontario.....	
36	Can. Northern Quebec.....	2,020,616 89	2,020,616 89		Quebec.....	1,194,129 46
37	*Can. Northern Alberta.....	3,094,104 00	3,094,104 00			
38	*Can. Northern Pacific.....	5,648,626 37	5,648,626 37			
39	*Central of Canada.....	30,145 02	30,145 02			
40	Canadian Pacific:— Owned—	30,369,374 70	30,369,374 70		Manitoba.....	375,377 50
		10,189,521 00	10,189,521 00	*	British Colum- bia.....	37,500 00
41	Canada Central.....	1,525,250 00	1,525,250 00		Ontario.....	1,479,000 00
42	Lake Temiskaming Colo- nization.....	310,335 95	310,335 95		Quebec.....	350,076 82
43	Montreal and Western.....	361,270 00	361,270 00		"	472,500 00
44	North Shore.....	1,500,000 00	1,500,000 00			
45	Quebec, Montreal, Otta- wa and Occidental.....				Quebec.....	727,000 00

\*Under construction

†Secured by the Guaranteed Bonds of the Co.

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by Governments and Municipalities, to 30th June, 1917.

Governments.			By Municipalities.				No.
Subsidy Paid up.	Loan.	Subscription to shares.	Subsidy Granted.	Subsidy Paid up.	Loan.	Subscription to Shares.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
48,680 00							1
9,000 00							2
							3
199,620 00							4
265,000 00							5
							6
50,918 00			500 00	500 00			7
			20,600 00	20,600 00			8
							9
			322,500 00	322,500 00			10
147,859 00							11
							12
							13
							14
			15,000 00	15,000 00			15
							16
40,000 00			4,000 00	4,000 00			17
							18
						650,000 00	19
84,000 00			197,990 43	197,990 43			20
			116,000 00	116,000 00			21
278,000 00			93,500 00	93,500 00			22
19,149 39							23
							24
223,000 00			100,000 00	50,000 00			25
135,000 00							26
641,575 25							27
1,072,800 00			50,000 00	50,000 00			28
255,571 00			40,000 00	40,000 00			29
	4,447,000 00						30
156,499 33			88,874 17	88,874 17			31
			15,338 93	15,338 93			32
							33
							34
2,368,816 88			12,000 00	12,000 00		450,000 00	35
			20,000 00	20,000 00			36
1,194,129 46			82,000 00	82,000 00		200,000 00	37
							38
							39
372,157 50			572,500 00	464,761 29			40
37,500 00							41
1,479,000 00						42,500 00	41
350,076 82							42
472,500 00							43
							44
727,000 00	1,176,956 00		25,000 00	25,000 00	771,644 62		45

TABLE 5.—Statement of Aid, granted and paid to Railways

No.	Name of Railway.	By Dominion Government.			By Provincial	
		Subsidy Granted.	Subsidy Paid up.	Loan.	Name of Province.	Subsidy Granted.
		\$ cts.	\$ cts.	\$ cts.		\$ cts.
	Canadian Pacific— <i>Con.</i>					
	Leased—					
46	Alberta Ry. and Irriga- tion Co. ....	148,094 00	148,094 00			
47	Esquimalt and Nanaimo	1,520,560 00	1,520,560 00			
48	Kingston and Pembroke.	48,000 00	48,000 00		Ontario.....	456,493 00
49	St. Maurice Valley.	173,120 00	173,120 00			
50	Atlantic and North West.	3,888,800 00	3,888,800 00		Quebec.....	711,122 00
51	Cap de la Madeleine.	7,424 00	7,424 00			
52	Columbia and Kootenay.	88,800 00	88,800 00			
53	Credit Valley.....				Ontario.....	531,000 00
54	Fredericton.....				New Brunswick	230,000 00
55	Guelph Junction.....	51,200 00	46,000 00		Ontario.....	
56	Guelph and Goderich....				"	
57	Lindsay, Bobcaygeon and Pontypool.....	185,173 06	185,173 06		"	52,500 00
58	Manitoba and Northwest- ern.....				Manitoba.....	
59	Manitoba South West Colonization.....				"	
60	Montreal and Lake Maski- nonge.....	41,280 00	41,280 00		Quebec.....	87,750 00
61	Montreal and Ottawa....	192,000 00	192,000 00		Ontario.....	100,000 00
					Quebec.....	182,210 00
62	Nakusp and Sloean.	121,600 00	117,760 00		British Colum- bia.....	
63	New Brunswick.....				New Brunswick	76,000 00
64	New Brunswick and Can- ada.....				"	575,000 00
65	New Brunswick Southern				"	413,000 00
66	Nicola, Kamloops and Similkameen.....	300,800 00	300,800 00			
67	Northern Colonization....	355,200 00	355,200 00		Quebec.....	96,000 00
68	Ontario and Quebec.....	196,000 00	196,000 00		Ontario.....	
69	Ottawa, Northern and Western.....	950,000 00	821,009 20		Ontario.....	50,000 00
					Quebec.....	1,316,389 15
70	Orford Mountain.....	202,926 50	202,926 50		Quebec.....	138,884 92
71	Saskatchewan and West- ern.....				Manitoba.....	
72	Shuswap and Okanagan....	163,200 00	163,200 00			
73	St. John Bridge and Ry. Extension.....			433,900 00	New Brunswick	5,181 81
74	St. John and Maine.....				"	880,000 00
75	St. Lawrence and Ottawa				Ontario.....	
76	St. Mary's and Western Ontario.....	67,709 00	67,709 00		"	
77	St. Stephen and Milltown	14,848 00	14,848 00		New Brunswick	13,920 00
78	Tilsonburg, Lake Erie and Pacific.....	158,871 48	150,071 48		Ontario.....	38,564 00
79	Tobique Valley.....	134,016 00	134,016 00		New Brunswick	70,000 00
80	Toronto, Grey and Bruce	4,656 00	14,656 00		Ontario.....	375,282 00
81	Vancouver and Lulu Island.....	61,670 00	61,670 00			
82	West Ontario Pacific....	60,000 00	60,000 00		Ontario.....	
83	Cape Breton.....	196,800 00	196,800 00		Nova Scotia.....	99,200 00
84	Caraget.....	224,000 00	224,000 00		New Brunswick	180,000 00
85	Gulf Shore.....	53,699 20	53,699 20		"	41,950 00
86	Colchester Coal and Ry. Co	12,800 00	12,800 00			
87	Cumberland Ry. and Coal Co.....	44,800 00	39,850 00		Nova Scotia....	184,450 00
88	Dominion Atlantic, includ- ing.....					
89	Windsor and Annapolis....	1,193,369 00	1,193,369 00			
90	Cornwallis Valley.....	44,800 00	44,800 00		Nova Scotia....	44,800 00
91	Western Counties.....	500,000 00	500,000 00		"	679,197 45
92	Midland of N.S.....	399,060 40	399,060 40		"	185,600 00

\*Cash paid for land relinquished by Company.

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by Governments and Municipalities, to 30th June, 1917—Continued.

Governments.			By Municipalities.				No.
Subsidy Paid up.	Loan.	Subscriptions to Shares.	Subsidy Granted.	Subsidy Paid up.	Loan.	Subscription to Shares.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
							46
							47
456,493 00			509,320 00	509,320 00			48
							49
699,192 08						325,000 00	50
							51
							52
531,000 00			1,085,000 00	1,085,000 00			53
230,000 00			80,000 00	80,000 00			54
						193,000 00	55
			31,000 00	31,000 00			56
							57
52,500 00			73,000 00	73,000 00			57
							58
			215,600 00	215,600 00			58
							59
	900,000 00						59
							60
87,750 00							60
100,000 00							61
182,210 00			5,300 00	5,300 00			61
							62
	647,074 00						62
76,000 00			23,000 00	23,000 00			63
							64
575,000 00			47,500 00	47,500 00			64
413,000 00			3,000 00	3,000 00			65
							66
							67
96,000 00							68
			52,500 00	52,500 00			68
							69
50,000 00			150,000 00	150,000 00			69
1,192,672 58			101,000 00	100,000 00			70
138,884 92			3,000 00	3,000 00			70
							71
			10,000 00	10,000 00			71
							72
							73
5,181 81							73
880,000 00		300,000 00				60,000 00	74
						90,000 00	75
					300,000 00		75
			80,000 00	77,996 39			76
13,920 00							77
							78
38,564 00			75,000 00	75,000 00			78
70,000 00							79
375,282 00			988,000 00	969,561 44			80
							81
			25,000 00	25,000 00			82
			10,000 00	10,000 00			83
99,200 00							84
180,000 00							85
41,950 00							86
							87
173,650 00							87
							88
							89
							90
44,800 00			27,685 00	27,685 00			90
679,197 45			250,000 00	250,000 00			91
183,510 40			36,000 00	36,000 00			92

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TABLE 5.—Statement of Aid, granted and paid to Railways

No.	Name of Railway.	By Dominion Government.			By Provincial	
		Subsidy Granted.	Subsidy Paid Up.	Loan.	Name of Province.	Subsidy Granted.
		\$ cts.	\$ cts.	\$ cts.		\$ cts.
93	Edmonton D. & B.C.	160,352 00	125,202 84			
94	Elgin and Havelock.	†82,652 82	†82,652 82		New Brunswick	107,500 00
95	Fredericton and Grand Lake.	216,576 00	216,576 00			
96	Grand Trunk, including...			15,142,633 33		
97	Beauharnois Junction.	62,400 00	62,400 00		Quebec	179,073 00
98	Brantford, Norfolk and Port Burwell				Ontario	68,000 00
99	Buffalo and Lake Huron.				"	
100	Cobourg, Blairton and Marmora.				"	18,740 00
101	Grand Trunk, Victoria Jubilee Bridge.	500,000 00	500,000 00			
102	Grand Trunk, Georgian Bay and Lake Erie.				Ontario	326,000 00
103	Grand Junction, Belleville and N. Hastings.	21,888 00	21,888 00		"	224,660 00
104	Owen Sound Branch.	39,744 00	39,744 00		"	
105	Hamilton and North Western.				"	565,020 00
106	London, Huron and Bruce				"	178,630 00
107	Midland, Ontario.				"	168,350 00
108	Montreal and Champlain Junction.	103,600 00	103,600 00		Quebec	150,000 00
109	Northern.				Ontario	196,188 00
110	North Simcoe.				"	83,300 00
111	Northern Pacific Junction	1,320,000 00	1,320,000 00			
112	South Norfolk.	54,400 00	54,400 00		Ontario	
113	Toronto and Nipissing.				"	105,212 00
114	Lake Simcoe Junction.				"	53,000 00
115	Victoria.				"	312,000 00
116	Waterloo Junction.	32,800 00	32,800 00		"	
117	Wellington, Grey and Bruce.				"	241,276 00
118	Whitby, Port Perry and Lindsay.				Ontario	94,957 59
119	Canada Atlantic.	282,355 20	282,355 20		Ontario	270,000 00
					Quebec	200,000 00
120	Ottawa, Arnprior and Parry Sound	932,512 00	932,512 00		Ontario	577,326 06
121	Central Counties				"	
122	Pembroke Southern.	64,000 00	64,000 00		"	55,500 00
123	Grand Trunk Pacific.	†4,994,416 66	†4,994,416 66	10,000,000 00	"	376,320 00
		1,269,299 20	1,269,299 20			
124	Hereford.	170,560 00	170,560 00		Quebec	103,000 00
125	International of New Bruns- wick.	726,080 00	726,080 00		New Brunswick	275,000 00
126	Kent, Northern, and.	58,334 27	58,334 27		"	135,000 00
127	St. Louis and Richibucto (abandoned).	22,400 00	22,400 00		"	21,000 00
128	Kettle Valley.	2,174,190 72	2,174,190 72		British Colum- bia.	1,110,700 00
129	Klondike Mines.	197,184 00	197,184 00			
130	*Kootenay Central.	1,065,856 00	1,065,856 00			
131	L'Assomption (abandoned).	11,200 00	11,200 00			
132	*Lake Erie and Northern.	320,191 40	320,191 40			
133	Lake Erie and Detroit River and.	571,851 00	571,851 00		Ontario	83,000 00
134	London and Port Stanley.				"	
135	Lotbiniere and Megantic.	96,000 00	96,000 00		Quebec	126,994 00
136	Maganetawan River.	3,552 00	3,552 00		Ontario	10,000 00
137	Maritime Coal, Ry. and Power Co.	40,700 00	40,700 00		Nova Scotia	39,788 00
138	Massawippi Valley.	5,376 00	5,376 00		Quebec	5,000 00
139	Minudie Coal and Ry. Co	18,544 00	18,544 00			

†Includes loan used iron rails.

‡Paid under the special "Implement Clause."

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by Governments and Municipalities, to 30th June, 1917—*Continued.*

Governments.			By Municipalities.				No.
Subsidy Paid up.	Loan.	Subscription to Shares.	Subsidy Granted.	Subsidy Paid up.	Subsidy Loan.	Subscription to Shares.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
107,500 00			13,000 00	13,000 00			93 94
179,073 00							95 96 97
68,000 00			966,000 00	996,000 00			98 99
18,740 00	26,000 00		113,000 00	113,000 00			100 101
336,000 00			929,000 00	929,000 00			102
224,660 00			213,000 00	213,000 00		50,000 00	103 104
565,020 00			599,805 00	599,805 00			105
178,630 00			311,500 00	311,500 00			106
168,350 00			144,870 85	144,870 85			107
150,000 00			21,774 00	21,774 00			108
196,188 00			241,980 00	241,980 00		390,000 00	109 110 111
83,300 00			65,000 00	65,000 00			112
105,212 00			376,702 59	376,702 59			113
53,000 00			100,000 00	100,000 00			114
312,000 00			186,000 00	186,000 00			115
			47,000 00	47,000 00			116
241,276 00			682,000 00	682,000 00			117
94,957 59			222,094 93	222,904 93			118
270,000 00			154,392 00	152,900 00		32,000 00	119
200,000 00							120
577,326 06			24,000 00	24,000 00			121
55,500 00			20,000 00	20,000 00			122
376,320 00			350,000 00	350,000 00			123
84,226 36							124
275,000 00			5,000 00	5,000 00			125
135,000 00							126
21,000 00							127
1,110,700 00							128 129 130 131 132
83,000 00			356,500 00	356,500 00			133
126,994 00					1,332,854 00	414,000 00	134 135
10,000 00							136
39,788 00							137
5,000 00						65,000 00	138 139

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TABLE 5.—Statement of Aid, granted and paid to Railways

No.	Name of Railway.	By Dominion Government.			By Provincial	
		Subsidy Granted.	Subsidy Paid Up.	Loan.	Name of Province.	Subsidy Granted.
		\$    cts.	\$    cts.	\$    cts.		\$    cts.
140	Montreal and Atlantic and Lake Champlain and St. Lawrence Jct.				Quebec	444,000 00
142	Montreal and Province Line	58,560 00	56,560 00		"	250,280 00
143	Moncton and Buctouche	102,400 00	101,600 00		"	231,122 00
144	Napierville Junction	173,440 00	173,440 00		New Brunswick	96,000 00
145	New Brunswick Coal and Ry. Co.	190,400 00	190,400 00		Quebec	
146	New Brunswick and Prince Edward Island				New Brunswick	224,000 00
147	North Shore (N.B.)	113,440 00	113,440 00		"	99,708 90
148	Northern New Brunswick and Seaboard	27,616 00	27,616 00		"	16,200 00
149	Ottawa and New York	108,160 00	108,160 00			
150	Phillipsburg Ry. and Quar- ry Co.	262,384 00	262,384 00		Ontario	35,000 00
151	Pontiac and Renfrew	23,712 00	23,712 00		Quebec	25,667 00
152	*Quebec Bridge and Ry. Co.	13,600 00	13,600 00		"	17,433 00
153	Quebec Ry., Light and Power Co.	374,353 33	374,335 33		"	250,000 00
154	Quebec Central	96,000 00	96,000 00		"	306,945 50
155	Quebec Oriental	585,038 90	585,038 90		"	1,076,123 14
156	*Quebec and Saguenay	846,885 01	846,885 01		"	1,596,390 00
157	Quebec, Montreal and Southern, and	248,801 28	248,801 28			
158	United Counties, East Richelieu Valley	500,386 25	500,386 25		Quebec	207,565 00
159	South Shore	69,952 00	69,952 00		"	115,215 00
160	Roberval and Saguenay	296,998 38	296,998 38		"	276,645 00
161	Salisbury and Albert	231,787 80	231,787 80			
162	Schomberg and Aurora	29,665 45	†29,391 01		New Brunswick	455,000 00
163	Schomberg and Aurora	48,000 00	46,144 00			
163	*Southampton (N.B.)	81,280 00	81,280 00			
164	St. Clair Tunnel	375,000 00	375,000 00			
165	St. Lawrence and Adiron- daek	149,481 60	149,481 60		Quebec	70,400 00
166	*St. John and Quebec	598,319 70	598,319 70			
167	St. Martins	83,612 54	†83,612 54		New Brunswick	145,600 00
168	Sydney and Louisburg (Dom. Coal Co.)	89,600 00	87,808 00		Nova Scotia	87,808 00
169*	Thessalon and Northern Ontario	6,112 00	6,112 00			
170	Temiscouata	645,950 00	645,950 00		Quebec	362,250 00
171	Temiskaming and Northern Ontario				New Brunswick	66,000 00
172	Thousand Islands	2,134,080 00	2,134,080 00			
173	Toronto, Hamilton and Buffalo	61,200 00	29,840 00		Ontario	
174	York and Carleton	57,600 00	57,600 00		"	
		32,896 00	32,896 00		New Brunswick	25,247 00
	Total	118,204,991 05	116,962,223 63	25,576,533 33		31,374,184 87

\*Under construction. †Includes used iron rails.

‡Includes Ha Ha Bay Railway.



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by Governments and Municipalities, to 30th June, 1917—*Concluded.*

Governments.			By Municipalities.				No.
Subsidy Paid up.	Loan.	Subscription to Shares.	Subsidy Granted.	Subsidy Paid up.	Loan.	Subscription to Shares.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
315,891 89						528,000 00	140
250,280 00			51,000 00	36,000 00			141
231,122 00			25,000 00	25,000 00			142
94,500 00							143
			10,000 00	10,000 00			144
224,000 00							145
99,708 90							146
16,200 00							147
							148
35,000 00			85,000 00	85,000 00			149
25,667 00							150
17,433 60							151
250,000 00			300,000 00	290,817 46			152
206,945 50							153
1,076,123 14			103,000 00	103,000 00			154
947,199 25			50,500 00	9,000 00			155
							156
207,565 00							157
115,215 00							158
276,645 00			25,000 00	25,000 00			159
			12,365 30	12,365 30			160
455,000 00			70,000 00	70,000 00			161
							162
							163
							164
70,400 00							165
145,600 00							166
							167
82,000 00							168
							169
362,250 00			25,000 00	25,000 00			170
66,000 00							
			10,000 00	10,000 00			171
							172
			268,000 00	265,500 00			173
25,247 00							174
29,940,865 16	7,197,030 00	300,000 00	12,919,693 20	12,670,837 78	2,404,498 62	3,489,500 00	

TABLE 6.—Earnings of Railways for the year ending June 30, 1917.

Name of Railway.	1		Earnings.			5	6	7		
	2	3	4	Total Gross including other Earnings from Operation.						
				Passenger.	Freight and Switching.				Other Earnings from Operation.	Operating Expenses.
	\$	cts	\$	cts	\$	cts	\$	cts		
Algoma Central & Hudson Bay	70,949	39	809,003	50	276,525	35	969,481	56	186,996	68
Algoma Eastern	46,183	60	357,032	26	43,414	89	355,620	53	271,020	22
Atlantic, Quebec and Western	38,039	57	99,331	20	2,650	82	139,421	59	152,738	42
Alberta & Great Waterways	22,176	89	32,994	77	6,820	86	61,992	52	101,337	54
Brandon, Saskatchewan & Hudson Bay	22,405	46	20,845	57	4,856	04	48,107	07	132,498	20
British Yukon	51,862	40	219,570	79	12,455	69	283,888	88	146,511	41
Canada & Gulf Terminal	16,680	43	26,633	75	2,950	68	46,284	86	41,989	18
Canada Southern	3,371,483	56	9,440,972	17	717,522	11	13,529,977	84	7,593,743	23
Canadian Government Railways (Intercolonial)	4,900,673	27	11,022,339	81	2,100,742	06	18,023,355	14	16,385,815	23
Canadian Government Railways (Prince Edward Island)	162,105	48	235,746	63	269,143	05	666,995	16	912,178	31
Canadian Northern System	6,718,575	92	32,126,913	07	4,154,487	57	42,999,976	56	30,840,234	17
Canadian Pacific	27,936,712	91	101,482,004	01	17,294,398	73	146,713,115	65	96,657,441	72
Cape Breton	6,774	48	4,928	57	658	04	12,361	09	24,208	28
Central Vermont	115,674	93	191,745	30	33,225	07	340,645	30	274,340	05
Caraqueet & Gulf Shore	22,904	02	53,621	73	4,216	11	80,741	86	79,959	69
Crow's Nest Southern	12,358	31	83,458	70	4,945	13	100,762	14	206,237	04
Cumberland	13,765	48	79,435	35	5,852	49	99,053	32	87,170	44
Central Canada	4,192	18	6,619	91	488	18	11,300	27	30,437	39
Dominion Atlantic	447,767	73	614,285	46	90,221	26	1,152,274	45	830,278	07
Eastern British Columbia	1,697	46	25,894	96	1,873	15	29,466	06	34,954	20
Edmonton, Dunvegan & British Columbia	186,999	42	265,426	50	36,079	64	487,605	56	496,370	46
Elgin & Havelock	1,707	56	7,450	29	1,127	70	10,285	55	11,901	94
Essex Terminal	180,391	71	79,795	73	18,732	30	98,528	63	66,086	11
Esquimalt & Nanaimo	7,681	08	428,910	34	47,409	16	656,711	21	428,284	90
Fredrickton & Grand Lake Coal & Ry. Co.	7,681	08	86,031	40	981	00	94,694	38	53,460	60
Grand Trunk	11,134,854	82	31,755,443	53	4,080,872	04	46,921,270	39	33,772,231	91
Grand Trunk Pacific	1,047,245	33	4,379,516	76	1,024,333	89	6,651,298	18	6,857,632	99
Grand Trunk Pacific Branch Lines	314,709	07	1,142,796	03	135,513	90	1,593,019	10	1,796,346	61
Hereford	18,638	51	50,378	45	4,170	95	73,187	91	129,025	49

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International of New Brunswick.....	45,409 86	181,370 12	135,960 26	3,230 40	96,206 63	36,523 23	79,331 24	178,931 78	36,980 25	295,243 27	308,608 05	13,364 78
Kent Northern.....	7,500 00	17,857 33	25,357 33	2,928 49	14,692 96	7,735 88	40,742 00	93,331 00	45,398 00	179,671 00	287,880 77	-108,269 77
Kettle Valley.....	100,159 08	669,294 05	569,134 37	29,412 51	388,463 43	151,258 63	112,974 06	3,032,750 95	57,611 52	3,203,336 51	1,713,645 16	1,489,691 35
Lothmere & Megantic.....	1,052 03	33,736 83	34,788 86	1,887 05	28,867 69	4,034 12	445,919 44	1,215,001 08	97,516 63	1,758,437 15	1,192,354 80	566,082 35
Maine Central.....	3,429 84	16,337 37	19,767 21	1,111 24	7,037 08	11,618 89	159,019 97	282,179 81	21,568 45	462,768 23	502,697 19	45,055 87
Manitoba Great Northern.....	83,218 36	125,639 58	125,639 58	9,024 21	36,016 84	5,502 31	56,928 67	1,356,276 99	8,264 67	222,834 59	80,741 28	20,137 40
Maritime Coal Ry. & Power Co.....	42,260 43	55,283 43	92,543 86	1,272 32	90,136 97	6,134 57	8,608 25	91,361 47	1,399 32	100,291 28	19,550 00	14,338 40
Massachusetts Valley.....	61,767 54	283,318 29	221,550 75	7,561 36	147,176 86	66,812 52	2,301 31	15,294 40	1,599 32	19,395 03	33,795 44	14,368 10
Midland Railway of Manitoba.....	9,810 70	344,312 94	334,502 94	59,680 17	178,047 62	96,774 45	9,245 61	6,440 95	357 31	16,043 85	12,975 75	3,068 10
Moncton & Baudoche.....	1,230 03	37,193 38	35,963 35	2,370 57	21,024 72	12,368 06	12,551 40	119,819 90	68,223 07	200,694 37	153,157 37	47,557 00
Montréal & Atlantic.....	77,555 95	1,223,737 51	1,301,293 46	77,440 29	1,030,379 14	193,474 03	9,245 61	15,294 40	1,399 32	16,043 85	12,975 75	3,068 10
Morrissey, Fermie & Michel.....	80,235 33	88,235 33	88,964 31	7,726 35	69,931 31	11,307 25	10,215 39	147,092 88	1,444 04	158,752 31	88,405 90	70,346 41
Napierville Junction.....	70,346 41	88,405 90	88,964 31	1,444 04	147,092 88	10,215 39	10,215 39	147,092 88	1,444 04	158,752 31	88,405 90	70,346 41
National Transcontinental.....	82,032 16	7,195,278 57	7,113,246 41	185,279 57	6,095,722 85	82,243 99	82,243 99	6,095,722 85	185,279 57	7,113,246 41	7,195,278 57	82,032 16
Nelson & Fort Sheppard.....	47,830 30	100,300 20	52,559 30	6,095 64	17,942 64	17,501 62	17,501 62	17,942 64	6,095 64	52,559 30	100,300 20	47,830 30
New Brunswick Coal & Railway Co.....	13,591 73	51,436 93	37,845 20	7,737 81	17,314 11	12,533 28	12,533 28	17,314 11	7,737 81	37,845 20	51,436 93	13,591 73
New Brunswick & Prince Edward Island.....	27,112 46	77,915 64	50,803 18	5,313 55	37,086 54	8,403 09	8,403 09	37,086 54	5,313 55	50,803 18	77,915 64	27,112 46
New Westminster Southern.....	5,971 86	29,279 47	23,307 61	334 26	21,039 28	1,934 07	1,934 07	21,039 28	334 26	23,307 61	29,279 47	5,971 86
Northern New Brunswick & Seaboard.....												
North Shore.....												
Ottawa & New York.....												
Pacific Great Eastern.....												
Pere Marquette.....												
Quebec Central.....												
Quebec, Montreal & Southern.....												
Quebec Oriental.....												
Quebec Railway Light & Power Co.....												
Red Mountain.....												
Rutland & Noyan.....												
Roberval-Saguenay.....												
Salisbury & Albert.....												
St. Lawrence & Adirondack.....												
St. John & Quebec.....												
St. Martins.....												
Sydney & Louisburg.....												
Temiscouata.....												
Teniskaming & Northern Ontario.....												
Thousand Islands.....												
Toronto, Hamilton & Buffalo.....												
Vancouver, Victoria & Eastern.....												
Victoria Terminal Railway & Ferry Co.....												
Victoria & Sidney, B.C.....												
Wabash (in Canada).....												
York & Carleton.....												
Final total.....		222,890,637 08	310,771,479 10	31,855,225 73	217,625,962 67	61,290,290 70	217,625,962 67	31,855,225 73	310,771,479 10	222,890,637 08	87,880,842 02	

TABLE 7.—Earnings and Income for the year ending June 30, 1917.

Name of Railway.	Revenue from Transportation—Rail Line.									
	E freight.	Per Ton per Mile.	Passenger.	Per Passenger per Mile.	Excess Baggage.	Sleeping Cars.	Parlour and Chair Car.	Mail.	\$ cts.	\$ cts.
Algoma Central and Hudson Bay.....	681,115 58	0 744	70,949 39	3 927	262 08	263,796 89	14,089 50	155,900 42	7,720 00	3,827 60
Algonia Eastern.....	523,295 09	1 941	46,183 60	2 804	243 28	2,804	179 60	366,978 73	3,827 60	1,268 07
Atlantic, Quebec & Western.....	49,331 20	1 382	38,039 57	2 935	324 86	3,869	1,085 78	22,285 28	1,085 78	1,085 78
Alberta & Great Waterways.....	32,694 77	0 626	22,176 89	3 869	39 04	3 869	97 00	22,285 28	97 00	97 00
Brandon, Saskatchewan & Hudson Bay.....	15,896 90	1 203	22,405 46	2 563	181 46	2 563	6,922 45	24,380 33	24,380 33	2,275 00
British Yukon.....	219,570 79	3 035	51,862 40	9 118	368 73	3 118	11,407 97	3,734 82	1,459,227 80	2,196 94
Canada & Gulf Terminal.....	26,653 75	3 186	16,680 43	3 118	398 32	3 118	1,407 97	1,396 00	701 00	676 08
Canada Southern.....	9,391,949 41	0 651	3,371,483 56	2 346	27,763 62	2 346	14,089 50	155,900 42	7,720 00	3,827 60
Canadian Govt. Ryys. (Intercolonial).....	10,946,671 21	0 576	4,300,673 27	1 555	33,536 28	1 555	179 60	366,978 73	7,720 00	3,827 60
Canadian Northern System.....	239,340 98	3 792	162,165 48	1 661	2,278 55	1 661	18,368 87	22,285 28	1,459,227 80	2,196 94
Canadian Northern System (P. E. Island).....	31,601,074 81	0 688	6,718,575 92	2 089	47,071 48	2 089	18,368 87	238,978 68	1,459,227 80	2,196 94
Canadian Pacific.....	100,901,891 68	0 676	27,936,712 91	1 942	349,512 87	1 942	115,209 26	1,459,227 80	7,720 00	3,827 60
Cape Breton.....	4,928 57	2 584	6,774 48	2 890	70 75	2 890	412 68	1,459,227 80	7,720 00	3,827 60
Central Vermont.....	187,964 28	1 509	115,674 93	3 165	955 97	3 165	412 68	1,459,227 80	7,720 00	3,827 60
Caracquet & Gulf Shore.....	53,621 73	3 166	22,304 02	2 891	103 51	2 891	1,459,227 80	1,459,227 80	7,720 00	3,827 60
Crow's Nest Southern.....	83,314 70	1 099	12,358 31	3 502	103 51	3 502	1,459,227 80	1,459,227 80	7,720 00	3,827 60
Cumberland.....	79,405 35	3 100	13,765 48	2 680	338 55	2 680	1,459,227 80	1,459,227 80	7,720 00	3,827 60
Central Canada.....	6,619 91	1 693	4,192 18	3 759	28 11	3 759	1,459,227 80	1,459,227 80	7,720 00	3,827 60
Dominion Atlantic.....	613,119 22	2 298	447,767 73	2 288	3,417 33	2 288	6,922 45	24,380 33	24,380 33	2,275 00
Eastern British Columbia.....	25,894 96	2 985	1,697 95	5 553	61 57	5 553	11,837 77	2,275 00	2,275 00	2,196 94
Edmonton, Dunvegan & British Columbia.....	262,589 79	1 549	186,099 42	3 589	61 57	3 589	11,837 77	2,196 94	2,196 94	676 08
Elgin & Havelock.....	7,450 29	1 747 56	1,747 56	1 747 56	1,747 56	1 747 56	1,747 56	1,747 56	1,747 56	1,747 56
Essex Terminal.....	77,795 69	2 712	180,391 71	2 960	2,532 06	2 960	3,964 15	10,101 29	10,101 29	826 32
Esquimalt & Nanaimo.....	428,864 34	1 522	7,681 98	3 152	59,339 62	3 152	100,735 41	559,737 69	559,737 69	109,924 60
Fredrieton & Grand Lake Coal & Rly Co.....	86,031 40	0 738	11,134,954 82	1 901	7,001 65	1 901	358 99	109,924 60	109,924 60	19,050 25
Grand Trunk.....	31,093,103 31	0 731	1,047,245 33	2 126	7,001 65	2 126	107,979 76	19,050 25	19,050 25	2,991 64
Grand Trunk Pacific.....	4,557,112 80	0 731	1,047,245 33	2 126	7,001 65	2 126	107,979 76	19,050 25	19,050 25	2,991 64
Grand Trunk Pacific Branch Lines Co.....	1,132,921 91	1 104	314,709 07	2 254	134 75	2 254	3,931 86	2,991 64	2,991 64	1,396 00
Hereford.....	50,286 41	1 657	18,638 51	3 219	134 75	3 219	856 61	2,991 64	2,991 64	1,396 00
International of New Brunswick.....	96,124 08	1 407	36,523 23	2 489	190 66	2 489	1,396 00	701 00	701 00	676 08
Kent Northern.....	14,692 96	1 549	7,735 88	2 960	214 26	2 960	1,723 41	9,745 38	9,745 38	1,872 05
Kettle Valley.....	381,707 31	3 645	151,258 63	2 960	1,723 41	2 960	1,872 05	1,872 05	1,872 05	1,872 05
Lotbiniere & Megantic.....	28,867 69	3 645	4,034 12	2 717	1,723 41	2 717	1,872 05	1,872 05	1,872 05	1,872 05

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Maime Central.....	7,037 08	0-605	11,618 89	2-364	41 60	218 01
Manitoba Great Northern.....	34,624 76	0-554	5,502 34	2-721	44 95	280 68
Maritime Coal Rly. & Power Co.....	89,189 97	2-661	6,134 57	3-014	63 50	577 92
Massawippi Valley.....	145,640 62	0-880	66,812 53	2-704	414 08	3,550 10
Midland Rly. of Manitoba.....	170,030 11	0-884	96,774 45	2-333	901 23	8,759 30
Moncton & Baetouche.....	21,024 72	4-570	12,368 06	2-185	7,291 66	804 00
Montreal & Atlantic.....	1,022,281 38	1-188	193,474 03	2-471	2,274 98	13,383 41
Morrissey, Fermie & Michel.....	64,490 91	2-656	11,307 25	1-675	37 28	14,498 34
Napierville Junction.....	147,068 13	0-765	10,215 39	2-632	35,345 99	1,502 40
National Transcontinental.....	6,044,325 63	0-303	832,243 99	1-660	146 15	1,452 00
Nelson & Fort Sheppard.....	28,962 64	2-295	17,501 62	3-257	157 30	4,741 76
New Brunswick Coal & Rly. Co.....	17,314 11	2-393	12,733 28	2-418	15 32	
New Brunswick & P.E. Island.....	37,086 54	2-615	8,403 09	2-815		
New Westminster Southern.....	21,039 28	2-397	1,934 07	3-166		
Northern, New Brunswick & Seaboard						
North Shore.....						
Ottawa & New York.....	178,784 99	0-577	79,331 24	2-441	547 62	4,732 59
Pacific Great Eastern.....	93,331 00		40,742 00		1,198 09	1,520 00
Pere Marquette.....	3,003,370 45	0-591	112,974 06	2-319	4,547 43	10,661 12
Quebec Central.....	1,215,001 08	1-334	445,919 44	2-235	1,140 52	28,285 64
Quebec, Montreal & Southern.....	280,496 86	1-382	159,019 97	2-451	241 41	5,238 80
Quebec Oriental.....	157,941 25	1-101	56,628 67	2-621	20 64	3,953 07
Quebec Rly. Light & Power Co.....	30,368 93	3-438	8,608 25	1-491		284 80
Red Mountain.....	14,340 40	3-835	2,501 31	2-718		87 64
Rutland & Noyan.....	6,440 93		9,245 61			
Roberval-Saguenay.....	86,905 56	1-743	12,551 40	2-692	89 93	2,535 30
Salisbury & Alboert.....	33,013 06		8,738 65		91 30	5,238 49
St. Lawrence & Adirondack.....	767,815 54	1-089	222,998 97	1-659	753 66	1,647 36
St. John & Quebec.....	50,268 11	2-419	28,409 99	2-416	209 27	1,056 04
St. Martins.....	14,499 18	6-034	3,694 24	2-521		1,079 60
Sydney & Louisburg.....	678,518 69	1-161	48,994 50	2-306	500 20	6,320 34
Temiscouata.....	161,045 82	2-512	48,385 33	2-729	787 93	22,241 43
Temiskaming & Northern Ontario	1,346,564 02	0-921	674,048 77	2-219	4,641 00	855 00
Thousand Islands.....	26,670 32	11-327	7,765 13	2-943	243 87	1,015 88
Toronto, Hamilton & Buffalo.....	1,535,423 94	1-350	427,156 17	2-250	1,988 60	4,016 22
Vancouver, Victoria & Eastern.....	303,397 08	0-907	119,620 81	2-832	991 03	11,719 43
Victoria Terminal Rly. & Ferry Co.....	1,035 46	6-389	1,860 58	2-383		25 26
Victoria & Sidney, B.C.....	18,985 08	6-545	25,373 73	2-390	3,212 39	395 93
Wabash (in Canada).....	3,372,555 55	0-518	383,060 90	1-012		20 00
York and Carleton.....	4,629 41		1,653 00			
Final total.....	215,245,256 49		61,290,290 70		569,566 07	3,169,910 97
					2,832,750 58	268,875 33

TABLE 7.—Earnings and Income for the year ending June 30, 1917—Continued.

## Revenue from Transportation—Rail Line.—Continued.

Name of Railway.	Express.		Other Passenger Train.		Milk.		Switching.		Special Service Train.		Other Freight Train.		Water Transfers Freight.		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Algoma Central & Hudson Bay.....	3,489	16							3,321	30					888,698	18
Algonia Eastern.....	5,577	93						127,887	92			2,072	75		589,241	57
Atlantic, Quebec & Western.....	1,725	96						13,647	17						139,421	59
Alberta & Great Waterways.....	852	84							124	65					56,826	19
Brandon, Saskatchewan & Hudson Bay.....	1,862	70		19	87			4,948	67						47,757	30
British Yukon.....	3,131	83							87	50					280,164	04
Canada & Gulf Terminal.....	1,885	00													45,617	50
Canada Southern.....	258,738	69	23,240	40		928	26	19,022	76	Cr.	427	69			13,278,698	61
Canadian Govt. Rlys. (Intercolonial).....	669,327	93	814	99		34,335	63	76,468	60		5,824	53	456	00	17,312,273	56
“ “ (P.E. Island).....	6,399	83						405	65		7,113	29			436,108	61
Canadian Northern System.....	4,096,264	37	17,412	07		57,536	16	522,838	26		29,554	57	130	00	40,617,439	69
Canadian Pacific.....	3,916,004	17	12,522	74		206,535	39	580,109	33		27,687	22	13,113	12	137,650,253	25
Cape Breton.....	18,026	23													12,361	00
Central Vermont.....	388	51	139	08		2,239	29	3,781	02						336,913	48
Caraguet & Gulf Shore.....	1,639	03	10	31											80,741	86
Crow's Nest Southern.....	3,300	61						114	00						98,837	96
Cumberland.....	104	20						30	00						97,925	77
Central Canada.....	37,700	00													11,270	10
Dominion Atlantic.....			191	65		2,774	07	1,166	24	235	50	60	13		1,638,037	65
Eastern British Columbia.....	9,458	13													27,867	91
Edmonton, Dunvegan & British Columbia.....	451	62						2,836	71	143	35				475,803	68
Edgem & Haystack.....															10,285	55
Essex Terminal.....	10,149	09	71	00		4,269	44	46	00			3,598	10		83,393	82
Esquimaux & Nainimo.....															640,379	08
Fredericton & Grand Lake Coal & Rly. Co.....															94,539	70
Grand Trunk.....	1,873,348	83	11,321	80	200,748	16	642,340	19	22,595	33				45,701,225	19	
Grand Trunk Pacific.....	485,523	63	920	40	1,458	14	22,403	96	9,974	73				6,349,404	23	
Grand Trunk Pacific Branch Lines Co.....	73,584	34				913	79	9,874	12	1,819	54			1,559,777	21	
Hereford.....	559	75						92	04						72,703	10
International of New Brunswick.....	579	20						82	55						134,895	72
Kent Northern.....	1,775	97													25,420	17
Kettle Valley.....	12,909	62						3,756	12	159	37	279	50		564,539	34
Goldimere & Megantic.....															34,773	86
Maine Central.....	851	63													19,767	21

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Manitoba Great Northern.....	340 12	5 07	1,392 08	166 50	7,709 96	42,190 00
Maritime Coal, Rly. & Power Co.....	582 00		947 00			97,495 86
Massachusetts Valley.....	999 96		1,536 24			218,953 53
Midland Rly. of Manitoba.....	20,359 83	111 30	8,017 51	166 50	182 30	313,755 99
Moncton & Buctouche.....	214 00					34,410 78
Montréal & Atlantic.....	21,678 95	118 15	8,097 76	476 00	7,709 96	1,271,646 85
Morrissey, Fernie & Michel.....	625 87		5,440 40			81,238 56
Napierville Junction.....	51,345 89	5 40	459 51			158,436 33
National Transcontinental.....	2,142 25	50 00	646 62	2,339 04		7,035,471 02
Nelson & Fort Sheppard.....	886 98	15 12	51,397 22		7 50	50,277 68
New Brunswick Coal & Rly. Co.....	305 74					32,386 37
New Brunswick & P. E. Island.....	306 56	2 10				50,694 43
New Westminster Southern.....						23,297 33
Northern New Brunswick & Seaboard.....						
North Shore.....						
Ottawa & New York.....	28,243 28	397 19	1,146 79	115 06		294,174 70
Pacific Great Eastern.....	1,744 00				41,511 00	179,046 00
Pere Marquette.....	26,229 11		29,379 98			3,186,480 99
Quebec Central.....	27,488 46			255 21		1,721,242 65
Quebec, Montreal & Southern.....	12,346 52	268 10	1,682 95			460,629 94
Quebec Oriental.....	4,070 19					222,834 59
Quebec Rly., Light & Power Co.....	943 28		492 54			99,969 72
Red Mountain.....	269 67	2 99	451 00			19,047 42
Rutland & Noyan.....			32,914 34			16,043 85
Roherval-Saguenay.....	454 65					132,461 23
Salisbury & Albert.....	23,364 28	619 61	1,068 77	346 26		44,852 96
St. Lawrence & Adirondack.....	545 77		3 00			1,038,503 41
St. John & Quebec.....	116 80					81,083 50
St. Martins.....	2,160 42		12,830 38	681 35		19,366 26
Sydney & Louisbourg.....	2,848 16		1,253 72			714,755 14
Temiscouata.....	65,243 72		9,712 37	775 90		220,641 30
Thousand Islands.....	4,024 85	4 60	31 43			2,124,087 41
Toronto, Hamilton & Buffalo.....	43,633 98	213 73	118,124 98			39,751 48
Vancouver, Victoria & Eastern.....	21,522 82	156 72	30,916 62	266 00		2,130,557 62
Victoria Terminal Rly. & Ferry Co.....						495,816 32
Victoria & Sidney, B.C.....	137,997 43	177 58	206 32			3,127 62
Wabash (in Canada).....	219 32		2,119 30			46,875 63
York & Carleton.....			1,274 28			3,898,278 13
Final total.....	8,999,073 85	72,110 40	2,380,706 18	113,832 01	27,652 04	41,518 50
			538,486 82			295,550,929 94









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Manitoba Great Northern.....					6 42		221 00	
Maritime Coal, Rly. & Power Co.					110 40		1,196 00	522 91
Massawippi Valley.....				0 97	644 90		5,289 57	
Midland Rly. of Manitoba		9,618 48						
Moncton & Buctouche					726 31		17,159 25	
Montreal & Atlantic					12 14		280 00	23 84
Morrissey, Fermie & Michel.....					4,904 47		11,360 47	13,944 58
Napierville Junction					16 25		171 00	2,057 55
National Transcontinental				0 10			55 00	0 25
Nelson & Fort Sheppard		Dr. 2,580 86			1 80		0 11	
New Brunswick Coal & Rly. Co.				1 25				
New Brunswick & P. E. Island								
New Westminster Southern								
Northern New Brunswick & Seaboard								
North Shore								
Ottawa & New York			34 32	7 00	388 88	8 70	472 25	13 02
Pacific Great Eastern			12 00		238 00		238 00	
Pere Marquette			118 21	3 20	947 95	9 70	10,465 00	70 00
Quebec Central		11,186 14			1,180 26	276 07	5,111 00	
Quebec Montreal & Southern			120 00		279 89	16 10	1,779 00	463 30
Quebec Oriental							34 20	
Quebec Rly., Light & Power Co.			124 10	7 66	84 73		40 00	204 42
Red Mountain				3 00			6,604 95	
Roberval-Saguenay								
Rutland & Noyan								
Salisbury & Albert								
St. Lawrence & Adirondack			244 81		36 16	2 40	6,773 50	213 53
St. John & Quebec			106 94		11 80	0 25	1,403 00	7 05
St. Martins								2 48
Sydney & Louisbourg								150 36
Tennessee								52 05
Tennisskamik & Northern Ontario			500 00		63 29		3,680 90	
Thousand Islands			5,400 02		87 15		1,742 00	62,155 00
Toronto, Hamilton & Buffalo					1,619 05	335 90	18,215 75	
Vancouver, Victoria & Eastern					22 41		326 00	514 03
Victoria Terminal Rly. & Ferry Co.			382 32		591 40	16 71	35,805 00	
Victoria & Sidney, B.C.			40 59	28 48	1,365 95	677 99	3,278 89	1,706 69
Wabash (in Canada)							10 08	
York and Carleton			1,185 49		Dr.	14 85	156 92	
Final total	3,026,048 70	542,581 61	99,875 58	82,446 02	247,132 61	77,134 48	1,526,214 72	328,265 29



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Lothbinière & Megantic.....				15 00					34,788 86
Maine Central.....									19,767 21
Manitoba Great Northern.....	15 00								42,421 22
Maritime Coal, Rly. & Power Co.....		48 00			3 55				97,543 86
Massawippi Valley.....			42 00						221,550 75
Midland Rly. of Manitoba.....				205 12					334,502 24
Moncton & Buctouche.....			1,304 00		5,150 33				35,963 35
Montreal & Atlantic.....			2,831 06		8,019 64				1,301,293 46
Morrissey, Fernie & Michel.....					7,726 35				88,964 91
Napierville Junction.....									158,752 31
National Transcontinental.....				4,275 97	42,573 28				7,113,246 41
Nelson & Fort Sheppard.....					21 72				52,559 90
New Brunswick Coal & Rly. Co.....					5,458 58				37,845 20
New Brunswick & P. E. Island.....					51 35				50,803 18
New Westminster Southern.....					3 80				23,307 61
Northern New Brunswick & Seaboard.....									
North Shore.....									
Ottawa & New York.....									295,243 27
Pacific Great Eastern.....		58 00			86 40				179,671 00
Pere Marquette.....		60 00			315 00				3,203,336 51
Quebec Central.....		4,599 24			642 22				1,798,437 15
Quebec, Montreal & Southern.....		11,575 69			2,966 81				402,768 23
Quebec Oriental.....		27 00	10c.		547 00				222,834 59
Quebec Rly., Light & Power Co.....		70 87							100,291 28
Red Mountain.....					2 79				19,365 03
Rutland & Noyan.....									16,043 89
Roberval-Saguenay.....		1,935 89			59,629 30				200,694 37
Salisbury-Albert.....		120 00			768 77				45,955 26
St. Lawrence & Adirondack.....		23 00			15 00				1,045,605 33
St. John & Quebec.....		230 00			97 28				82,935 25
St. Martins.....		28 00							19,544 62
Sydney & Louisbourg.....									765,763 55
Temisconiata.....		127 50			1,463 47				224,561 42
Trenton & Northern Ontario.....		8,170 34			3,920 12				2,236,299 82
Thousand Island.....		1,124 52			324 35				43,327 43
Toronto, Hamilton & Buffalo.....		862 48			1,588 99				2,192,093 60
Vancouver, Victoria & Eastern.....		1,627 52			1,157 80				547,186 59
Victoria Terminal Rly. & Ferry Co.....									3,138 80
Victoria & Sidney, B.C.....									47,027 50
Wabash (in Canada).....									3,969,001 33
York and Carleton.....									6,521 73
Final total.....	1,180,366 97	10,262 42	1,457,494 70	1,820,245 80	10,407,098 90	425,878 72	8,839 76	310,771,479 10	

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917.

Name of Railway.	Maintenance of Way and Structures.						Other Track Material.	Ballast.
	Superintendent.	Roadway Maintenance.	Tunnels and Subways.	Bridges, Trestles, and Culverts.	Ties.	Rails.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Algoma Central & Hudson Bay	11,459	07	39,891	79	21,790	34	1,680	93
Algoma Eastern	4,997	00	8,362	30	1,883	61	4,202	21
Atlantic, Quebec & Western	1,876	34	24,121	77	4,667	53	578	20
Alberta & Great Waterways	1,637	92	928	31	33	45	257	05
Brandon, Saskatchewan & Hudson Bay	4,515	11	9,220	62	2,062	37	11,101	74
British Yukon	45	77			2,636	91	3,204	13
Canada & Gulf Terminal	636	91	5,927	66			246	13
Canada Southern	87,348	71	122,092	93	18,829	95	205,282	35
Canadian Govt. Railway (Intercolonial)	170,732	19	233,920	16	158,161	47	168,234	71
Canadian Govt. Railway (P. E. Island)	17,278	42	26,988	12	4,460	64	11,439	14
Canadian Northern System	271,657	15	974,230	97	401,735	22	1,623,095	03
Canadian Pacific	621,292	76	2,024,291	14	666,290	67	1,545,758	10
Cape Breton	250	00	3,967	84	1,871	08	1,516	75
Central Vermont	2,760	33	9,486	63	5,961	16	8,944	58
Caraquee & Gulf Shore	840	00	4,915	50	2,225	85	3,628	08
Crow's Nest Southern	6,251	01	24,816	33	8,003	66	10,333	96
Cumberland	1,072	58	12,683	36	316	33	5,381	14
Central Canada	175	21	6,218	32	115	00	381	00
Dominion Atlantic	7,932	23	27,851	71	19,525	44	28,692	31
Eastern British Columbia	750	00	5,049	28	1,061	05	1,213	08
Edmonton, Dunvegan & British Columbia	3,534	63	26,850	80	7,117	21	6,300	90
Elgin & Havelock			2,024	18	699	96	875	20
Essex Terminal	33	70	5,355	14	195	33	3,818	94
Esquimaux & Nainimo	8,195	21	28,247	55	13,135	94	10,294	66
Fredrieton & Grand Lake Coal & Ry. Co.	184,765	63			64	84	676,845	83
Grand Trunk	92,456	89	354,001	85	307,749	67	50,081	47
Grand Trunk Pacific	47,279	92	115,024	61	117,844	30	24,601	93
Grand Trunk Pacific Branch Lines	47,279	92	90,538	90	13,215	31	2,219	16
Ilwaco	1,870	95	5,432	81	1,921	63	33,376	22
International of New Brunswick	4,060	83	7,418	86	302	97	6,391	98
Kent Northern			2,043	06	75	00	15,101	75
Kettle Valley	10,566	32	210,383	31	12,511	07	6,203	87
Lothbriere & Megantic			6,525	71	216	65	3,706	65
Maine Central	45	00	541	80	25	36	610	91
Manitoba Great Northern	5,217	05	7,497	47	1,586	45	27,839	02
Maritime Coal, Ry. & Power Co.	802	84			2,582	00	1,692	09
Massachusetts Valley	2,518	02	6,260	26	2,958	75	9,394	63
							39	95
							6,929	72
							5,876	76
							107,005	42
							16,312	48
							9,297	90
							1,124	95
							3,583	97
							1,964	31
							500	00
							5	39
							277	05
							404	56
							2,060	78
							1,070	30
							134	90
							113	19
							1,617	35
							403	83
							57,939	69
							42,459	06
							9,601	84
							339	13
							2,907	78
							652	89
							1,964	31
							277	05
							39	95
							6,929	72

	3,404 27	654 47	78 12	37 78	52 18	332 61 (Cr.)	28 78
Midland Ry. of Manitoba	5,812 75	23,289 80	2,004 45	2,149 49	323 40	12,079 38	851 20
Moncton & Buctouche	8,078 13		31,751 77	31,219 02	13,802 43		1,337 00
Montreal & Atlantic	3,486 12			1,379 13	1,384 47		
Morrissey, Fernie & Michel	1,392 73		957 61	5,284 13	90 70	232 14	279 26
Naperville Junction	140,502 75	853 11	128,779 36	269,598 16	(Cr. 752,764 47	12,657 25	82,961 63
National Transcontinental	4,434 17		4,606 16	4,571 15	679 02	355 52	
Nelson & Fort Sheppard	845 49		2,809 86		26 34	710 19	38 75
New Brunswick Coal & Ry. Co.	756 11		1,910 80	1,393 58	198 83	161 48	423 91
New Brunswick & P. E. Island	1,985 02		6,101 16	867 17	89 69	42 14	49 62
New Westminster Southern							
Northern New Brunswick & Seaboard							
North Shore							
Ottawa & New York	3,525 70	7,155 89	4,122 82	10,014 17	1,783 92	3,076 97	4,766 82
Pacific & Great Eastern	4,487 70	32,710 04	2,549 45	34 79	2 40	206 15	340 06
Pere Marquette	13,806 04	16,008 91	4,144 98	28,531 12	11,961 89	7,525 62	1,301 48
Quebec Central	8,371 45	103,808 62	5,089 97	31,500 00	24,000 00	4,170 70	22,000 00
Quebec, Montreal & Southern	11,000 54	17,346 23	8,403 05	26,473 64	953 27	4,335 59	9 15
Quebec Oriental	2,050 75	28,859 23	6,064 71	8,923 66	529 75	2,471 27	7,893 75
Quebec Ry., Light & Power Co.	309 05	3,257 87	508 73	1,050 41		125 04	50 28
Red Mountain	829 76	1,472 87	660 63	2,100 10	4 27	126 85	
Rutland & Noyan	260 54	368 63	143 57	637 09	190 55	162 89	20 54
Roberval-Saguenay	1,678 09	682 23	1,130 20	4,463 72	320 42	555 30	3,368 57
Salisbury & Albert	884 45	9,013 75	1,229 49	3,587 36	109 62	749 47	500 10
St. Lawrence & Adirondack	2,971 54	9,307 24	5,408 17	11,051 62	18,188 57	7,350 03	3,206 82
St. John & Quebec	3,138 98	10,985 95	3,394 83	123 29	164 13	367 08	147 97
St. Martins			3,155 54	1,833 51		758 22	
Sydney & Louisburg	3,725 24	52,066 08	3,746 01	18,278 94	5,821 95	5,311 69	85 61
Teniscouata	2,387 30	30,589 62	5,034 90	7,446 46	574 29	1,372 13	
Teniscouata & Northern Ontario	27,040 80	50,263 29	7,406 63	6,684 89	6,762 39	16,513 44	1,546 30
Thousand Islands	517 28	1,817 18	25 05	740 81	20 00	108 33	51 41
Toronto, Hamilton & Buffalo	18,938 64	38,128 96	7,815 95	19,869 27	14,925 79	11,887 08	6,209 58
Vancouver, Victoria & Eastern	28,776 64	44,327 06	47,815 12	27,661 75	1,592 05	7,989 22	1,221 48
Victoria Terminal Ry. & Ferry Co.	27 16	198 87	42 78	32 91		39 43	
Victoria & Sidney, B. C.	425 75	3,115 68	4 73	515 84			
Wabash (in Canada)	566 41						
York & Carleton		1,272 30		463 28		11 98	
Final Total	1,881,690 17	5,423,612 34	2,098,029 57	5,255,375 18	330,236 82	1,180,639 44	1,001,102 86

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Maintenance of Way and Structures—Continued.									
	Tracklaying and surfacing.	Right of way Fences.	Snow and Sand Fences and Snow sheds.	Crossings and Signs.	Station and Office Buildings.	Roadway Buildings.	Water Stations.	Fuel Stations.	\$	cts.
Algoma Central & Hudson Bay.....	97,111 28	74 01	89 16	425 53	3,031 46	1,300 21	2,908 55	1,238 48		
Algoma Eastern.....	23,781 91	9 85	373 87	318 12	196 10	232 08	455 02	43 13		
Atlantic, Quebec & Western.....	9,248 40	84 69	99 70	358 36	584 39	12 50	1,617 32			
Alberta & Great Waterways.....	11,472 33	472 02	557 36	500 33	770 54	318 05	415 56			
Brandon, Saskatchewan & Hudson Bay.....	11,300 91		159 64	16 36		6,671 03				
British Yukon.....			104 23	122 76	204 43					
Canada & Gulf Terminal.....	346,180 68	15,412 80	44 80	12,584 62	29,183 21	2,995 87	13,682 01	3,943 19		
Canada Southern.....	813,884 70	50,970 55	559 20	28,981 21	174,857 19	4,978 93	31,333 12	17,648 05		
Canadian Govt. Railway (Intercolonial) (P. E. Island).....	52,642 27	7,018 03	1,186 71	1,508 76	9,853 46	88 18	1,525 96			
Canadian Northern System.....	2,189,846 60	46,575 50	9,853 17	28,233 30	153,168 29	21,273 16	136,021 74	19,091 52		
Canadian Pacific.....	5,155,676 92	142,885 92	67,359 01	119,047 37	985,332 23	104,566 81	431,682 87	147,672 72		
Cape Breton.....				36 41		116 86				
Central Vermont.....	23,593 03	4,137 98	129 85	730 29	2,428 79	67 53	121 14	77 65		
Caraquet & Gulf Shore.....		496 59		95 99	160 04		186 96			
Crow's Nest Southern.....	28,647 15	85 00	27 60	839 21		1,217 02	405 33			
Cumberland.....							328 23			
Central Canada.....	2,345 39						1,164 41			
Dominion Atlantic.....	54,292 17	2,780 71		1,710 41	13,849 59	153 36				
Eastern British Columbia.....							2,767 34			
Edmonton, Dunvegan & British Columbia.....	92,732 68	978 61	22 41	822 01	1,533 02	119 01				
Elgin & Havelock.....										
Essex Terminal.....										
Esquimalt & Nanaimo.....	31,991 65	1,041 13		785 20	4,245 95	246 08	1,083 66	353 56		
Fredericton & Grand Lake Coal & Ry. Co.....	8,492 68	0 62			21 94	5 00		0 29		
Grand Trunk Pacific.....	1,485,162 88	59,141 13	8,233 53	196,596 12	279,260 61	15,299 82	48,531 01	21,771 81		
Grand Trunk Pacific Branch Lines.....	553,605 70	3,381 07	2,074 21	5,903 48	34,981 93	3,560 29	28,520 03	3,336 60		
Herford.....	211,140 03	2,442 67		239 18	1,037 01	280 78	301 90	25 65		
International of New Brunswick.....	12,298 80	1,942 86	1,303 85	3,409 77	6,344 25	1,283 35	5,204 95	2,602 43		
Kent Northern.....	24,950 51	1,76 17		250 91	370 06	42 72	551 46	124 65		
Kettle Valley.....	507 20		57 50	1,277 68	522 28	308 50	50 00			
Lotbiniere & Megantic.....				4 70		4,410 74				
Meane Central.....	854 29	17 25		5 22		385 58				
Maritime Great Northern.....	19,582 99	164 72	76 59	106 75	795 74	188 12	548 17	24 99		
Manitoba Coal, Ry. & Power Co.....	10,275 64				2 50					
Massachusetts Valley.....	22,091 98	2,317 56		806 22	3,397 45	118 35	339 51	685 54		



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Midland Ry. of Manitoba.....	1,864 36			89 40	243 26	15 60	597 61	50 41
Moncton & Buctouche		745 65		4,667 03	21,136 31	494 76	1,859 04	8,813 06
Montreal & Atlantic.....	65,102 34							
Morrissey, Fernie & Michel				59 62	1,353 62		748 97	
Napierville Junction.....	4,536 61	369 81		5,834 39	59,975 08	10,895 31	49,619 34	4,660 57
National Transcontinental	805,197 09	4,434 32		19 88	364 20	157 27	804 82	0 12
Nelson & Fort Sheppard.....	11,633 59	73 57		13 88	182 55	45 51		63 51
New Brunswick Coal & Ry. Co.	14,654 97	25 40		46 70	890 40			
New Brunswick & P. E. Island	9,551 98	477 50		27 05	10 10	0 46		
New Westminster Southern.....	2,156 31	2 36						
Northern New Brunswick & Seaboard								
North Shore.....								
Ottawa & New York.....	19,524 99	1,157 23		754 41	2,589 70	893 06	1,165 31	2,252 17
Pacific Great Eastern.....				228 72		1,326 24		
Pere Marquette.....	59,565 17	26 00		2,708 15	6,527 41	716 03	2,883 11	192 24
Quebec Central.....	18,319 13	1,115 38		272 29	236 45	4,137 83	295 56	354 67
Quebec, Montreal & Southern	23,591 14	3,178 78		1,032 46	5,113 76	1,194 28	1,697 93	108 36
Quebec Oriental.....		593 55		197 85	484 37	1,453 10		
Quebec Ry. Light & Power Co.				487 48	69 37	69 38	292 03	0 02
Red Mountain.....	3,619 12	13 03		21 58				
Roberval-Saguenay.....	10,007 42	794 81		965 06	2,815 94			
Rutland and Noyan.....	1,288 20	11 60		48 69	150 88	4 73	40 82	10 23
Salisbury & Albert.....		232 16			115 06			
St. Lawrence & Adirondack.....	23,487 37	2,743 18		980 02	5,597 46	463 36	301 17	111 90
St. John & Quebec.....	11,078 90	394 90		321 16	555 21	19 80	126 05	
St. Martins.....								
Sydney & Louisburg.....		3,177 09		502 78		4,855 21		1,728 05
Tenniscouata.....				56 83		1,678 24		
Tennessing & Northern Ontario	113,184 83	2,327 70		409 28	34,091 79	6,359 93	4,878 54	1,340 14
Thousand Islands.....		257 26		1,218 55	227 83			
Toronto, Hamilton & Buffalo	64,342 02	6,151 40		2,684 82	7,126 49	850 34	2,688 31	346 63
Vancouver, Victoria and Eastern	93,011 80	1,848 48		2,377 78	4,267 30	327 91	1,524 71	417 72
Victoria Terminal Ry. & Ferry Co.		9 39		1 43	185 85			
Victoria & Sidney, B. C.		147 33		20 41	147 33			
Wabash (in Canada).....					13 22			
York & Carleton.....								
Final total.....	12,649,518 11	384,028 11		430,559 08	1,859,760 51	207,606 55	779,202 23	241,192 75



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Massawippi Valley.....	952 89						148 94	21 98
Midland Ry. of Manitoba.....	1,285 28						108 29	
Moncton & Buctouche.....								
Montreal & Atlantic.....	6,711 43		6,663 95				4,235 81	1,075 53
Morrisey, Fermé & Michel.....							78 75	(r. 1 28
Napierville Junction.....	80,767 25			131 57			39,059 28	10,313 46
National Transcontinental.....	0 60						263 41	83 60
Nelson & Fort Sheppard.....	1,792 44						52 89	
New Brunswick Coal & Ry. Co.....	558 60						35 13	2 20
New Brunswick & P. E. Island.....	1 72							
New Westminster Southern.....								
Northern New Brunswick & Seaboard.....								
North Shore.....								
Ottawa & New York.....	2,775 15						36 42	8,061 13
Pacific Great Eastern.....				542 96			1,992 19	
Pere Marquette.....	4,213 61			149 19			335 92	1,279 06
Quebec Central.....	591 11			400 36				34 80
Quebec, Montreal & Southern.....	1,275 27				25 89		538 59	1,125 12
Quebec Oriental.....							261 14	
Quebec Ry., Light & Power Co.....							93 38	25 32
Red Mountain.....	0 09						99 88	15 65
Roberval & Saguenay.....				122 87			644 67	110 05
Rutland & Noyan.....	119 21			1 10			4 53	10 78
Salisbury & Albert.....								
St. Lawrence & Adirondack.....	1,035 42						510 00	
St. John & Quebec.....	65 14						131 73	2,144 66
St. Martins.....							171 02	(r. 210 00
Sydney & Louisburg.....	2,104 71						817 14	
Temiscouata.....								
Thimiskaming & Northern Ontario.....	14,888 72						5,700 12	30 01
Thousand Islands.....				28 95				
Toronto, Hamilton & Buffalo.....	4,974 76						1,942 29	11,149 31
Vancouver, Victoria & Eastern.....	583 01			329 62			1,804 40	2,734 30
Victoria, Terminal Ry. & Ferry Co.....				1 00			0 04	
Victoria & Sidney B. C.....				68 90			0 58	
Wabash (in Canada).....	1,905 17							11 77
York & Carleton.....								
Final total.....	1,254 720 36	90,913 77	8,472 05	141,959 87	75,288 49	6,239 53	481,162 85	315,585 93

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Maintenance of Way and Structures—Continued.									
	Power Transmission Systems.	Miscellaneous Structures.	Paving.	Roadway Machines.	Small Tools and Supplies.	Removing Snow, Ice, and Sand.	Assessments for Public Improvement.	Injuries to Persons.	\$	cts.
Algoma Central & Hudson Bay.....				2,133 09	2,600 97	26,240 57		316 53		
Algonia Eastern.....		157 91		201 76	710 98	4,091 58		49 27		
Atlantic, Quebec & Western.....		48 49			864 45	7,873 08				
Alberta & Great Waterways.....		0 25		743 86	1,107 65	858 07		8 00		
Brandon, Saskatchewan & Hudson Bay.....				313 54	1,407 65	13,592 98		14 48		
British, Yukon.....					657 36	1,327 05				
Canada & Gulf Terminal.....					923 27	35,608 69		2,932 31		
Canada Southern.....	7,566 86			3,842 95	20,885 91	22,263 62		1,071 78		
Canadian Govt. Railway (Intercolonial).....	2,232 96			6,789 46	20,289 30	8,432 91		42 90		
(P. E. Island).....				1,009 87	3,620 13	8,432 91				
Canadian Northern System.....	8,604 34	6,837 78	2,886 60	24,456 14	83,601 53	412,982 39		32,908 92		
Canadian Pacific.....		39,557 66	397 27	50,789 30	166,529 43	1,075,375 81	25,236 23	88,812 53		
Cape Breton.....					29 93	71 55				
Central Vermont.....				110 12	883 43	19,992 39		2 00		
Caracquet & Gulf Shore.....				800 88	1,017 81	2,100 50				
Crow's Nest Southern.....		34 35			4,310 91	4,310 91		1,297 31		
Cumberland.....					275 24	1,062 77				
Central Canada.....				187 74	38 76	542 73				
Dominion Atlantic.....		21 85		229 52	1,349 49	4,444 94		1 65		
Eastern British Columbia.....		207 57			409 81	1,014 63				
Edmonton, Dunvegan & British Columbia.....		53 73			4,804 43	11,153 60				
Elgin & Havelock.....					1,358 14					
Essex Terminal.....	76 65				145 44					9 00
Esquimalt & Nanaimo.....			13 20	553 13	1,422 92	3,206 11	971 44			
Fredericton, & Grand Lake Coal & Ry. Co.....					122 28	1,394 69				
Grand Trunk.....	1,172 87	16,690 35	2,967 94	7,348 70	43,787 95	345,256 11		26,222 91		
Grand Trunk Pacific.....	23 30	896 43		8,690 45	26,983 47	116,736 28		1,166 39		
Grand Trunk Pacific Branch Lines.....	41 60	20 00 (Y.)	149 78	1,579 18	13,513 16	37,797 56		302 23		
Hereford.....				143 30	309 69	4,614 82				
International of New Brunswick.....				535 02	399 06	5,994 85				
Kent Northern.....					87 00					3 00
Kettle Valley.....					9,575 84	63,333 29				
Loftshire & Megantic.....				67 43		239 02				
Maine Central.....				695 90		4,260 65				13 15
Manitoba Great Northern.....				452 17						
Maritime Coal, Ry. & Power Co.....										
Massachusetts Valley.....				270 17	930 39	4,630 71				2,105 00



TABLE 8.—Summary of operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Maintenance of Way and Structures—Continued.					
	Insurance.	Stationery and Printing.	Other Expenses.	Maintaining Joint tracks, Yards, and Facilities—Dr.	Maintaining Joint tracks, Yards, and other Facilities—Cr.	Total Maintenance of Way and Structures.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Algoma Central & Hudson Bay.....	12,188 92	305 91	147 21	212 10		286,459 32
Algoma Eastern.....	2,183 69	147 08				72,765 16
Atlantic, Quebec & Western.....		735 33				46,887 55
Alberta & Great Waterways.....	476 99	3 92		2,688 38		21,801 19
Brandon, Saskatchewan & Hudson Bay.....	310 78	277 11	189 71			60,145 55
British Yukon.....			19 52			38,861 52
Canada & Gulf Terminal.....		13 00				9,668 38
Canada Southern.....	1,061 33	4,496 75	45 53	86,080 92	99,472 01	1,127,943 91
Canadian Govt. Railway (Intercolonial)		15,522 88	452 91	75,396 38	2,699,393 79	2,699,393 79
Canadian Govt. Railway (P. E. Island)		21,134 81			167,491 21	167,491 21
Canadian Northern System.....	5,486 86	7,374 86	2,380 30	62,730 63	53,102 90	7,160,338 18
Canadian Pacific.....		13,757 91	5,341 74	235,736 09	52,998 07	16,828,216 64
Cape Breton.....			117 75			8,279 25
Central Vermont.....	285 84	80 25		430 81		88,739 56
Caraquez & Gulf Shore.....		75 00	960 00			18,244 89
Crow's Nest Southern.....	786 05	255 56	374 03	99 00		117,661 67
Cumberland.....			325 45			24,350 38
Central Canada.....	206 27					12,616 48
Dominion Atlantic.....		3 43	65 01			200,133 82
Eastern British Columbia.....	1,741 56	16 27		7,509 81	2,704 19	9,703 55
Edmonton, Dungevan & British Columbia		7 33				176,009 80
Elgin & Havelock.....						3,099 71
Essex Terminal.....		115 06				15,104 55
Esquimalt & Nanaimo.....						110,958 06
Fredrieton & Grand Lake Coal & Ry. Co.						11,371 93
Grand Trunk.....	47,870 93	6,740 93	2,452 98	48,980 25	394,532 99	4,502,001 90
Grand Trunk Pacific.....	9,347 07	2,285 11	1,100 30	27,050 47	843 27	1,766,066 82
Grand Trunk Pacific Branch Lines.....	1,935 20	816 12	17 80	21 21	17 80	504,529 09
Hereford.....	213 81	162 22	50 64	1,117 77		40,325 71
International of New Brunswick		81 78	10 00	600 00		70,281 24
Kent Northern.....	1,602 24	330 37	306 55	7,705 88	27,749 84	306,133 05
Kettle Valley.....					240 00	11,262 97
Lotbiniere & Megantic.....		13 15				2,113 04
Maine Central.....	371 39	282 91	244 80			71,973 66
Manitoba Great Northern.....				157 71		16,119 71
Maritime Coal, Ry. & Power Co.				360 00		73,718 28
Massachusetts Valley.....	289 39	36 76	111 77	825 53		52,002 38
Midland Ry. of Manitoba.....	652 68	76 18		40,335 88		

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Moncton & Buetouche.....												11,326 42
Montreal & Atlantic.....												283,533 91
Morrissey, Fernie & Michel.....												9,613 63
Naperville Junction.....												20,105 38
National Transcontinental.....												1,335,581 74
Nelson & Fort Sheppard.....												44,036 23
New Brunswick Coal & Ry. Co.....												23,166 99
New Brunswick & P. E. Island.....												19,769 44
New Westminster Southern.....												13,392 09
Northern New Brunswick & Seaboard.....												
North Shore.....												
Ottawa & New York.....												78,035 41
Pacific Great Eastern.....												51,366 57
Pere Marquette.....												300,858 77
Quebec Central.....												244,664 51
Quebec, Montreal & Southern.....												122,963 61
Quebec Oriental.....												73,057 43
Quebec Ry., Light & Power Co.....												9,656 42
Red Mountain.....												11,733 19
Roberval & Saguenay.....												38,290 89
Rutland & Noyan.....												3,958 57
Salisbury & Albert.....												17,126 88
St. Lawrence & Adirondack.....												118,669 35
St. John & Quebec.....												32,671 60
St. Martins.....												9,744 61
Sydney & Morrisburg.....												108,327 04
Temisouata.....												53,850 13
Temiskaming & Northern Ontario.....												344,785 62
Thousand Islands.....												4,453 04
Toronto, Hamilton & Buffalo.....												213,299 38
Vancouver, Victoria & Eastern.....												299,200 91
Victoria Terminal Ry. & Ferry Co.....												469 58
Victoria & Sidney, B. C.....												4,643 60
Wabash (in Canada).....												307,332 50
York & Carleton.....												1,846 31
Final total.....	98,253 81	69,007 05	29,638 15	1,092,719 01	716,360 91	41,154,193 11						





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Midland Railway of Manitoba.....	3,308 49	1,024 05	40 89	32,632 78	9,966 13
Moncton & Buctouche.....	3,167 97	4,329 44		1,639 92	535 42
Morrissey & Atholite.....		2,835 22		83,672 12	6,389 23
Morrissey, Fernie & Michel.....				6,532 21	6,126 85
Napierville-Junction.....	724 51			3,679 76	1,026 19
National Transcontinental.....	64,543 35	56,738 50	12,685 57	674,592 42	521,321 31
Nelson & Fort Sheppard.....		632 41	354 63	4,931 15	210 32
New Brunswick Coal & Ry. Co.....		3,791 79	3 23	2,137 71	1,454 09
New Brunswick & P.E. Island.....	450 89	370 93	92 84	5,010 00	1,407 73
New Westminster Southern.....	99 85	42 88	3 16	1,883 98	
North Shore.....					
Ottawa & New York.....	8,393 72	1,528 34		20,960 41	6,365 80
Pacific Great Eastern.....	4,711 21	3,307 37		26,578 63	5,926 71
Pere Marquette.....	18,457 36	6,516 54	1,405 95	191,525 54	3,583 04
Quebec Central.....	12,272 04	6,234 03		46,621 56	59,599 69
Quebec, Montreal & Southern.....	8,881 04	1,714 76		39,727 51	114,413 91
Quebec Oriental.....		107 15		25,669 13	1,792 09
Quebec Ry., Light & Power Co.....	203 45	197 70		5,568 02	5,728 02
Red Mountain.....	158 67	82 45	5 74	1,917 27	4,226 52
Roberval-Saguenay.....	1,920 24	1,496 11		4,807 79	658 32
Rutland & Noyan.....	85 16	27 02		763 64	539 06
Salisbury & Albert.....		168 91		1,655 15	2,729 51
St. Lawrence & Adirondack.....	3,988 72	7 96		34,295 80	213 18
St. John & Quebec.....	300 00			2,905 47	
St. Martins.....				431 25	
Sydney & Louisburg.....	1,639 61			81,495 07	114,402 99
Tennesconata.....	3,173 87	402 77		8,452 54	6,986 29
Temiskaming & Northern Ontario.....	14,578 29	6,820 73	118 17	108,187 29	17,314 33
Thousand Islands.....				902 83	
Toronto, Hamilton & Buffalo.....	13,201 28	5,602 51		139,561 32	52,109 36
Vancouver, Victoria & Eastern.....	3,976 31	1,904 75	122 28	55,886 05	14,838 94
Victoria Terminal Ry. & Ferry Co.....	13 58	1 05		40 59	38 67
Victoria & Sidney, B. C.....	212 93	16 45		637 33	449 87
Wabash (in Canada).....	20,034 51	14,245 28	1,151 59	229,109 33	190,259 52
York & Carleton.....				220 67	
Final Total.....	1,154,342 26	1,293,054 48	48,730 39	16,522,003 84	13,633,817 08
			9,908 84	2,654,278 18	21,233,314 42

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TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Maintenance of Equipment—Continued.							
	Passenger-train Cars—Repairs.	Passenger-train Cars—Renewals.	Motor Equipment of Cars—Repairs.	Motor Equipment of Cars—Renewals.	Floating Equipment Repairs.	Floating Equipment Renewals.	Work Equipment Repairs.	Work Equipment Renewals.
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Algoma Central & Hudson Bay	5,898 11		17 33				10,151 30	
Algonia Eastern	907 29						984 62	
Atlantic, Quebec & Western	4,501 12						1,371 59	
Alberta & Great Waterways	1,027 82		2,389 42				407 29	
Brandon, Saskatchewan & Hudson Bay	1,546 40						2,210 24	
British Yukon	2,177 72						2,786 85	
Canada & Gulf Terminal	579 34						4,426 49	2,056 19
Canada Southern	62,642 22	5,019 07			47,594 08		64,105 26	
Canadian Govt. Railway (Intercolonial)	501,818 28				2,111 50		5,856 48	
" (P. E. Island)	18,485 10				614 93		178,559 29	
Canadian Northern Systems	736,266 23		39,708 29		193,653 37		513,218 87	367,249 65
Canadian Pacific	3,342,912 60	178,001 53						
Cape Breton	212 80						644 22	
Central Vermont	2,888 11						240 76	
Caracquet & Gulf Shore	405 00						2,689 40	
Crows' Nest Southern	773 20						196 25	
Cumberland	403 11						116 83	
Central Canada	269 02						3,833 41	
Dominion Atlantic	15,162 51						2,061 98	
Eastern British Columbia	403 15							
Edmonton, Dunvegan & British Columbia	9,886 82							
Elgin & Havelock								
Essex Terminal								
Esquimalt & Nanaimo	23,512 81						4,187 68	
Fredericton & Grand Lake Coal & Ry. Co.	70 16						9 87	
Grand Trunk	587,467 30				73,345 11		165,224 98	
Grand Trunk Pacific	172,087 83	5,924 76				112 50	44,958 31	4,067 85
Grand Trunk Pacific Branch Lines	15,293 96	945 30	6,476 00					
Hereford	1,956 50	17 14					495 82	31 64
International of New Brunswick	2,897 60				553 24		2,009 89	
Kent Northern	422 00							
Kettle Valley	3,954 04							
Lotbiniere & Mogantic	77 06						25 34	
Manitoba Central	389 86	2 29					25 28	2 37
Manitoba Great Northern	859 90							
Maritime Coal, Ry. & Power Co.	1,071 45						2,038 27	
Massachusetts Valley	4,183 70						354 40	





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Massawippi Valley.....	1 35	453 90	260 72	123 28	462 45	1,242 20	40,004 89
Midland Ry. of Manitoba.....	689 28		332 59	210 48	882 00		60,209 59
Moncton & Bouché.....				224 24			4,083 44
Montreal & Atlantic.....							289,947 15
Morrissey, Fernie & Michel.....			15 69	7 40			15,494 28
Napierville Junction.....			5 00	8,166 39			6,420 58
National Transcontinental.....		455 72 Cr.	59 14	38 98			1,720,010 04
Nelson & Fort Sheppard.....		124 34			26 63		8,621 61
New Brunswick Coal & Ry. Co.....		8 81		62 74	2 07	105 89	7,638 41
New Brunswick & P. E. Island.....		50 91	235 85	4 69	3 74		9,781 91
New Westminster Southern.....							4,138 84
Northern New Brunswick & Seaboard.....							
North Shore.....		36 03		117 00		38 17	39,375 65
Ottawa & New York.....		100 00		135 76	1 35		61,175 16
Pacific Great Eastern.....		3,995 86	5,481 90	1,029 12	95 61	490 24	258,048 05
Pere Marquette.....		19 87	1,080 00	190 75	5,150 20		173,146 87
Quebec Central.....		234 79	1,964 02	483 62	14 43		180,441 12
Quebec, Montreal & Southern.....					4 05		30,413 99
Quebec Oriental.....		9 50		25 76	11 49	8 749 55	23,013 82
Quebec Railway, Light & Power Co.....		34 66	12 50	10 24	7 35		2,437 83
Red Mountain.....		6 44	387 74	8 57	978 21		18,269 70
Roberval-Saguenay.....			12 80	6 06			1,969 87
Rutland & Noyan.....							2,739 47
Salisbury & Albert.....							57,432 09
St. Lawrence & Adirondack.....				282 34			3,959 85
St. John & Quebec.....							906 62
St. Martins.....							265,009 90
Sydney & Louisbourg.....				48 40	16 75		29,920 76
Tennesseata.....				1,321 07	7,680 51	4,445 80	270,578 38
Thousand Islands.....		954 71	5,436 66		78 07		3,504 90
Toronto, Hamilton & Buffalo.....		514 76	1,258 19	739 48	20 00	12,212 05	306,436 01
Vancouver, Victoria & Eastern.....		883 57	2,689 57	217 32	145 02	458 89	104,304 12
Victoria Terminal Ry. & Ferry Co.....							86 36
Victoria & Sidney, B. C.....							4,055 58
Wabash (in Canada).....		7,140 03	5,343 43	1,726 77		138,375 11	652,744 61
York & Carleton.....							228 92
Final Total.....	11,403 45	439,934 29	91,656 13	107,608 20	181,376 46	243,230 31	46,371,178 39

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Traffic Expenses.									
	Superintendence.	Outside Agencies.	Advertising.	Traffic Associations.	Fast Freight Lines.	Industrial and Immigration Bureaus.	Insurance.	Stationery and Printing.	Other Expenses.	Total Traffic Expenses.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Algoma Central & Hudson Bay...	4,981 31	14 38	107 07	265 90	5 45		64 15	628 72		6,156 98
Algoma Eastern.....	3,027 27	1,104 61	128 67	249 16			50 86	367 00		4,927 66
Atlantic, Quebec & Western.....	938 22		177 27				12 00	161 81		1,289 30
Alberta & Great Waterways										
Brandon, Saskatchewan & Hudson Bay	518 26	4,386 77	945 78	35 76		216 81	2 11	240 09	1 07	3,346 65
British Yukon	2,137 90	4,578 91	1,776 60	35 66				292 98	9 84	8,796 23
Canada & Gulf Terminal										
Canada Southern	80,559 78	69,485 63	29,663 01	7,329 78	49,485 36	1,340 78	20 98	47,921 79	31 30	285,838 41
Canadian Govt. Railways—										
Intercolonial	72,287 97	121,790 05	38,873 09	2,898 67		351 33	137 66	55,298 71	48 05	271,685 53
P. E. Island	2,881 24	4,872 61	703 54	157 98		7 27	5 38	1,434 25	1 48	10,063 75
Canadian Northern System.....	235,200 52	212,335 62	179,451 51	17,738 29		11,346 10	188 31	55,717 13	831 56	712,809 04
Canadian Pacific	671,238 52	1,487,985 48	548,927 63	42,421 95		20,187 33		305,965 65	1,576 06	3,078,301 42
Cape Breton			33 00							33 00
Central Vermont	1,760 39	2,711 77	701 46	162 60			0 22	874 99	0 76	6,212 19
Caracquet & Gulf Shore	840 00							95 00	166 20	1,101 20
Crow's Nest Southern	654 49	1,893 43	796 01	58 40			2 16	346 72	1 84	3,976 85
Cumberland			21 50	19 75				14 50		55 75
Central Canada	141 72		34 44					8 00	5 41	189 57
Dominion Atlantic	10,779 18	2,836 45	9,921 24	360 61				2,146 18	133 17	26,176 83
Eastern British Columbia									0 35	0 35
Edmonton, Dunvegan & B. C.	4,762 94		978 87	367 41			20 00	1,713 65		7,842 87
Elgin & Havelock										
Essex Terminal			107 30	157 08						264 38
Esquimault & Nanaimo			150 60							150 60
Fredericton & Grand Lake Coal and Railway Co.		50 50	68 45	31,654 07	41,400 70	11,198 51		91,528 71	6,493 91	118 95
Grand Trunk	247,197 00	547,053 34	115,878 86	2,041 92			1,092 00	15,685 56	177 18	1,093,497 10
Grand Trunk Pacific	40,098 26	77,119 08	26,684 72	550 43			120 74	5,865 20	94 19	161,977 46
Grand Trunk Pacific Branch Lines	14,602 60	26,656 79	9,850 55	28 91			45 06	232 85	4 76	57,664 82
Hereford	1,027 43	90 22	519 05	28 91	0 02	66 64		416 63	0 36	1,969 88
International of New Brunswick	679 20	1,091 89	20 04	40 24			1 24			2,249 60
Kent Northern										
Kettle Valley	2,504 00		62 95	242 64				404 55	105 45	3,076 95
Lotbiniere & Megantic	8 00		8 00	8 00				99 33		349 97
Miami Central	208 73	18 13	104 22	5 74		13 69		44 78	1 27	396 56

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Manitoba Great Northern.....	316 21	873 54	274 92	32 61	136 51	0 26	171 32	1 04	1,806 41
Maritime Coal, Ry. & Power Co.....	2,342 93	393 05	580 70	252 85	.....	.....	.....	.....	3,569 53
Massachusetts Valley.....	1,761 16	4,721 56	2,139 87	125 92	647 79	6 29	712 93	89 55	10,205 07
Midland Ry. of Manitoba.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Moncton & Buctouche.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montreal & Atlantic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morrissey, Fernie & Michel.....	724 79	2 61	3 63	116 04	.....	.....	48 38	.....	895 35
Naperville Junction.....	48,404 96	50,067 03	19,853 96	1,962 36	1,814 97	34 87	9,530 48	105 71	131,774 34
National Transcontinental.....	431 61	1,148 15	810 50	31 35	156 09	1 60	204 96	0 91	2,785 17
Nelson & Port Sheppard.....	.....	22 50	20 00	.....	.....	.....	.....	.....	42 50
New Brunswick Coal & Ry. Co.....	703 41	1,180 04	442 96	26 53	4 00	1 64	309 92	0 40	2,668 93
New Brunswick & P. E. Island.....	107 68	359 25	0 06	17 04	19 78	0 17	86 29	0 59	590 86
New Westminster Southern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northern New Brunswick & Sea-board.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Shore.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ottawa & New York.....	5,954 70	674 62	11 03	76 39	14 04	.....	181 73	6 60	6,919 11
Pacific Great Eastern.....	20,689 24	1,473 04	1,921 50	50 60	.....	.....	101 18	5 80	3,672 32
Pere Marquette.....	11,376 24	27,810 77	8,031 82	1,495 51	120 80	62 45	9,023 18	.....	67,113 05
Quebec Central.....	7,095 20	10,016 90	3,224 80	951 58	.....	216 00	2,674 16	435 26	28,894 94
Quebec, Montreal & Southern.....	.....	742 47	162 50	161 74	.....	10 50	1,104 62	4 50	9,281 53
Quebec Oriental.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Quebec Ry., Light & Power Co.....	91 95	584 39	928 33	48 18	.....	.....	44 56	313 39	1,918 85
Red Mountain.....	557 03	315 64	0 06	12 60	.....	0 15	55 66	0 46	514 14
Roberval-Saguenay.....	264 39	504 87	194 40	55 75	.....	.....	27 78	55 94	890 90
Rutland & Noyan.....	.....	.....	93 83	10 22	31 33	0 16	60 09	3 34	969 43
Salisbury & Albert.....	2,880 35	2,641 51	555 98	6 63	133 00	2 31	44 31	0 68	6,915 94
St. Lawrence & Adirondack.....	1,457 60	37 70	845 74	.....	.....	.....	695 48	.....	2,841 04
St. John & Quebec.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Martins.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sydney & Louisburg.....	1,140 00	837 64	87 64	201 26	.....	.....	.....	.....	2,178 90
Temisconata.....	3,076 70	958 05	126 99	.....	.....	.....	565 41	.....	4,727 15
Tennessing & Northern Ontario.....	6,966 40	1,752 22	5,451 60	675 24	1,871 23	.....	1,991 09	.....	18,707 78
Thousand Islands.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Toronto, Hamilton & Buffalo.....	12,562 27	963 03	2,739 42	593 50	1,322 39	7 51	3,796 80	328 11	21,977 41
Vancouver, Victoria & Eastern.....	2,391 00	6,771 10	2,805 80	222 48	888 56	.....	1,246 52	.....	14,661 17
Victoria Terminal Ry. & Ferry Co.....	67 92	.....	1 75	.....	.....	.....	0 97	.....	70 64
Victoria & Sidney, B.C.....	1,064 30	.....	27 50	.....	.....	.....	15 15	.....	1,106 95
Wabash (in Canada).....	35,747 71	84,068 83	4,999 42	2,690 12	442 30	27 46	10,506 06	61 45	138,543 35
York & Carleton.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Final Total.....	1,567,702 71	2,761,176 86	1,023,871 63	110,638 85	92,528 80	2,134 82	610,703 20	11,097 94	6,236,810 91

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Transportation Expenses—Rail Line.									
	Superintend- ence.	Despatching Trains.	Station Employees.	Weighing, Inspection and Demurrage Bureaus.	Coal and Ore Wharves.	Station Supplies and Expenses.	Yardmasters and their Clerks.	Yard Conductors and Brakemen.	\$	cts.
Algonia Central & Hudson Bay.....	10,489 00	4,094 26	18,651 00	481 21	28,229 35	3,074 08	1,958 61	12,433 42		
Algonia Eastern.....	6,854 33	2,655 95	9,041 84	72 50	14,602 59	770 00	105 00			
Atlantic, Quebec & Western.....	5,19 20	519 20	7,281 40			901 02				
Atlantic & Great Waterways.....	2,851 57	925 36	2,576 33			381 27				
Brandon, Saskatchewan & Hudson Bay.....	1,629 64	694 85	8,286 51	45 50	1,253 49	555 08				
British Yukon.....	2,402 97	1,342 28	19,608 08			2,196 15				
Canada & Gulf Terminal.....	18 33		2,461 83			647 30				918 20
Canada Southern.....	126,249 22	17,507 74	192,485 09	1,119 00		25,529 53	98,974 15	296,490 84		
Canadian Govt. Railway (Intercolonial) (P. E. Island).....	105,330 22	162,064 12	1,225,656 57	3,296 15		157,171 51	63,799 99	344,707 74		
Canadian Northern System.....	13,697 73	6,380 35	81,303 23		464 10	7,918 76	3,921 77	4,598 49		
Canadian Pacific.....	483,295 92	190,825 67	1,903,867 65	6,175 70		182,673 14	130,457 02	469,127 44		
Cape Breton.....	1,337,367 08	700,636 54	7,095,763 65	12,551 53	396 38	655,902 74	418,066 20	1,844,175 38		
Central Vermont.....	500 00		1,110 00			30 15		1,707 30		
Caraquet & Gulf Shore.....	2,359 41	1,089 21	20,436 64	76 34		3,087 05	214 50			
Crow's Nest Southern.....	1,780 00		4,681 11			1,010 00				
Cumberland.....	1,870 97	782 59	6,522 23	95 37		449 58				
Central Canada.....	827 21	787 71	5,861 46	2,426 35		369 92	1,305 33	10,641 48		
Dominion Atlantic.....	629 72	178 00	1,037 68			122 38				
Eastern British Columbia.....	4,419 15	5,078 88	71,703 39	264 47		6,629 35	7,946 35			
Edmonton, Dunvegan & British Columbia.....	2,200 20		1,488 82	21 70		131 90				
Elgin & Havelock.....	7,481 74	2,165 53	15,798 42	42 15		2,974 93		2,989 30		
Essex Terminal.....	1,800 00		380 00	60 00						
Esquimalt & Nanaimo.....	8,700 53	8,759 26	2,888 00	254 18		2,737 34	194 25	5,075 64		
Fredericton & Grand Lake Coal & Ry. Co.....			42,416 61	36 75		88 72	1,132 10	1,272 30		
Grand Trunk.....	358,680 99	165,022 71	2,941,115 57	12,893 82		277,788 63	393,581 59	891,724 14		
Grand Trunk Pacific.....	64,332 98	37,363 13	265,718 36	1,110 05	102 75	37,452 31	13,559 50	59,848 22		
Grand Trunk Pacific Branch Lines.....	29,896 47	10,679 22	86,999 23			9,734 51	3,973 31	12,887 82		
Hereford.....	1,406 57	1,270 67	5,339 89	51 35		479 57				
International.....	7,446 75	87 96	4,623 78			746 34				
International of New Brunswick.....	1,000 00		1,575 48			212 00				
Kettle Valley.....	3,475 23	6,274 23	21,813 63			3,027 69		2,530 83		
Lothbriere & Megantic.....			1,883 17			175 30				
Maine Central.....	265 62	105 71		3 86						
Manitoba Great Northern.....	998 58	277 84	6,483 99	51 20		1,075 74				
Maritime Coal & Power Co.....	1,441 54		1,453 84			40 36				
Massawippi Valley.....	5,909 49	2,658 62	26,484 03	82 83		1,846 70				



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Midland Ry. of Manitoba.....	3,808 35	18 51	26,113 41	95 56	11,326 19	1,342 59	5,592 50
Moncton & Buctouche.....	12,699 63	7,998 99	2,760 00	23 33	233 59	5,204 04	12,303 82
Morrissey, Fernie & Michel.....	1,905 80	217 75	82,029 34	6 47	8,808 14	31,222 61	10,129 81
Napierville Junction.....	646 72	120,109 47	3,743 93	1,982 79	574 04	248 27	54,759 72
National Transcontinental.....	80,950 80	721 57	241,662 89	37 52	499 70	438 41	2,379 73
Nelson & Fort Sheppard.....	1,529 70	115 52	2,991 21	26 24	248 27	.....	.....
New Brunswick Coal & Ry. Co.....	556 05	.....	2,318 10	.....	2,151 40	.....	.....
New Brunswick & P. E. Island.....	238 64	.....	4,122 29	.....	3 66	.....	.....
New Westminster Southern.....	.....	.....	28 63	.....	.....	.....	.....
Northern New Brunswick & Seaboard.....	.....	.....	.....	.....	.....	.....	.....
North Shore.....	1,538 63	2,180 00	23,267 51	55 38	4,628 00	5 72	3,690 22
Ottawa & New York.....	2,968 78	1,741 63	8,308 56	55 51	789 68	7,529 53	26,885 86
Pacific Great Eastern.....	29,980 71	9,071 74	98,541 94	309 74	7,381 80	2,246 55	5,321 95
Pere Marquette.....	10,118 01	8,268 15	93,830 56	937 78	9,691 31	.....	.....
Quebec Central.....	5,416 23	2,260 90	28,953 08	104 48	4,226 34	.....	.....
Quebec, Montreal & Southern.....	902 25	536 45	7,921 90	249 69	1,085 38	298 89	1,005 25
Quebec Oriental.....	9 05	1,019 72	6,265 61	20 55	890 39	32 70	117 15
Quebec Ry., Light & Power Co.....	315 88	143 73	3,488 77	128 59	2,557 78	51 92	177 88
Red Mountain.....	2,173 63	428 00	5,553 03	0 41	73 59	.....	.....
Roberval-Saguenay.....	120 12	48 65	1,713 96	.....	54 72	.....	.....
Rutland & Noyan.....	.....	.....	1,368 00	91 73	1,947 24	.....	.....
Salisbury & Albert.....	3,884 43	1,741 70	27,111 19	.....	.....	.....	.....
St. Lawrence & Adirondaek.....	1,680 46	0 85	3,669 88	.....	528 45	.....	.....
St. John & Quebec.....	.....	.....	240 00	.....	.....	.....	.....
St. Martins.....	3,050 93	6,533 30	22,871 49	25,059 50	2,540 20	7,880 35	52,609 72
Sydney & Louisbourg.....	2,841 74	1,791 15	10,977 33	185 71	1,305 71	12,385 77	27,186 62
Temiscouata.....	18,232 11	14,184 97	160,122 38	399 06	18,469 45	.....	.....
Temiskaming & Northern Ontario.....	600 00	5,160 17	5,160 17	51 19	829 07	14,249 91	41,424 24
Thousand Islands.....	29,741 68	14,171 95	155,705 68	730 94	9,700 07	4,571 88	16,304 60
Toronto, Hamilton & Buffalo.....	7,612 54	5,810 41	141,280 08	329 59	8,939 48	.....	.....
Vancouver, Victoria & Eastern.....	27 31	.....	263 79	.....	62 94	.....	.....
Victoria Terminal Ry. & Ferry Co.....	428 15	.....	4,133 81	.....	996 24	.....	.....
Victoria & Sidney, B. C.....	26,620 91	.....	6,023 37	5,696 64	301 37	.....	19 90
Wabash (in Canada).....	.....	.....	.....	.....	.....	.....	.....
York & Carleton.....	.....	.....	.....	.....	.....	.....	.....
Final Total.....	2,848,262 76	1,529,312 70	15,289,063 08	77,790 35	1,558,002 81	1,226,242 43	4,221,856 29





TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Transportation Expenses, Rail Line—Continued.									
	Enginehouse Expenses—Yard.	Yard Supplies and Expenses.	Operating Joint Yards and Terminals—Dr.	Operating Joint Yards and Terminals—Cr.	Train Enginemen.	Train Motorman	Fuel for Train Locomotives.	Train Power Produced.	Train Power Purchased.	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Algoma Central & Hudson Bay.....	6,491 48	70 74	3,728 35		37,311 96		149,948 04			
Algoma Eastern.....					25,933 19		66,372 15			
Atlantic, Quebec & Western.....					6,727 40		34,928 89			
Alberta & Great Waterways.....			3,340 10		5,906 93	647 20	23,010 34			
Brandon, Saskatchewan & Hudson Bay.....					6,648 95		10,865 76			
British Yukon.....					5,988 06		13,122 98			
Canada & Gulf Terminal.....					1,881 08		7,495 41			
Canada Southern.....	38,987 48	10,724 81	488,403 94	20,649 66	390,450 62	37,199 30	1,069,880 96	31,818 46		
Canadian Govt. Railway (Intercolonial).....	74,726 29	27,275 40	270,676 27	90,592 41	877,894 75		3,230,113 71			
"    (P. E. Island).....	379 81	73 15			34,014 22		75,330 63			
Canadian Northern System.....	88,141 32	6,108 63	336,174 48	29,159 61	1,910,825 17	117,569 74	4,354,854 99	10,201 29	36,725 09	
Canadian Pacific.....	510,624 00	65,036 04	401,398 00	261,517 11	5,281,463 63		12,587,667 48			
Cape Breton.....					2,067 60		4,432 20			
Central Vermont.....	359 47		678 06	56 21	18,924 01		51,385 24			
Caracquet & Gulf Shore.....					4,200 00		22,345 66			
Crow's Nest Southern.....					11,439 37		16,228 44			
Cumberland.....					9,355 09		11,183 17			
Central Canada.....			14 85		1,642 81		4,270 04			
Dominion Atlantic.....	2,708 52	8 47	2,631 60		51,489 70		152,723 29			
Eastern British Columbia.....					3,187 90		3,249 35			
Edmonton, Dunvegan & Brit. Columbia.....	167 47	132 92	7,769 47	1,505 58	29,151 29		77,092 33			
Eggn & Havelock.....					832 63		1,978 61			
Essex Terminal.....					4,146 80		10,660 77			
Esquimalt & Nanaimo.....	699 40	105 00	1,668 50		28,565 84		47,497 88			
Fredericton & Grand Lake Coal and Ry. Co.....										
Grand Trunk.....	157,841 07	20,024 85	175,118 78	780,547 06	3,245 15		9,473 93			
Grand Trunk Pacific.....	11,549 42	1,491 26	102,968 21	155 94	1,921,703 92		5,595,677 62			
Grand Trunk Pacific Branch Lines.....	1,588 87	235 34			269,996 99		638,593 67			
Hereford.....					115,995 19		219,247 55			
International of New Brunswick.....	13 65	13 40	2,720 00		7,202 36		31,284 08			
Kent Northern.....					8,913 59		35,263 14			
Kettle Valley.....					1,180 00		2,056 39			
Loebiniere & Megantic.....	710 77		7,024 82	3,649 37	46,815 74		101,130 26			
Maine Central.....					1,410 35		4,691 23			
Manitoba Great Northern.....					1,500 85		4,390 00			
Maritime Coal, Ry. & Power Co.....		322 15	742 62	52 00	4,306 65		9,022 60			
					4,188 96		12,074 00			



TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Transportation Expenses, Rail Line—Continued.									
	Water for Train Locomotives.	Lubricants for Train Locomotives.	Other Supplies for Train Locomotives.	Enginehouse Expenses—Train.	Trainmen.	Train Supplies and Expenses.	Operating Sleeping Cars.	Signal and Interlocking Operation.	Crossing Protection.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
Algonia Central & Hudson Bay.....	6,115 13	1,738 61	1,124 73	13,362 90	43,942 86	9,502 26	.....	175 32	.....	
Algonia Eastern.....	1,302 82	1,044 18	716 68	14,325 63	30,336 91	3,341 18	.....	378 72	.....	
Atlantic, Quebec & Western.....	2,038 40	869 03	24 47	5,073 12	6,723 10	1,021 77	.....	.....	.....	
Alberta & Great Waterways.....	2,483 53	572 09	263 81	2,435 13	7,306 74	2,111 30	.....	.....	.....	
Brandon, Saskatchewan & Hudson Bay.....	790 12	129 96	172 96	1,714 18	6,461 17	2,767 50	.....	3,781 40	111 84	
British Yukon.....	586 45	275 87	124 05	2,340 09	5,458 81	1,196 13	.....	.....	.....	
Canada & Gulf Terminal.....	125 58	.....	376 62	339 97	2,223 70	1,042 12	.....	.....	.....	
Canada Southern.....	40,403 64	9,045 75	6,477 07	86,067 30	412,203 46	107,116 20	.....	63,556 55	14,301 85	
Canadian Government Railways—										
Intercolonial.....	86,048 98	13,627 92	31,266 16	462,167 74	1,119,070 61	337,951 90	92,009 63	866 41	21,748 82	
P. E. Island.....	2,021 30	1,429 87	1,049 26	11,971 58	51,921 76	10,683 25	87 91	85 58	742 99	
Canadian Northern System.....	298,227 06	79,732 93	45,810 52	661,331 47	1,990,584 34	739,678 42	112,688 58	98,737 71	24,078 31	
Canadian Pacific.....	579,182 77	136,398 03	175,268 69	1,611,102 23	5,496,202 59	2,068,381 97	958,492 18	120,530 11	51,261 99	
Cape Breton.....	.....	225 27	.....	.....	.....	55 50	.....	.....	.....	
Central Vermont.....	2,541 94	530 39	508 97	3,052 05	19,905 70	5,838 13	.....	182 22	22 83	
Caracquet & Gulf Shore.....	(86) 70	900 00	900 00	.....	1,019 65	858 89	.....	.....	.....	
Crow's Nest Southern.....	1,124 30	281 81	289 75	2,343 59	12,474 64	4,202 20	.....	10 25	.....	
Cumberland.....	201 00	601 62	.....	2,528 28	.....	68 59	.....	.....	.....	
Central Canada.....	688 61	151 19	66 03	543 02	2,228 90	147 64	.....	.....	.....	
Dominion Atlantic.....	3,028 55	1,699 28	991 98	22,319 87	59,792 73	20,376 69	.....	66 37	1,073 37	
Eastern British Columbia.....	268 75	197 38	212 74	803 41	3,568 25	65 62	.....	.....	.....	
Edmonton, Dumvegan & British Columbia.....	8,586 08	1,360 66	1,115 95	7,963 55	28,722 03	13,064 58	4,261 42	1,122 31	.....	
Elgin & Havelock.....	.....	103 66	76 45	.....	4,435 85	.....	.....	.....	.....	
Essex Terminal.....	51 93	228 85	.....	914 19	.....	.....	.....	.....	.....	
Esquimaux & Nanaimo.....	1,536 43	786 06	458 19	10,362 31	31,945 80	5,774 40	.....	1,974 04	716 07	
Fredriecton & Grand Lake Coal and Railway Co.....	8 60	116 96	56 44	1,287 81	3,717 93	1,100 78	.....	427 60	.....	
Grand Trunk.....	177,115 18	48,684 35	77,406 24	535,499 34	2,072,651 84	643,453 17	.....	17,923 13	94,244 21	
Grand Trunk Pacific.....	87,653 28	13,516 42	7,127 68	100,045 71	283,450 88	157,531 41	39,285 24	15,008 88	286 53	
Grand Trunk Pacific Branch Lines.....	43,333 06	3,924 76	3,036 95	40,455 66	113,451 40	36,756 77	1,319 93	18,888 89	1 23	
Hereford.....	952 15	242 98	195 59	3,174 48	8,335 07	2,073 58	.....	.....	.....	
International of New Brunswick.....	110 65	363 53	176 77	1,187 54	12,052 18	1,312 22	.....	.....	.....	
Kent Northern.....	82 00	94 50	96 00	186 00	740 00	32 75	.....	.....	.....	
Keftle Valley.....	4,304 30	2,315 05	2,634 25	13,747 00	40,454 26	7,416 03	.....	.....	.....	
Lothbriere & Megantic.....	.....	173 17	42 53	613 66	2,113 30	275 35	.....	.....	.....	

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Maine Central.....	26 17	1,956 29	1,791 97	377 94	4,376 92	577 94
Manitoba Great Northern.....	88 88	1,048 17	6,574 50	1,596 79		1,596 79
Maritime Coal, Ry. & Power Co.....	296 09	1,239 40	4,871 92	322 91		322 91
Massawippi Valley.....	392 03	6,978 34	24,381 46	5,549 55		5,549 55
Midland Ry. of Manitoba.....	822 30	7,366 07	16,187 45	7,005 05	2,079 75	7,005 05
Moncton & Bectouche.....	265 49	558 00	1,975 00	122 94		122 94
Montreal & Atlantic.....	1,682 37	21,104 92	69,261 45	13,835 60	1,861 87	13,835 60
Morrissey, Ferme & Michel.....	245 50	880 37	4,812 30	102 13		102 13
Napierville Junction.....	164 09	2,134 20	4,812 30	544 69	1,073 89	544 69
National Transcontinental.....	17,159 38	290,444 29	* 427,637 46	128,746 94	5,585 39	128,746 94
Nelson & Fort Sheppard.....	134 53	2,106 46	5,407 08	2,251 49		2,251 49
New Brunswick Coal & Ry. Co.....	16 53	616 84	2,942 10	199 82		199 82
New Brunswick & P. E. Island.....	189 87	4,991 45	8,430 87	3,058 56		3,058 56
New Westminster Southern.....	24 94		3,127 92	703 25		703 25
Northern New Brunswick and Sea-board.....						
Ottawa & New York.....	683 35	6,344 97	18,972 88	2,356 24	5,629 90	2,356 24
Pacific Great Eastern.....	2,060 03	5,051 43	15,898 32	3,124 63		3,124 63
Pere Marquette.....	2,984 62	20,640 28	123,076 15	15,393 62	4,196 27	15,393 62
Quebec Central.....	4,490 71	16,272 95	82,862 45	16,163 57		16,163 57
Quebec, Montreal & Southern.....	1,228 27	10,430 98	19,266 27	6,031 81	4,653 74	6,031 81
Quebec Oriental.....	336 49	5,315 48	10,904 35	980 59		980 59
Quebec Ry., Light & Power Co.....	221 91	344 26	6,344 19	1,515 92		1,515 92
Red Mountain.....	82 49	441 74	2,834 22	480 79		480 79
Roberval-Saguenay.....	430 39	1,334 23	8,922 08	1,135 13		1,135 13
Rutland & Noyan.....	31 07	228 15	810 18	136 33	0 17	136 33
Saguenay-Albert.....	90 97	462 20	2,102 63	7 80		7 80
St. Lawrence & Adirondack.....	1,020 06	362 76	45,344 10	5,864 36	886 12	5,864 36
St. John & Quebec.....	197 17	122 20	8,854 54	1,906 83		1,906 83
St. Martins.....	130 57	54 00	2,204 81	585 45		585 45
Sydney & Louisburg.....	6,990 76	3,560 76	14,080 57	1,183 74	644 78	1,183 74
Temisconata.....	401 17	333 86	12,649 72	3,155 65		3,155 65
Teniskaming of Northern Ontario.....	3,804 84	2,395 02	123,114 33	32,803 67		32,803 67
Thousand Islands.....	258 09	50 10	1,500 00	293 82		293 82
Toronto, Hamilton & Buffalo.....	2,504 13	38,683 35	55,108 65	28,745 29	11,163 50	28,745 29
Vancouver, Victoria & Eastern.....	906 24	8,427 10	39,619 95	12,110 07	5,075 86	12,110 07
Victoria Terminal Ry. & Ferry Co.....	21 68	8 76	222 67	25 45		25 45
Victoria & Sidney, B.C.....	353 23	10 73	4,044 52	430 41		430 41
Wabash (in Canada).....	72 25	4,906 34	180,443 12	58,112 48		58,112 48
York & Carleton.....	3,374 30	113 53	772 50			
Final Total.....	408,270 57	398,405 84	13,223,005 75	4,542,162 61	1,224,320 57	254,097 67
	1,539,253 10					

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Transportation Expenses, Rail Line—Continued.							
	Drawbridge *Operation.	Telegraph and Telephone Operation.	Operating Floating Equipment.	Express Service.	Stationery and Printing.	Other	Operating Joint Tracks and facilities— Dr.	Operating Joint Tracks and facilities— Cr.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Algoma Central & Hudson Bay.....					2,112 28	5,915 48		726 02
Algoma Eastern.....	982 65				1,327 01	258 60	999 96	
Atlantic, Quebec & Western.....					290 00	73 95		
Alberta & Great Waterways.....		134 75			512 34	0 40		
Brandon, Saskatchewan & Hudson Bay.....		299 93			353 65	172 49		
British Yukon.....		1,016 04			476 77	853 72		
Canada & Gulf Terminal.....	3,065 14	26,778 21			820 02	1,558 90		
Canada Southern.....	4,025 79	11,049 31	96,405 25		46,960 69	26,110 21	22,477 09	23,512 49
Canadian Govt. Railway (Intercolonial).....	769 44	922 97	1,002 31		99,639 40	193 67	21,136 95	
" (P. E. Island).....	6,911 38	17,969 69	15,644 20	17,222 24	131,659 99	5,696 31	14,461 97	3,633 08
Canadian Northern System.....	17,965 95	208,479 01	44,034 08		362,238 83	59,677 62	76,085 06	19,568 42
Canadian Pacific.....						633 85		
Cape Breton.....	1,412 96	150 21			2,212 23	Cr.	2 43	
Central Vermont.....		738 95			100 10	165 45		
Caracquet & Gulf Shore.....		64 71			454 16	323 09		
Crow's Nest Southern.....		12 33			784 88	2,492 78		
Cumberland.....		25 50			112 16	0 28		
Central Canada.....		35 44			6,695 75	55 11		
Dominion Atlantic.....	1,818 48				2,677 19	12 50		
Eastern British Columbia.....		973 99			2,677 19	508 08		
Edmonton, Dunsyogan & British Columbia.....				28 30	11 96	207 11		
Elgin & Havelock.....		47 95			77 73	187 30		
Essex Terminal.....		177 91			4,207 73			
Esquimalt & Nanaimo.....	2,239 60				351 00	6,742 86		
Predicton & Grand Lake Coal & R.Y. Co.....		44,704 91	209,672 90		190,301 81	58,397 02	8,711 62	143,291 56
Grand Trunk.....	26,928 26	16,798 75	373 27	145,025 56	26,331 03	1,683 53	3,684 72	1,381 19
Grand Trunk Pacific.....	5 00	4,071 90		20,465 33	9,414 50	433 45		
Grand Trunk Pacific Branch Lines.....					683 19	61 10		
Heretford.....		352 43			542 05			
International of New Brunswick.....		54 90			73 28			830 24
Kent Northern.....		0 70			1,749 43	1,410 35	10 00	360 00
Kettle Valley.....					110 26	7 35		
Leominere & Megantic.....					124 92	11 87		
Maine Central.....		195 69			236 77	105 39		
Manitoba Great Northern.....		100 42						
Maritime Coal, Ry. & Power Co.....					102 46			



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Massawippi Valley.....	8 88			379 42	92 85	1,069 25	12 92
Midland Ry. of Manitoba.....	1,265 77			1,927 38	1,187 57	13,336 41	
Moncton & Buctouche.....						2,400 00	
Montreal & Atlantic.....				6,438 26	17 05	486 95	
Morrissey, Fernie & Michel.....					85 21		50 00
Napierville Junction.....	65 00			683 51	29 63		
National Transcontinental.....	12,968 63	77,128 28		33,061 88	666 82	2,872 35	
Nelson & Sheppard.....	2,649 00			282 06	133 84		
New Brunswick Coal & Ry. Co.....				84 34	19 31		
New Brunswick & P. E. Island.....				73 84			
New Westminster Southern.....	3 09			65 98	39 48	457 00	
Northern New Brunswick & Seaboard.....							
North Shore.....							
Ottawa & New York.....	2 98			1,721 22	4 85	2,902 84	
Pacific Great Eastern.....		32,283 96	275 98	1,166 09	1,548 70		
Pere Marquette.....	5,713 40	31,496 01		9,889 58	510 28	29,724 62	686 39
Quebec Central.....	4,648 96			4,142 39	2,922 74	14,760 48	
Quebec, Montreal & Southern.....	682 25			4,103 62	19 50	515 00	3,615 00
Quebec Oriental.....				300 00	408 84		
Quebec Ry., Light & Power Co.....				925 76	4 01		
Red Mountain.....	6 41			77 83	73 26		
Roberval-Saguenay.....	397 53			1,319 11	372 02		3 87
Rutland & Noyan.....	7 78			56 08	2 43	41 40	
Salisbury & Albert.....				139 20	24 23		277 36
St. Lawrence & Adirondack.....	28 85			2,264 39		9,261 59	
St. John & Quebec.....				246 78			
St. Martins.....	96 49				1,794 60		
Sydney & Louisburg.....	1,003 94			3,020 95	9,934 59		
Teniscouata.....				1,039 01	68 43		
Temiskaming & Northern Ontario.....				13,147 68	470 94		891 77
Thousand Islands.....			336 00	81 20	76 51		
Toronto, Hamilton & Buffalo.....	1,422 30			13,156 48	244 59	1,223 69	89 71
Vancouver, Victoria & Eastern.....	352 81	10,149 91		1,671 50	1,386 52	4,913 87	1,148 53
Victoria Terminal Ry. & Ferry Co.....							
Victoria & Sidney, B.C.....	503 56			5,107 88	4,379 86	104,140 03	231 24
Wabash (in Canada).....				9 00			
York & Carleton.....							
Final Total.....	71,842 35	518,210 17	183,353 41	1,008,279 15	198,881 56	337,234 18	200,309 79

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Transportation Expenses, Rail Line—Continued.									
	Insurance.	Clearing Wrecks.	Damage to Property.	Damage to Live Stock on Right-of-Way.	Loss and Damage—Freight.	Loss and Damage—Baggage.	Injuries to Persons.	Total Transportation Expenses, Rail Line.		
	\$	\$	\$	\$	\$	\$	\$	\$		
Algoma Central & Hudson Bay.....	2,066 62	12,382 63	261 41		1,981 42	123 92	618 40	410,135 73		
Algonia Eastern.....	1,550 68	7,696 27			77 05	69 25	336 38	191,061 52		
Atlantic, Quebec & Western.....		6 00		75 00	166 09			67,564 09		
Alberta & Great Waterways.....	331 15	20 06		5 60	1 30			55,817 30		
Brandon, Saskatchewan & Hudson Bay.....	162 24	21 54	22 01	1,236 36	145 95	13 29	368 06	48,647 82		
British Yukon.....		96 51			33 37		31 36	60,339 94		
Canada & Gulf Terminal.....					33 56	9 95		19,037 97		
Canada Southern.....	291 33	11,214 88	6,883 70	3,017 39	140,921 31	1,193 92	49,845 28	4,351,449 31		
Canadian Govt. Railway (Intercolonial).....	1,780 20	74,525 21	7,099 41	5,596 46	101,374 05	1,742 63	4,551 58	9,787,422 34		
Canadian Govt. Railway (P. E. Island).....	118 17	541 99	433 98	301 41	1,125 69		48 26	336,519 56		
Canadian Northern System.....	13,210 61	126,776 76	49,595 68	18,355 61	189,036 22	4,984 79	101,997 43	15,803,817 47		
Canadian Pacific.....		111,019 36	44,856 67	41,519 36	765,563 07	2,009 35	431,214 91	47,093,830 08		
Cape Breton.....		385 50	8 00		9 12			11,764 49		
Central Vermont.....	80 72	657 62	28 69	72 50	1,432 96	5 76	1,541 88	138,741 99		
Cararequet & Gulf Shore.....					310 36			43,018 47		
Crow's Nest Southern.....	307 25	130 68	162 68	683 15	91 55	11 83	49 52	60,369 45		
Cumberland.....		0 72			26 05		156 00	49,632 97		
Central Canada.....	89 54	69 59						12,017 95		
Dominion Atlantic.....		1,131 50	1,083 14	483 61	7,827 72	121 83	1,437 87	466,923 43		
Eastern British Columbia.....		1 55			0 07			15,628 11		
Edmonton, Dunvegan & British Columbia.....	4,010 21	3,606 31	100 00	95 11	1,177 77		100 00	227,220 81		
Elgin & Havelock.....		119 70						5,633 07		
Essex Terminal.....					43 32		4 00	27,706 98		
Esquimaux & Nanaimo.....		373 83	20 00	118 11	542 49		765 00	212,434 41		
Fredericton & Grand Lake Coal & Ry. Co.....		12 50		25 14	36 82			34,474 45		
Grand Trunk.....	43,081 81	83,125 79	38,239 64	13,761 01	420,992 03	5,196 96	230,734 56	19,053,769 88		
Grand Trunk Pacific.....	2,829 12	8,999 67	1,150 43	4,740 53	26,074 22	64 31	40,388 75	2,634,313 96		
Grand Trunk Pacific Branch Lines.....	1,361 25	3,688 99	990 62	2,655 82	9,093 19	29 51	81 22	836,338 12		
Horseshoe.....		835 45	1 25	265 45	584 62			66,342 11		
International of New Brunswick.....	14 50	4,930 29		9 91	6 13			80,968 02		
Kent Northern.....								7,328 40		
Kettle Valley.....	817 87	2,082 71	81 00	1,352 73	498 78	44 00	78 46	275,285 21		
Lalibniere & Megantic.....					4 65			11,143 72		
Maine Central.....	14 57				166 78			10,894 89		
Manitoba Great Northern.....	127 91	16 71	8 09	99 10	266 43	6 49	21 00	38,015 17		
Maritime Coal, Ry. & Power Co.....		49 22			23 63			30,052 15		
Massachusetts Valley.....	62 95	432 70	58 20	75 00	888 18	113 35	8,167 15	154,671 12		

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Midland Ry. of Manitoba.....	597 01	56 78	159 7	417 52	2, 100 92	67 80	1, 622 14	197, 696 14
Moncton & Buctouche.....		1, 441 98	40 00	322 96	5, 584 53		2, 542 79	16, 606 11
Morrissey, Fernie & Michel.....		116 71		126 09	36 15		14, 569 67	33, 996 34
Naperville Junction.....	12 82	39, 270 71	1, 369 15	2, 859 45	192 51		7, 625 24	56, 027 79
National Transcontinental.....	1, 231 01	157 92	3 62	29 09	33, 384 95	410 77		3, 673, 841 19
Nelson & Sheppard.....	153 13			7 50	281 73	11 84		40, 734 99
New Brunswick Coal & Ry. Co.....		17 24		18 18	20 78			14, 783 22
New Brunswick & P. E. Island.....	67 81	1 77		1 84	676 77		10 26	43, 842 87
New Westminster Southern.....		Cr.			112 95			9, 756 54
Northern New Brunswick & Seaboard.....								
North Shore.....	55 48		284 80	18 90	893 00		38 00	173, 410 82
Ottawa & New York.....		943 68		678 90	104 68		28, 706 12	148, 735 49
Pacific Great Eastern.....	2, 323 70	3, 160 45	2, 769 33	3, 554 26	22, 829 36	37 77	19, 018 75	1, 011, 183 29
Pere Marquette.....	3, 960 00	2, 629 85	127 30	676 96	1, 891 67	72 00	3, 625 30	676, 621 39
Quebec Central.....	113 35	1, 097 49	70 00	55 00	1, 669 09		121 03	179, 948 55
Quebec, Montreal & Southern.....				324 00	466 89	6 60		84, 814 02
Quebec Oriental.....		31 66	3 12	8 22	44 37		0 61	35, 218 61
Quebec Railway, Light & Power Co.....	67 46	0 04		377 75	50 80		706 22	18, 166 92
Red Mountain.....	89 50	1, 096 28	7 40		446 49	0 84	1, 172 70	74, 536 64
Roberval-Saguenay.....	2 64	12 85	5 01	3 29	55 88	0 82	73 40	5, 322 61
Rutland & Noyan.....		98 43	25 00	89 00	142 03			15, 269 59
Salisbury & Albert.....	128 60	956 39	270 02	74 28	2, 915 60	12 82	471 86	393, 110 10
St. Lawrence & Adirondack.....	21 40	171 77		299 96	38 05			57, 848 52
St. John & Quebec.....								10, 750 11
St. Martins.....		1, 094 87		330 00	435 56		360 84	289, 207 07
Sydney & Louisbourg.....		806 10	92 00	63 50	149 35			90, 276 84
Temiscouata.....	1, 782 36	3, 405 54		278 84	7, 467 51	71 47	3, 744 03	916, 797 19
Temiskaming & Northern Ontario.....		49 75			1 80			19, 498 72
Thousand Islands.....	240 30	1, 577 15	5, 313 30	960 54	3, 720 30	80 61	2, 783 99	678, 081 02
Toronto, Hamilton & Buffalo.....	5, 954 64	1, 943 82	1, 293 08	910 56	1, 766 67	40 12	5, 179 29	437, 899 21
Vancouver, Victoria & Eastern.....	15 54	0 07	0 54	8 10	4 38		0 15	1, 275 00
Victoria Terminal Ry. & Ferry Co.....	243 36	1 06	8 46	241 90	72 18		2 35	21, 941 64
Victoria & Sidney, B. C.....	3, 820 05	10, 761 81	3, 495 43	1, 206 08	53, 811 60	6 32	1, 870 10	1, 548, 900 71
Wabash (in Canada).....								3, 223 03
York & Carleton.....								
Totals.....	93, 311 62	557, 420 73	166, 421 29	108, 550 03	1, 814, 437 56	16, 396 78	966, 806 60	114, 327, 343 71



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Midland Ry. of Manitoba.....					11,279 50				
Moncton & Buctouche.....									
Montreal & Atlantic.....									
Morrissey, Fernie & Michel.....									667 36
Naperville Junction.....									
National Transcontinental.....									
Nelson & Fort Sheppard.....									
New Brunswick Coal & Railway Co.....									
New Brunswick & P. E. Island.....									
New Westminster Southern.....									
Northern New Brunswick & Seaboard.....									
North Shore.....									
Ottawa & New York.....									
Pacific Great Eastern.....									
Pere Marquette.....									
Quebec Central.....									
Quebec, Montreal & Southern.....					15,797 03				
Quebec Oriental.....									
Quebec Railway, Light & Power Co.....									
Red Mountain.....									
Roberval-Saguenay.....									
Rutland & Noyau.....									
Salisbury & Albert.....									
St. Lawrence & Adirondack.....									
St. John & Quebec.....									
St. Martins.....									
Sydney & Louisburg.....									
Témiscouata.....									
Thousand Islands.....									
Toronto, Hamilton & Buffalo.....									
Vancouver, Victoria & Eastern.....									
Victoria Terminal Ry. & Ferry Co.....									
Victoria & Sidney, B. C.....									
Wabash (in Canada).....									
York & Carleton.....									
Totals.....	2,559,424 94	565,539 25	146,928 43	3,271,892 62	2,904,540 52	629,947 98	334,243 16		7,969 48

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Miscellaneous Operations.		General Expenses.						Relief Department				
	Other Miscellaneous Operations.	Total Miscellaneous Operations.	Salaries and Expenses of General Officers.		Salaries and Expenses of Clerks and Attendants.		General Office supplies and Expenses.			Law Expenses.	Insurance.		
			\$	cts.	\$	cts.	\$	cts.				\$	cts.
Algoma Central & Hudson Bay.....			23,810	87	7,934	19	2,362	60	14,936	51	821	89	
Algoma Eastern.....			3,378	12	3,106	40	1,627	96	2,242	38	173	56	
Atlantic, Quebec & Western.....			12,181	00	2,613	40	54	69			758	48	
Alberta & Great Waterways.....			3,099	49	1,618	93	455	24			27	83	
Brandon, Saskatchewan & Hudson Bay.....			579	31	1,743	31	123	13	1,341	95	4	06	
British Yukon.....			10,032	79	4,747	48	704	86	707	36	1,795	98	
Canada & Gulf Terminal.....			1,667	62					267	08	1,920	43	
Canada Southern.....			43,654	08	146,755	96	7,889	98	64,461	28	76	91	
Canadian GOV'L Railway (Intercolonial).....			29,745	62	139,602	39	5,017	65	22,476	67	2,421	43	8,956
(P. E. Island).....			1,342	26	6,147	61	213	87	962	00	88	57	391
Canadian Northern System.....			140,824	40	451,352	63	62,436	58	123,750	91	320,752	97	750
Canadian Pacific.....			549,688	88	827,614	39	109,078	76	236,426	32	435,323	44	
Cape Breton.....			2,726	21							422	19	
Central Vermont.....			1,788	85	4,736	76	137	21	1,087	74	11	34	
Caraquet & Gulf Shore.....			3,200	00	1,284	90	130	00			683	10	
Crow's Nest Southern.....			783	63	2,107	65	128	30	2,615	81	4	40	
Cumberland.....			738	50	733	49	943	34			326	64	195
Central Canada.....			1,713	33	882	28	138	13			12	50	
Dominion Atlantic.....			12,862	37	19,037	49	2,507	39			10,723	22	
Eastern British Columbia.....			770	00	537	00	42	50			237	43	
Edmonton, Dunvegan & British Columbia.....			10,890	74	4,124	58	2,136	59	1,644	68	284	79	
Essex Terminal.....			150	00	14	60			30	00			
Esquimalt & Nanaimo.....			1,675	41	285	00	536	81	815	18	139	50	
Fredericton & Grand Lake Coal & Ry. Co.....			1,384	18	374	92	19	15	711	20	6,688	80	
Grand Trunk.....			174,284	34	485,124	71	1,762	00	82	91	378	60	
Grand Trunk Pacific.....			57,978	99	86,226	30	67,246	52	80,641	38	757	86	11,886
Grand Trunk Pacific Branch Lines.....			20,489	02	29,853	72	1,479	62	22,863	88	3,497	56	
Havelock.....			829	54	1,792	56	168	86	8,736	92	1,327	73	
International of New Brunswick.....			310	82	1,469	30	51	93	631	46	2	64	
Kent Northern.....			1,288	39			274	86	243	50	26	38	94
Kettle Valley.....			1,625	94	9,402	00	1,994	50	79	50	113	75	
Lothmere & Megantic.....			1,500	00	1,295	21	646	52	894	76	1,102	32	
Maine Central.....			160	82	345	47	32	48	119	98			
Manitoba Great Northern.....			377	82	1,180	54	73	25	1,486	28	2	73	
Maritime Coal, Railway & Power Co.....			1,320	00	600	00					514	96	
Massachusetts Valley.....			937	54	8,587	51	72	63	1,608	48			

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Midland Ry. of Manitoba.....	11,279 50	1,478 96	5,226 62	363 39	2,904 06	7 56
Moncton & Buctouche.....		2,700 00	720 00	216 00	144 00	296 00
Montreal & Atlantic.....			30,045 87		48 64	1,843 20
Morrissey, Ferme & Michel.....		5,144 96	980 00		Cr.	1,217 77
Napierville Junction.....		1,274 20	2,148 56	2 72	800 56	
National Transcontinental.....	20,774 35	11,788 04	57,508 37	1,955 90	8,836 86	6,708 98
Nelson & Fort Sheppard.....		533 24	1,398 67	87 03	2,003 74	3 13
New Brunswick Coal & Railway Co.....		1,955 74	987 70	7 75		852 60
New Brunswick & P. E. Island.....		159 83	752 46	26 67	114 61	15 93
New Westminster Southern.....		135 84	323 95	107 10	798 88	0 40
Northern New Brunswick & Seaboard.....						
North Shore.....		1,909 45	3,366 48	1,192 71	3,976 56	
Ottawa & New York.....		6,902 89	3,438 95	474 05	527 84	11,217 29
Pacific & Great Eastern.....		11,163 44	48,227 43	2,627 84	8,520 27	182 94
Pere Marquette.....	15,797 03	15,756 46	16,979 12	7,105 10	488 02	504 00
Quebec Central.....		1,288 58	9,513 81	75 82	2,918 46	103 27
Quebec, Montreal & Southern.....		10,510 50	2,590 80	50 30		356 73
Quebec Oriental.....		2,295 91	3,740 56	257 12	845 39	1,130 36
Quebec Railway, Light & Power Co.....		131 19	368 26	18 49	350 90	1 02
Red Mountain.....		4,288 64	2,417 16	2,749 31	5,333 08	
Roberval-Saguenay.....		81 36	347 90	46 80	64 33	1 46
Rutland & Noyan.....		1,573 34		62 38	140 80	54 50
Salisbury & Albert.....		2,858 41	3,920 25	3,471 89	1,301 86	
St. Lawrence & Adirondack.....		825 00	2,496 85			
St. John & Quebec.....		360 00	360 00			
St. Martins.....		1,800 00	4,598 01	15,891 75	0 60	75 50
Sydney & Louisburg.....		7,134 44	2,843 80	503 78	353 70	2,019 14
Temiscouata.....		21,638 30	44,485 96	9,199 38	4,963 39	1,148 92
Temiskaming & Northern Ontario.....	30,470 64	1,579 57	614 00	521 20	9 85	182 50
Thousand Islands.....		20,054 63	18,863 91	3,118 06	7,453 90	758 50
Toronto, Hamilton, & Buffalo.....		3,411 00	8,385 36	492 78	9,654 40	172 11
Vancouver, Victoria & Eastern.....		19 85	101 31	21 25		17 82
Victoria Terminal Railway & Ferry Co.....		312 15	1,468 69	332 87		30 48
Victoria & Sidney, B. C.....		15,522 37	57,650 75	6,503 30	11,730 70	477 47
Wabash (in Canada).....						44 20
York & Carleton.....						
Totals.....	85,842 80	1,283,951 30	2,591,936 24	332,187 81	666,941 25	807,275 95
						29,215 06

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	General Expenses— <i>Included</i> .						Transportation for Investment, C.F.
	Pensions.	Stationery and Printing.	Other Expenses.	General Joint Facilities—Dr.	General Joint Facilities—Cr.	Total General Expenses.	
Algoma Central & Hudson Bay.....		1,862 26	67,747 89			119,476 21	
Algonia Eastern.....		621 03	5,565 84			16,715 29	12,062 50
Atlantic, Quebec & Western.....		285 40	416 68			16,309 65	
Alberta & Great Waterways.....		156 34	317 62			5,675 45	
Brandon, Saskatchewan & Hudson Bay.....	27 27	150 65	155 36			4,125 04	2 42
British Yukon.....		323 59	808 00			19,140 06	
Canada & Gulf Terminal.....		133 94	5,221 36			9,210 43	
Canada Southern.....	12,722 70	27,093 98	11,686 17			314,187 21	
Canadian Govt. Railway (Intercolonial).....	95,171 76	22,703 90	18,668 45			344,762 86	
Canadian Govt. Railway (P. E. Island).....	4,116 22	972 16	1,256 75			15,490 53	
Canadian Northern System.....	0 80	46,459 75	181,363 12	9,321 36	1,478 81	1,335,533 68	
Canadian Pacific.....		113,041 20	635,539 14	1,639 20		2,908,351 33	
Cape Breton.....		107 01	29 00			3,284 41	
Central Vermont.....	240 00	803 10	175 19			8,980 19	
Caracquet & Gulf Shore.....		278 55	2,857 25			8,433 80	
Crow's Nest Southern.....	28 70	182 83	147 39			6,058 71	1,473 45
Cumberland.....			1,285 34			4,222 81	
Central Canada.....		44 72	44 45			2,785 41	
Dominion Atlantic.....	6,578 93	3,399 19 (C.F.)	1,911 91			53,955 98	
Eastern British Columbia.....		12 00	348 07			1,967 00	
Edmonton, Dunvegan & British Columbia.....		503 88	4,594 25			24,179 51	
Elgin & Haystack.....		3 40	283 27			481 27	
Essex Terminal.....		461 58	15,625 22			18,597 46	
Esquimaux & Nainaimo.....		223 49	279 69			9,972 66	
Fredericton & Grand Lake Coal & Railway Co.....		122 82	449 24			4,369 59	
Grand Trunk.....	147,725 51	52,822 74	340 63	163,576 31	1,204 28	1,182,702 26	
Grand Trunk Pacific.....		9,979 18	20,754 54	1,785 50	14 34	209,760 93	
Grand Trunk Pacific Branch Lines.....		3,460 79	7,589 90			72,937 40	
Hereford.....	315 14	192 41	371 55			4,304 16	
International of New Brunswick.....	882 80	243 78	286 74			3,600 73	
Kent Northern.....		901 96	102 00			1,858 50	
Kettle Valley.....		34 96	1,187 90			14,259 80	
Lotbiniere & Megantic.....		36 30	1,138 34			6,612 11	
Maine Central.....		36 30	66 68			761 73	
Manitoba Great Northern.....	17 90	103 04	95 06			3,336 62	48 32
Maritime Coal, Railway & Power Co.....		26 00	500 00			2,960 96	
Massachusetts Valley.....		4 25	144 06			11,354 47	



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Midland Ry. of Manitoba.....	103 59	589 26	631 58	1,615 24	12,920 26	
Moncton & Buctouche.....		409 89	691 52		5,177 41	
Montreal & Atlantic.....		231 25	250 00		32,090 43	
Morrissey, Fernie & Michel.....		161 71	337 79	11,764 80	21,131 08	
Napierville Junction.....		8,466 00	479 10		4,866 85	
National Transcontinental.....	20,648 95	111 91	6,959 77		113,206 91	
Nelson & Fort Sheppard.....	18 33	73 95	95 24		4,251 29	39 09
New Brunswick Coal & Railway Co.....	459 82	122 33	2,528 07		5,805 81	
New Brunswick & P. E. Island.....	1 60	26 07	153 40		1,852 49	
Northern New Brunswick & Seaboard.....			7 30		1,401 14	
North Shore.....						
Ottawa & New York.....	17 76	282 63	121 47		10,867 06	
Pacific Great Eastern.....		332 31	37 70		22,931 23	
Pere Marquette.....		3,576 82	2,359 52		76,668 26	226 26
Quebec Central.....		1,430 48	10,966 70		53,230 06	
Quebec, Montreal & Southern.....		646 04	642 68		15,189 26	
Quebec Oriental.....		305 70	597 72		14,411 75	
Quebec Railway, Light & Power Co.....		439 50	3,224 74		11,933 58	
Red Mountain.....	3 60	30 33	37 31		941 36	
Roberval-Saguenay.....		570 22	5,790 83		21,149 24	
Rutland & Noyan.....		42 50	170 92		755 27	
Salisbury & Albert.....			2,164 65		3,995 67	
St. Lawrence & Adirondack.....	52 63	583 82	20 17		12,209 03	
St. John & Quebec.....	403 58		4 76		3,730 19	
St. Martins.....			49 05	108 19	952 74	
Sydney & Louisburg.....		687 82	7,278 49		33,194 49	
Tennessee.....		5,493 97	3,707 73	540 00	16,920 19	
Temisconata.....			17,080 31		110,677 12	1,385 48
Thousand Islands.....	7,724 83	126 28	20 00	101 52	3,629 40	
Toronto, Hamilton & Buffalo.....		1,755 63	8,775 61		68,050 94	753 99
Vancouver, Victoria & Eastern.....	104 45	690 30	924 97	155 84	23,196 11	1,508 40
Victoria Terminal Railway & Ferry Co.....		19 39			192 28	
Victoria & Sidney, B. C.....		304 74			2,895 92	
Wabash (in Canada).....	512 27	5,775 93	4,714 17	1,197 83	103,641 52	707 24
York & Carleton.....						
Totals.....	297,879 14	320,540 02	1,066,361 17	191,548 43	7,584,881 55	18,207 15

TABLE 8.—Summary of Operating Expenses for the year ending June 30, 1917—Continued.

Name of Railway.	Recapitulation of Expenses.																		
	Maintenance of Way and Structures.		Maintenance of Equipment.		Traffic.		Transportation—Rail Line.		Transportation—Water Line.		Miscellaneous Operations.		General Expenses.		Transportation for Investment (C.).		Total Operating Expenses.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
Algoma Central & Hudson Bay.....	286	459 32	147	253 32	6	156 98	410	135 73	119	476 21			119	476 21			969	481 56	
Algoma Eastern.....	72	765 16	82	213 40	4	427 66	191	051 52	16	715 29			16	715 29	12	062 50	355	620 53	
Atlantic, Quebec & Western.....	46	887 55	21	977 13			67	564 09	16	309 65			16	309 65			152	738 42	
Alberta & Great Waterways.....	21	891 19	16	754 30	1	289 30	55	817 30	5	675 45			5	675 45			101	337 54	
Brandon, Saskatchewan & Hudson Bay.....	60	115 35	16	235 76	3	346 65	48	617 82	4	125 04			4	125 04	2	42	132	498 20	
British Yukon.....	38	861 52	19	373 66	8	749 66	60	339 94	19	140 06			19	140 06			146	311 41	
Canada & Gulf Terminal.....	9	668 38	4	018 11	53	99	19	037 97	9	210 43			9	210 43			41	989 18	
Canadian Southern.....	1	127 943 91	1	361 934 75	285	838 41	4	351 449 31	152	389 64			152	389 64			7	593 743 23	
Canadian Govt. Railways—																			
Intercolonial.....	2	699 393 79	2	835 778 02	271	685 53	9	787 422 34	123	663 62	323	169 07	344	762 86			16	385 815 23	
P. E. Island.....	167	491 24	81	325 98	10	603 75	336	519 56	301	287 18			15	490 53			912	178 51	
Canadian Northern System.....	7	160 338 18	5	231 772 14	712	809 04	15	803 817 17	86	109 97	509	853 69	1	335 533 68			30	840 234 17	
Canadian Pacific.....	16	828 216 64	21	654 950 28	3	078 301 42	47	093 830 08	2	760 831 55	2	332 960 42	2	908 351 33			96	657 441 72	
Cape Breton.....	8	279 25	33	00			11	764 49					3	284 41			24	208 28	
Central Vermont.....	88	739 56	31	573 17	6	212 19	138	144 99			89	95	8	980 19			274	340 05	
Caracquet & Gulf Shore.....	18	344 89	9	061 33	1	101 20	43	018 47					8	433 80			79	959 69	
Crow's Nest Southern.....	117	661 67	19	613 81	3	976 85	60	369 45					6	058 71	1	473 45	206	237 64	
Cumberland.....	24	550 58	8	708 33	55	75	49	632 97					4	222 81			87	170 44	
Central Canada.....	12	616 48	2	827 98	189	57	12	017 95					2	785 41			30	437 39	
Dominion Atlantic.....	200	133 82	83	088 01	26	176 83	466	923 43					53	955 98			830	278 07	
Eastern British Columbia.....	9	763 55	7	655 19	0	35	15	628 11					1	967 00			34	454 20	
Edmonton, Dunvegan & British Columbia.....	176	099 80	61	027 47	7	842 87	227	220 81					24	179 51			496	370 46	
Elgin & Havelock.....	5	099 71	1	287 89			5	033 07					481	27			11	301 94	
Essex Terminal.....	15	161 55	4	352 74	264	38	27	706 98					18	597 46			66	086 11	
Esquimalt & Nanaimo.....	110	958 06	94	769 17	150	60	212	434 41					9	972 66			428	284 90	
Fredericton, Grand Lake & Coal and Railway Co.....	11	371 93	3	125 68	118	95	34	474 45					4	369 59			53	460 60	
Grand Trunk.....	4	502 001 90	7	625 842 75	1	093 497 10	19	653 769 88			314	418 02	1	182 702 26			33	772 231 91	
Grand Trunk Pacific.....	1	766 056 82	1	897 366 57	161	927 46	2	634 413 96			187	497 25	2	097 760 93			6	857 632 99	
Grand Trunk Pacific Branch Lines.....	594	529 09	315	400 59	57	664 82	836	338 12			9	476 59	72	937 40			1	796 346 61	
Hersford.....	40	325 71	16	083 63	1	969 88	66	342 11					4	304 16			129	025 49	
International of New Brunswick.....	70	281 24	24	261 53	2	249 60	80	968 02					3	609 73			181	370 12	
Kent Northern.....	7	337 34	1	333 00			7	328 40					1	858 50			17	857 33	
Kettle Valley.....	306	133 05	70	339 04	3	076 95	275	285 21					14	259 80			669	294 05	
Lodsbriere & Megantic.....	11	262 97	4	369 06	349	97	11	143 72					6	612 11			33	736 83	
Maine Central.....	2	113 01	2	171 15	396	56	10	894 89					7	61 73			16	337 37	

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Manitoba Great Northern.....	71,973 66	10,556 04	1,806 41	38,015 17	10,551 96	3,336 62	48 32	125,639 58
Maritime Coal, Ry. & Power Co.....	16,119 71	6,150 61	3,569 53	30,052 15	2,960 96	11,854 47		55,283 43
Massawippi Valley.....	73,718 28	40,004 89	10,205 07	154,671 12	11,279 50	5,177 41		283,318 29
Midland Railway of Manitoba.....	52,002 38	60,209 59		197,696 14		12,920 26		344,312 94
Moncton & Buctouche.....	11,326 44	4,083 44		16,606 11		32,090 43		37,193 38
Montreal & Atlantic.....	283,533 91	289,947 15		618,166 02		21,131 08		1,223,737 51
Morrissy, Fernie & Michel.....	9,613 63	15,494 28		33,996 34		4,866 85		80,235 33
Napierville Junction.....	20,195 38	6,420 58	895 35	56,027 74		113,296 91		88,405 90
National Transcontinental.....	1,535,581 74	1,720,010 04	131,774 34	3,673,841 19	20,774 35	4,251 29	39 09	7,100,390 20
Nelson & Fort Sheppard.....	44,036 23	8,631 61	2,785 17	40,784 99		5,805 81		51,436 93
New Brunswick Coal & Ry. Co.....	23,166 99	7,638 41	42 50	14,783 22		1,852 49		77,915 64
New Brunswick & P. E. Island.....	19,769 44	9,781 91	2,668 93	43,842 87		1,401 14		29,279 47
New Westminster Southern.....	13,392 09	4,138 84	590 86	9,756 54				
Northern New Brunswick & Seaboard								
North Shore.....								
Ottawa & New York.....	78,035 41	39,375 65	6,919 11	173,410 82		10,867 06		308,608 05
Pacific Great Eastern.....	51,366 57	61,175 16	3,672 32	148,735 49		22,631 23		287,880 77
Perc Marquette.....	300,858 77	258,048 05	67,113 05	1,011,183 29		76,668 26	236 26	1,713,645 16
Quebec Central.....	244,664 51	173,146 87	28,894 04	676,621 39	15,797 03	53,230 06		1,192,354 80
Quebec, Montreal & Southern.....	123,963 64	180,441 12	9,281 53	179,948 55		15,189 26		507,824 10
Quebec Oriental.....	73,057 43	30,413 99		84,814 02		14,411 75		202,697 19
Quebec Ry., Light & Power Co.....	9,656 42	22,013 82	1,918 85	35,218 61		11,933 58		80,741 28
Red Mountain.....	11,733 19	2,437 83	514 14	18,166 92		941 36		33,793 44
Roberval-Saguenay.....	38,290 89	18,269 70	890 90	74,556 64		21,149 24		153,157 37
Rutland & Noyan.....	3,958 57	1,969 87	969 43	5,322 61		755 27		12,975 75
Salisbury & Albert.....	17,126 88	2,739 47	44 31	15,209 59		3,895 67		39,175 92
St. Lawrence & Adirondack.....	118,669 35	57,432 09	6,915 94	393,110 10		12,209 03		588,336 51
St. John & Quebec.....	32,671 60	3,959 85	2,841 04	57,848 52		3,730 19		101,051 20
St. Martins.....	9,744 61	906 62		10,750 11		952 74		22,354 08
Sydney & Louisburg.....	108,327 04	205,009 90	2,178 90	289,207 07		33,194 49		637,917 40
Temiscouata.....	53,850 13	29,920 76	4,727 15	90,276 84		16,920 19		195,695 07
Ternisquaming & Northern Ontario.....	344,795 62	270,578 38	18,707 78	916,797 19	50,551 96	110,677 12	1,385 48	1,710,722 57
Thousand Islands.....	4,453 04	3,504 90		19,498 72		3,629 40		31,086 06
Toronto, Hamilton & Buffalo.....	213,299 38	306,430 01	21,977 41	678,081 02	20,054 63	68,050 94	753 99	1,307,145 40
Vancouver, Victoria & Eastern.....	299,200 91	104,304 12	14,661 17	437,899 21	3,414 00	23,196 11	1,508 40	881,167 12
Victoria Terminal Ry. & Ferry Co.....	469 58	86 36		1,275 00		192 28		2,093 86
Victoria & Sidney, B.C.....	4,643 60	4,055 58	1,106 95	21,941 64		2,895 92		34,643 69
Wabash (in Canada).....	307,332 50	652,734 61	138,543 35	1,548,900 71	10,877 84	103,641 52	707 24	2,701,333 29
York & Carleton.....	1,846 31	228 92		3,223 03				5,928 26
Final Total.....	41,154,193 11	46,371,178 39	6,236,810 91	114,327,343 71	3,271,892 62	3,962,543 94	7,584,381 55	222,890,637 08

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TABLE 9.—Income Account for

Name of Railway.	Net.		Outside Operations.			
	Operating Revenue.	Operating Deficit.	Revenue.	Expenses.	Profit.	Loss.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1 Algoma Central & Hudson Bay.....	186,996 68		514,452 10	226,930 78	287,521 32	
2 Algoma Eastern.....	271,020 22					
3 Atlantic, Quebec & Western.....		13,316 83				
4 Alberta & Great Waterways.....		39,345 02	9,261 60	10,969 72		1,708 12
5 Brandon, Saskatchewan & Hudson Bay.....		84,391 13				
6 British Yukon.....	137,377 47					
7 Canada & Gulf Terminal.....	4,295 68					
8 Canada Southern.....	5,936,234 61					
Canadian Gov't Railways—						
9 Intercolonial.....	1,638,139 91					
10 P. E. Island.....		245,183 35				
11 Canadian Northern System.....	12,159,742 39					
12 Canadian Pacific.....	50,055,673 93		5,021,329 64	3,310,097 04	1,711,232 60	
13 Cape Breton.....		11,847 19				
14 Central Vermont.....	66,305 25					
15 Caraquet & Gulf Shore.....	782 17					
16 Crow's Nest Southern.....		105,474 90				
17 Cumberland.....	11,882 88					
18 Central Canada.....		19,137 12				
19 Dominion Atlantic.....	321,996 38		6,281 30	8,948 19		2,666 89
20 Eastern British Columbia.....		5,488 14				
21 Edmonton, Dunvegan & British Columbia.....		8,764 90	20,899 36	3,864 95	17,034 41	
22 Elgin & Havelock.....		1,616 39				
23 Essex Terminal.....	32,441 92					
24 Esquimalt & Nanaimo.....	228,426 31					
25 Fredericton & Grand Lake Coal & Railway Co.....	41,233 78					
26 Grand Trunk.....	13,179,038 48					
27 Grand Trunk Pacific.....		205,734 81				
28 Grand Trunk Pacific Br'h Lines.....		203,327 61				
29 Hereford.....		55,837 58				
30 International of New Brunswick.....		45,409 86				
31 Kent Northern.....	7,500 00					
32 Kettle Valley.....		100,159 48				
33 Lotbiniere & Megantic.....	1,052 03					
34 Maine Central.....	3,429 84					
35 Manitoba Great Northern.....		83,218 36				
36 Maritime Coal Railway & Power Co.....	42,260 43					
37 Massawippi Valley.....		61,767 54				
38 Midland of Manitoba.....		9,810 70				
39 Moncton & Buctouche.....		1,230 03				
40 Montreal & Atlantic.....	77,555 95					
41 Morrissey, Fernie & Michel.....	8,729 58					
42 Napierville Junction.....	70,346 41					
43 National Transcontinental.....		82,032 16				
44 Nelson & Fort Sheppard.....		47,830 30				
45 New Brunswick Coal & Railway Co.....		13,591 73				
46 New Brunswick & P. E. Island.....		27,112 46				
47 New Westminster Southern.....		5,971 86				
48 Ottawa & New York.....		13,364 78				
49 Pacific Great Eastern.....		108,209 77				
50 Pere Marquette.....	1,489,691 35					
51 Quebec Central.....	566,082 35					
52 Quebec, Montreal & Southern.....		45,055 87				
53 Quebec Oriental.....	20,137 40					

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Total.		Taxes Deduction.	Total.		Other In- come from all other Sources.	Total Gross Corporate.	
Net Revenue.	Net Deficit.		Operating Income.	Operating Loss.		Income.	Loss.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
474,518 00		30,728 67	443,789 33		113,765 84	557,555 17	1
271,020 22		1,839 13	269,181 09		1,186 98	270,368 07	2
	13,316 83	3,263 00		16,579 83	59,074 61	42,494 78	3
	41,053 14	2,160 60		43,213 74	25,855 70		4
	84,391 13	1,071 89		85,463 02	595 31	84,867 71	5
137,377 47		6,805 27	130,572 20		22,592 22	153,164 42	6
4,295 68			4,295 68			4,295 68	7
5,936,234 61		252,859 82	5,683,374 79		593,384 38	6,276,759 17	8
1,638,139 91			1,638,139 91			1,638,139 91	9
	245,183 35		245,183 35			245,183 35	10
12,159,742 39		903,021 73	11,256,720 66		364,563 50	11,621,284 16	11
51,766,906 53		1,882,950 71	49,883,955 82		9,660,476 89	59,544,432 71	12
	11,847 19			11,847 19		11,847 19	13
66,305 25		5,450 39	60,854 86		22,546 45	83,401 31	14
782 17			782 17			782 17	15
	105,474 90	6,341 91		111,816 71	5 01	111,811 80	16
11,882 88			11,882 88			11,882 88	17
	19,137 12	138 39		19,275 51	669 30	18,606 21	18
319,329 49		412 36	318,917 13		23,291 67	342,208 80	19
	5,488 14	1,460 07		6,948 21		6,948 21	20
8,269 51		2,479 86	5,789 65		14,638 89	20,428 54	21
	1,616 39			1,616 39		1,616 39	22
32,441 92			32,441 92			32,441 92	23
228,426 31		35,965 95	192,460 36			192,460 36	24
41,233 78			41,233 78			41,233 78	25
13,179,038 48		1,289,167 77	11,889,870 71		2,500,485 04	14,390,355 75	26
	205,734 81	44,725 79		250,460 60	2,535,064 04	2,284,603 44	27
	203,327 61	22,285 61		225,613 22	909,375 72	683,762 50	28
	55,837 58	1,800 97		57,638 55	382 01	57,256 54	29
	45,409 86			45,409 86		45,409 86	30
7,500 00			7,500 00			7,500 00	31
	100,159 48	10,020 18		110,179 66		110,179 66	32
1,052 03			1,052 03			1,052 03	33
3,429 84		510 00	2,919 84		35 12	2,954 96	34
	83,218 36	920 34		84,138 70	210 54	83,928 16	35
42,260 43			42,260 43			42,260 43	36
	61,767 54	2,403 87		64,171 41	1,450 16	62,721 25	37
	9,810 70	27,128 45		36,939 15	28,076 90	8,862 25	38
	1,230 03			1,230 03		1,230 03	39
77,555 95		34,483 58	43,072 37		1,400 00	44,472 37	40
8,729 58			8,729 58			8,729 58	41
70,346 41		854 51	69,491 90		2,468 51	71,960 41	42
	82,032 16			82,032 16		82,032 16	43
	47,830 30	5,619 66		53,449 96	105 41	53,344 55	44
	13,591 73			13,591 73		13,591 73	45
	27,112 46			27,112 46		27,112 46	46
	5,971 86	872 32		6,844 18	350 82	6,493 36	47
	13,364 78	883 81		14,248 59	2,406 98	11,841 61	48
	108,209 77			108,209 77		108,209 77	49
1,489,691 35		1,320 64	1,488,370 71		156,250 35	1,644,621 06	50
566,082 35		15,046 24	551,036 11		15,427 18	566,463 29	51
	45,055 87	7,696 74		52,752 61	291,634 70	238,882 09	52
20,137 40		3,099 16	17,038 24		1 00	17,039 24	53

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TABLE 9.—Income Account for

Name of Railway.	Net.		Outside Operations.			
	Operating Revenue.	Operating Deficit.	Revenue.	Expenses.	Profit.	Loss.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
54 Quebec Railway, Light & Power Co.....	19,550 00					
55 Red Mountain.....		14,398 41				
56 Roberval-Saguenay.....	47,537 00					
57 Rutland & Noyan.....	3,068 10					
58 Salisbury & Albert.....	6,779 34					
59 St. Lawrence & Adirondack	457,268 82					
60 St. John & Quebec.....		18,115 95				
61 St. Martins.....		2,809 46				
62 Sydney & Louisburg.....	127,846 15					
63 Temiscouata.....	28,866 35					
64 Temiskaming & Northern Ontario.....	525,577 25					
65 Thousand Islands.....	12,241 37					
66 Toronto, Hamilton & Buffalo.....	884,948 20					
67 Vancouver, Victoria & Eastern.....		333,980 53				
68 Victoria Terminal Railway & Ferry Co.....	1,044 94					
69 Victoria & Sidney, B.C.....	12,383 81		264 50	17 82	246 68	
70 Wabash (in Canada).....	1,207,668 04					
71 York & Carleton.....	1,223 47					
Total.....	89,894,376 24	2,013,534 22	5,572,488 50	3,560,828 50	2,016,035 01	4,375 01

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Total.		Taxes Deduction.	Total.		Other In- come from all other Sources.	Total Gross Corporate.	
Net Revenue.	Net Deficit.		Operating Income.	Operating Loss.		Income.	Loss.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
19,550 00		7,577 93	11,972 07			11,972 07	54
	14,398 41	1,187 12		15,585 53	29 27		15,556 26
47,537 00			47,537 00			47,537 00	56
3,068 10		17 44	3,050 66		4,000 00	7,050 66	57
6,779 34			6,779 34			6,779 34	59
457,268 82		5,579 74	451,689 08		567 33	452,256 41	59
	18,115 95			18,115 95	230 67		17,885 28
	2,809 46			2,809 46			2,809 46
127,846 15			127,846 15			127,846 15	62
28,866 35		3,628 42	25,237 93		2,458 81	27,696 74	63
525,577 25			525,577 27		134,700 43	660,277 68	64
12,241 37		78 99	12,162 38		534 29	12,696 67	65
884,948 20		34,988 78	849,959 42		72,684 55	922,643 97	66
	333,980 53	64,745 56		398,726 09	168,120 80		230,605 29
1,044 94		1,488 75		443 81	344 57		99 24
12,630 49		1,380 05	11,250 44		Dr. 403 43	10,847 01	69
1,207,668 04			1,207,668 04			1,207,668 04	70
1,223 47			1,223 47			1,223 47	71
91,898,979 46	2,006,477 44	4,726,462 17	87,377,687 38	2,211,647 53	17,731,038 52	104,334,486 19	1,437,407 82

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TABLE 9.—Income Account for

No.	Name of Railway.	Deductions from		
		Rents accrued for lease of other roads.	Other rents.	Loss on separately operated properties.
		\$ cts.	\$ cts.	\$ cts.
1	Algoma Central & Hudson Bay.....		37,165 90	
2	Algoma Eastern.....		70,476 57	
3	Atlantic, Quebec & Western.....		14,557 81	
4	Alberta & Great Waterways.....			
5	Brandon, Saskatchewan & Hudson Bay.....		1,688 33	
6	British Yukon.....			
7	Canadian & Gulf Terminal.....		2,463 15	
8	Canada Southern.....		2,775,335 21	
9	Canadian Government Railways—Intercolonial.....		786,606 68	
10	“ “ “ P. E. Island.....			
11	Canadian Northern System.....	225,000 00	210,899 13	
12	Canadian Pacific.....	2,372,133 58	124,727 45	
13	Cape Breton.....			
14	Central Vermont.....		32,544 71	
15	Caraquet & Gulf Shore.....		8,212 40	
16	Crow's Nest Southern.....		4,332 60	
17	Cumberland.....			
18	Central Canada.....		2,969 74	
19	Dominion Atlantic.....	61,581 41	39,954 35	
20	Eastern British Columbia.....		6,603 39	
21	Edmonton, Dunvegan & British Columbia.....			
22	Elgin & Havelock.....			
23	Essex Terminal.....			
24	Esquimalt & Nanaimo.....		27,194 11	
25	Fredericton & Grand Lake Coal & Railway Co.....		22,564 80	
26	Grand Trunk.....	781,606 33	581,576 88	
27	Grand Trunk Pacific.....		155,988 65	908,618 52
28	Grand Trunk Pacific Branch Lines.....		64 86	
29	Hereford.....		400 00	
30	International of New Brunswick.....		18,669 10	
31	Kent Northern.....			
32	Kettle Valley.....	21,966 62	62,425 88	
33	Lotbiniere & Megantic.....			
34	Maine Central.....			
35	Manitoba Great Northern.....		10,321 25	
36	Maritime Coal, Railway & Power Co.....		5,428 50	
37	Mississippi Valley.....	24,000 00	45,035 52	
38	Midland of Manitoba.....		86,078 80	
39	Moncton & Buctouche.....			
40	Montreal & Atlantic.....	33,120 00	38,892 18	
41	Morrissey, Fernie & Michel.....			
42	Napierville Junction.....		23,205 34	
43	National Transcontinental.....		741,062 29	
44	Nelson & Fort Sheppard.....		4,411 27	
45	New Brunswick Coal & Railway Co.....		3,456 43	
46	New Brunswick & P. E. Island.....		5,107 94	
47	New Westminster Southern.....		16,944 18	
48	Northern New Brunswick & Seaboard.....			
49	North Shore.....			
50	Ottawa & New York.....		52,240 15	
51	Pacific Great Eastern.....			
52	Pere Marquette.....	175,187 09	680,454 35	249,800 00
53	Quebec Central.....		32,409 43	
54	Quebec, Montreal & Southern.....		953 88	
55	Quebec Oriental.....		18,535 39	
56	Quebec Railway, Light & Power Co.....			
57	Red Mountain.....		137 73	
58	Roberval-Saguenay.....	3,000 00	5,551 30	
59	Rutland & Noyan.....			
60	Salisbury & Albert.....			
61	St. Lawrence & Adirondack.....	10,000 00	177,374 38	
62	St. John & Quebec.....		11,683 38	
63	St. Martins.....			





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TABLE 9.—Income Account for

No.	Name of Railway.	Deductions from		
		Rents accrued for lease of other roads.	Other rents.	Loss on separately operated properties.
		\$ cts.	\$ cts.	\$ cts.
64	Sydney & Louisburg.....			
65	Temiscouata.....		660 89	
66	Temiskaming & Northern Ontario.....		75,432 04	
67	Thousand Islands.....		3,206 00	
68	Toronto, Hamilton & Buffalo.....		39,143 34	
69	Vancouver, Victoria & Eastern.....		169,918 66	
70	Victoria Terminal Railway & Ferry Co.....		441 76	
71	Victoria & Sidney, B.C.....		6,307 75	
72	Wabash (in Canada).....			
73	York & Carleton.....		426 85	
	Total.....	3,707,655 03	7,242,241 87	1,158,418 52

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Gross Corporate Income.					Net Corporate.		No.
Interest accrued on Funded Debt.	Other Interest.	Sinking Funds.	All other Deductions	Total Deductions.	Income.	Loss.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
	2,274 70			77,706 74	582,570 94		64
3,000 00			4,363 90	10,569 90	2,126 77		65
254,450 00	9,005 64		36 10	302,635 08	620,008 89		66
				169,918 66		400,523 95	67
	7 51			449 27		548 51	68
15,000 00	4,243 12			25,550 87		14,703 86	69
					1,207,668 04		70
				426 85	796 62		71
30,616,990 49	6,126,569 27	9,733 33	2,313,790 30	51,175,398 81	65,092,798 87	13,371,119 32	



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TABLE 9A.—Current Assets and Liabilities.

Number.	Name of Railway.	Current Assets Available for Payment of Current Liabilities.											
		Cash.	Bills Receivable.	Due from Agents.	Due from Solvent Companies, etc.	Traffic Balances.	Other Cash Assets.	Total Assets.	Loans Bills Payable.				
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1	Algoma Central	406,631	17	8,021	56	242,820	04	17,990	89	1,406	25	676,869	91
2	Algoma Eastern	19,028	71	1,000	00	62,368	93					82,397	64
3	Atlantic, Quebec & Western	40,823	48	6,412	08			27,002	36	1,525,001	30	74,237	92
4	Alberta and Great Waterways	152	43	916	10	3,343	02					1,529,412	85
5	Bedfordton & Nelson												
6	Brandon, Sask. & H. B.												
7	British Yukon												
8	Canada & Gulf Terminal	705	81	198	98	2,147	83	78,08				3,130	70
9	Canada Southern	35,627	23	288,901	83	257,438	83			3,150	00	585,117	80
10	Canadian Northern	18,871,593	32	2,008,428	00	7,754,355	28					28,634,376	60
11	Canadian Pacific	53,519,313	70	3,164,800	57	9,663,762	04	1,385,245	12	29,123,367	98	96,856,489	41
12	Caracquet & Gulf Shore	580	20	1,761	16	926	98			955	60	4,223	94
13	Crow's Nest Southern												
14	Central Canada	432	03			125,365	52			776,734	66	902,532	21
15	Detroit River Tunnel	143,325	55			132,645	74					280,971	29
16	Dominion Atlantic	7,116	80	31,852	20	29,716	33					68,685	33
17	Eastern B.C.	1,275	86			17,562	03	366	25	108	45	19,312	89
18	Edmonton, Dunvegan & B.C.	5,480	47	6,551	92	234,476	22	9,864	78	913,195	50	1,169,568	89
19	Elgin & Havelock												
20	Grand Trunk	5,202,772	26			39,168,376	34	4,150,959	78			48,522,108	38
21	Grand Trunk Pacific	1,844,526	34			5,367,209	92	946,891	91	120,383	35	8,279,011	52
22	G.T.R. Branch Lines	34,538	15	136,901	62					3	00	171,442	77
23	Kettle Valley									158	84	260,998	77
24	Manitoba Great Northern			4,803	64	198,935	09	57,101	20				
25	Midland of Manitoba	13,870	69	1,404	53	33,597	42			5,000	00	53,872	64
26	Moncton and Biefouche	5,107	77	315	67	692	65					6,116	09
27	Morrissey, Fermie & Michel			84	88	49,965	80	516	52			50,567	20
28	Napierville Junction							37,213	60	5,178	21	230,241	96
29	Nelson & Fort Sheppard	123,249	15	44,017	00								
30	New Westminster Southern												
31	Perc Marquette	2,726,471	96	222,181	98	917,325	10			91,435	63	656,092	80
32	Quebec Central	389,593	05	12,000	00	22,097	28	47,184	36	403,293	71	901,477	75
33	Quebec, Montreal & Southern	212,966	99	266,181	29	423,054	51	78,252	46	3,241	53	1,004,415	77
34	Quebec Oriental	3,126	87	2,035	87	8,920	10	24,029	46			38,112	30
35	Quebec Ry., Light & Power					28,886	30						



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TABLE 9A.—Current Assets and Liabilities—Continued.

Number.	Name of Railway.	Current Liabilities.—Continued.															
		Audited Vouchers and Accounts.		Wages and Salaries.		Traffic Balances.		Dividends Uncalled For.		Interest Coupons Unpaid.		Rents		Miscellaneous		Total Liabilities.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1	Algoma Central.....	94,113	38	58,587	50	42,810	38	1,563,871	76	461,644	03	2,221,047	05				
2	Algoma Eastern.....	50,914	05	21,983	75	35,429	18	3,073	74	1,054	27	2,112,454	39				
3	Albany, Quebec & Western.....	113,968	14	3,942	35	15,558	00	277	87	2,050,000	00	2,183,746	36				
4	Alberta & Great Waterways.....	1,542	959	39	3,170	45						1,546,129	84				
5	Bedfordton & Nelson.....	108,961	76									108,961	76				
6	Brandon, Sask. & H.B.....	537,235	88									537,235	88				
7	British Yukon.....					192,212	36					77,991	72				
8	Canada & Gulf Terminal.....	2,951	81	2,109	36	10,397	58					13,495	67				
9	Canada Southern.....							1,910	25			225,000	00				
10	Canadian Northern.....	13,786,946	12	1,996,062	19							227,185	25				
11	Canadian Pacific.....	8,825,761	22	5,453,264	11	1,016,215	77	64,338	60			7,431,123	76				
12	Caracquet & Gulf Shore.....	2,621	95	4,025	32	2,206	86					3,717	39				
13	Crow's Nest Southern.....	537,831	58														
14	Central Canada.....	163,897	71	105	30												
15	Detroit River Tunnel.....	6,923	80					90,000	00								
16	Dominion Atlantic.....	49,912	57	39,295	25	27,340	34										
17	Eastern B.C.....	1,420	24	2,329	25	430	64										
18	Edmonton, Dunvegan & B.C.....	1,472,922	27	20,373	01												
19	Elgin & Havelock.....	2,367	56														
20	Grand Trunk.....	3,402,292	02	3,111,671	41			2,378,093	04			14,277,842	72				
21	Grand Trunk Pacific.....	2,252,274	27	621,745	28							1,081,093	87				
22	G.T.P., Branch Lines.....	135,444	74	7,762	05							946,236	69				
23	Kettle Valley.....	56,822	77	43,667	08	28,940	92					5,045	00				
24	Manitoba Great Northern.....	492,722	55														
25	Midland of Manitoba.....	604,230	25	8,456	52												
26	Moncton & Baetouche.....	20,069	85														
27	Morrissey, Ferme & Michel.....	959	77	3,037	50												
28	Napierville Junction.....	17,438	67	2,703	81	31,670	27										
29	Nelson & Fort Sheppard.....	946,160	28														
30	New Westminster Southern.....	81,271	20														
31	Pere Marquette.....	1,262,207	81	768,056	20	1,076,138	37					14,987,272	19				
32	Quebec Central.....	107,001	29	52,315	61	43,694	26	40,544	22			203,508	74				
33	Quebec, Montreal & Southern.....	59,716	09														
34	Quebec, Oriental.....	70,892	05	5,146	85	6,446	26					234,966	06				
35	Quebec Ry., Light & Power.....					1,284,861	48					613,620	00				

TABLE 9A.—Current Assets and Liabilities—Concluded.

Number.	Name of Railway.	Current Liabilities.—Continued.										
		Audited Vouchers and Accounts.	Wages and Salaries.	Trade Balances.	Dividends Unclaimed For.	Interest Coupons Unpaid.	Rents.	Miscellaneous	Total Liabilities.			
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
36	Red Mountain	266,637	74									266,637 74
37	Salisbury & Albert											4,010 50
38	St. Martins			1,890	28							8,500 00
39	Tomiscomata	8,016	31	10,285	19	3,072	35	1,418	92			47,120 23
40	Tomiscomata & N. Ontario	277,175	41	1,044	15	1,319	31					432,333 90
41	Thousand Islands	1,346	85									4,170 34
42	Toronto, Hamilton & Buffalo	489,711	97	23,016	81	204,761	52			30 00		722,987 84
43	Vancouver, Victoria & Eastern	646,563	87					4,480	00		814 54	646,567 70
44	Victoria Terminal	154,205	16									163,874 23
45	Victoria & Sidney	206,256	66	1,794	72						7,874 35	206,256 66



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TABLE 10—Summary of Earnings and Expenses for the year ending June 30, 1917.

Name.	Bridge Tolls Revenue.	Sleeping Car Revenue.	Parlour and Chair Car Revenue.	Switching Revenue.	Power Revenue.	Rents of Buildings and other Property.	Freight Revenue.	Total Revenue.	Total Operating Expenses.	Net Operating Revenue.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Detroit River Tunnel Co.	447,908 45					1,050,000 00		1,050,000 00	1,050,000 00	1,050,000 00
International Bridge Co.				333,478 50	4,903 19	1,236 55		447,908 45	52,855 46	395,052 99
St. Clair Tunnel Co.		813,963 00	51,705 00					339,618 24	135,107 32	204,510 92
The Pullman Co.				5,888 00			12,387 00	865,668 00	487,589 42	378,078 58
Van Buren Bridge Co.								18,275 00	8,408 64	9,866 36
Total.....	447,908 45	813,963 00	51,705 00	339,366 50	4,903 19	1,051,236 55	12,387 00	2,721,469 69	683,960 84	2,037 508 85



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Massawippi Valley.....	558,512	16,543,569	155,880	2,470,859	59,996	87,626	14,072	161,691	3,766
Midland of Manitoba.....	289,164	19,225,973	66,845	4,147,847	50,340	102,016	67	152,453	132
Moncton & BaieCoteba.....	22,568	460,278	26,248	566,447			19,393	19,393	838
Montreal & Atlantic.....	1,691,976	86,018,107	331,640	7,829,834	231,049	141,968	151,912	525,058	7,129
Morrissey, Fernie & Michel.....	397,936	2,427,409	114,000	695,400			29,700	29,700	
Napierville Junction.....	668,994	19,223,514	22,637	388,072	25,072	4,687	12,972	42,736	963
National Transcontinental.....	3,398,031	1,200,857,918	820,107	50,145,704	2,175,982	689,670	513,305	3,379,072	77,903
Nelson & Fort Sheppard.....	34,711	1,261,966	20,257	537,462	18,501	36,880		35,381	5,745
New Brunswick Coal & Rly. Co.....	21,878	723,402	21,728	526,398			35,515	35,515	
New Brunswick & P. E. Island.....	61,197	1,418,030	14,644	298,502	12,932	396	30,904	44,232	2,820
New Westminster Southern.....	102,069	877,812	5,349	61,084	495		12,474	12,969	
Ottawa & New York.....	580,704	30,979,122	133,824	3,249,596	65,663	78,857		144,580	20,416
Pere Marquette.....	2,970,266	507,807,460	246,610	4,872,190	837,907	218,799		1,056,706	7,784
Quebec Central.....	1,158,456	91,096,678	463,122	19,361,653	228,015	265,824	238,073	779,772	245,755
Quebec, Montreal & Southern.....	461,654	20,293,668	273,127	6,487,822	83,043	124,502	75,228	282,773	1,763
Quebec Oriental.....	168,726	14,345,284	36,691	2,160,820	80,303	28,028	33,837	142,168	9,641
Quebec Rly., Light & Power Co.....	259,564	2,628,219	81,650	577,265	27,594	5,181		32,775	830
Red Mountain.....	41,699	373,929	10,240	92,026	72	10,882		10,954	
Roberval-Saguenay.....	169,090	2,241,256	29,401	458,883		70,134	248,975	319,109	
Rutland & Noxan.....	226,500	766,835	112,453	381,216	2,181	4,990		7,171	
Salisbury & Albert.....	48,045	1,151,985	11,645	324,755			31,185	31,185	
St. Lawrence & Adirondack.....	1,828,822	70,479,217	660,299	13,445,536	130,092	179,969		310,096	6,341
St. John & Quebec.....	55,851	2,077,887	42,073	1,175,717	336	325		71,017	2,828
St. Martins.....	16,005	240,260	7,784	146,503			70,356	16,500	
Sydney & Louisburg.....	3,905,872	58,407,794	152,473	2,124,738	162,051	24,409		204,303	
Temisouata.....	165,393	6,410,978	61,697	1,773,099	4,875	52,919	18,440	127,814	14,101
Temiskaming & Northern Ontario.....	886,912	146,125,191	498,076	30,367,353	514,267	447,307	61,246	1,025,397	28,639
Thousand Islands.....	39,244	235,464	43,698	263,808			95,278	95,278	
Toronto, Hamilton & Buffalo.....	3,057,508	113,988,532	611,087	18,968,400	181,247	287,913	1,798	470,958	7,847
Vancouver, Victoria & Eastern.....	1,048,689	33,464,921	157,147	4,224,255	83,935	116,258	96,557	296,824	27,478
Victoria Terminal Rly. & Ferry Co.....	16,370	16,206	78,843	78,055	481	2,497	151	2,829	
Victoria & Sidney, B.C.....	31,286	290,098	81,618	1,001,764			2,413	45,060	
Wabash (in Canada).....	3,100,330	650,673,278	564,212	37,806,291	1,311,812	500,014		1,811,826	5,744
York & Carleton.....	7,940		6,612				7,223	7,223	
Total.....	121,916,272	31,186,707,851	53,749,680	3,150,127,428	62,863,724	44,083,575	8,746,811	115,797,100	3,627,901

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## ELECTRIC

TABLE 1.—Summary of Road, Mileage,

Name of Railway.	Track Mileage.				
	Length of Road First Main Track.	Length of Road Second Main Track.	Total Main Track.	Length of Sidings and Turnouts.	Total Computed as Single Track.
Berlin & Waterloo (now Kitchener & Waterloo).....	3.28	1.40	4.68	0.38	5.06
Berlin & Northern.....	3.15		3.15		3.15
Berlin, Waterloo, Wellesley & Lake Huron.....	17.81	2.90	20.71	7.25	27.96
Brandon Municipal.....	10.31		10.31		10.31
Brantford & Hamilton.....	23.00		23.00		23.00
Brantford Municipal.....	29.96	1.95	31.91		31.91
British Columbia.....	245.59	73.54	319.13	48.31	367.44
Calais Street.....	7.00		7.00		7.00
Calgary Municipal.....	55.50	15.50	71.00	1.00	72.00
Canadian Resources Development.....	1.75		1.75	0.16	1.91
Cape Breton.....	30.59		30.59	1.26	31.85
Chatham, Wallaceburg & Lake Erie.....	36.94		36.94	3.66	40.60
Cornwall.....	4.00		4.00	2.50	6.50
Edmonton Radial.....	52.37		52.37	1.54	53.91
Fort William.....	19.88	9.56	29.44	0.94	30.38
Guelph Radial.....	8.50		8.50	0.33	8.83
Halifax Tramways.....	12.29	9.29	21.58	0.04	21.62
Hamilton & Dundas.....	7.00		7.00		7.00
Hamilton, Grimsby & Beamsville.....	22.00		22.00		22.00
Hamilton Street.....	33.70		33.70		33.70
Hamilton Radial.....	25.00	8.69	33.69		33.69
Hull.....	15.67	12.15	27.82	3.49	31.31
International Transit.....	4.30		4.30	0.22	4.52
Kingston, Portsmouth & Cataraqui.....	8.00		8.00		8.00
Lethbridge Municipal.....	11.00		11.00		11.00
Levis County.....	11.75		11.75		11.75
London Street.....	36.02		36.02		36.02
London & Lake Erie.....	29.75		29.75	1.50	31.25
London & Port Stanley.....	23.60		23.60	19.00	42.60
Lake Erie & Northern.....	51.00		51.00	3.80	54.80
Moncton Tramways.....	4.47		4.47	0.03	4.50
Montreal Tramways.....	124.26	80.41	204.67	28.82	233.49
Montreal & Southern Counties.....	52.20		52.20	4.33	56.53
Moose Jaw.....	9.00	1.50	10.50	1.50	12.00
Nelson.....	2.13	1.25	3.38	0.05	3.43
Niagara Falls, Park & River.....	11.91	11.20	23.11	1.37	24.48
Niagara, St. Catharines & Toronto.....	61.58		61.58	20.03	81.61
Niagara, Welland & Lake Erie.....	1.87		1.87	0.30	2.17
Nipissing Central.....	15.37		15.37	4.81	20.18
Oshawa.....	9.00	3.00	12.00	1.00	13.00
Ottawa.....	28.11	24.71	52.82		52.82
Peterborough Radial.....	6.55		6.55	0.79	7.34
Port Arthur.....	12.43	6.10	18.53	1.04	19.57
Pictou County (did not report).....					
Quebec Ry., Light & Power Co. Citadel.....	21.04		21.04		21.04
Quebec Ry., Light & Power Co. (Montgomery).....	28.60	9.80	38.40	3.00	41.40
Regina Municipal.....	32.12		32.12	2.15	34.27
Sandwich, Windsor & Amherstburg.....	41.34		41.34		41.34
Sarnia.....	8.25		8.25	1.00	9.25
Sherbrooke.....	9.00		9.00	0.53	9.53
Sudbury, Copper Cliff Suburban.....	6.24		6.24		6.24
Shawinigan Falls.....	3.75		3.75		3.75
St. Thomas.....	7.00		7.00	0.50	7.50
Suburban Rapid Transit.....	21.02		21.02		21.02
Saskatoon Municipal.....	12.63	3.53	16.16	0.12	16.28
Schomberg & Aurora Railway.....	14.40		14.40		14.40
Toronto.....	60.69	58.36	119.05	8.38	127.43

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## RAILWAYS.

Passengers and Freight carried for the year ending June 30, 1917.

Length of Track Leased.	Car Mileage.			Passenger Traffic.			Frts. Traf. Number of Tons of Freight Carried.
	Passenger Car Mileage.	Freight, Mail and Express Car Mileage.	Total Car Mileage.	Fare Passengers Carried.	Transfer Passengers Carried.	Total.	
	199,303		199,303	1,229,753	23,582	1,253,335	
	34,600		34,600	185,055		185,055	
	239,591	37,188	276,779	1,218,383		1,218,383	168,617
	305,878		305,878	839,375	48,876	888,251	
	328,013	37,766	365,779	624,560		624,560	6,026
	402,990		402,990	1,625,146		1,625,146	180
145-25	11,313,210	1,145,515	12,458,725	43,234,384	6,546,247	49,780,631	327,559
	183,960		183,960	758,065	17,092	775,157	
	2,573,993	13,240	2,587,233	13,909,238	3,328,472	17,437,710	7,707
	6,388		6,388	4,097		4,097	
19-03	676,894	19,187	696,081	4,643,990	79,037	4,723,027	
	250,000	218,705	468,705	348,774		348,774	106,390
	203,867	19,406	223,273	438,996		438,996	93,318
	1,881,839	24,083	1,905,922	10,148,382	1,302,478	11,450,860	260
	629,688		629,688	2,672,114	438,433	3,110,547	
	228,000	4,700	232,700	1,097,503	186,861	1,284,364	14,000
	1,380,474		1,380,474	8,935,380	732,959	9,668,339	
	157,464		157,464	935,628		935,628	361
	368,729	27,771	396,500	660,420		660,420	40,113
	2,783,918		2,783,918	16,542,136	4,370,229	20,912,365	
	489,658	13,809	503,467	1,322,615		1,322,615	29,026
1-82	790,695	26,321	817,016	3,102,929	111,000	3,213,929	8,583
	283,129		283,129	2,121,868		2,121,868	
	199,680		199,680	1,055,982	149,098	1,205,080	
	268,659		268,659	991,678	42,469	1,034,147	
	424,439	10,998	435,437	2,061,998	338,172	2,400,170	2,260
	1,932,316		1,932,316	11,234,977	1,750,125	12,985,102	
				333,669		333,669	6,500
	440,315	403,747	844,062	726,799		726,799	471,114
	296,130	646,483	942,613	373,299		373,299	55,512
	100,838		100,838	414,781		414,781	
				179,974,549	63,451,272	243,425,821	
27-83	657,263	110,655	767,918	2,057,574	124,125	2,181,699	10,450
	445,814		445,814	2,347,484		2,347,484	
	61,594		61,594	323,148		323,148	
	262,221		262,221	1,335,579		1,335,579	
	1,319,671	142,105	1,461,776	5,643,150	89,419	5,732,569	405,051
	87,834		87,834	693,843		693,843	
13-26	251,516		251,516	1,297,298		1,297,298	5,682
	56,210	33,928	90,138	286,486		286,486	213,888
	4,913,611		4,913,611	28,286,233	9,428,744	37,714,977	
	437,896		437,896	1,550,610	413,543	1,964,153	
	650,885		650,885	2,624,461	328,930	2,953,391	
	2,277,121		2,277,121	13,165,318	2,997,308	16,162,626	
	473,406		473,406	1,947,667		1,947,667	
	931,340	11,822	943,162	4,914,140	635,656	5,549,796	25,618
9-45	1,163,765		1,163,765	6,988,361	1,098,026	8,086,387	
	204,244	4,952	209,196	1,270,288	104,340	1,374,628	207,801
	390,681		390,681	1,237,760	197,563	1,435,323	
	54,626		54,626	251,053		251,053	
				436,332		436,332	22,398
	578,130		578,130	1,189,190	67,778	1,256,968	640
	757,734		757,734	3,624,268	644,758	4,269,026	
	52,296		52,296	36,931		36,931	9,706
	20,585,398		20,585,398	152,782,659	60,821,816	213,604,475	
	489,546	12,811	502,357	3,534,616	219,079	3,753,695	866

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TABLE 1.—Summary of Road, Mileage,

Name of Railway.	Track Mileage.				
	Length of Road First Main Track.	Length of Road Second Main Track.	Total Main Track.	Length of Sidings and Turnouts.	Total Computed as Single Track.
Toronto Suburban.....	18.79		18.79	0.35	19.14
Toronto & York Radial.....	72.17		72.17	9.83	82.00
Three Rivers Traction Company.....	7.10		7.10	0.50	7.60
Toronto Civic Railway.....	9.75	9.75	19.50	1.04	20.54
Winnipeg.....	110.20		110.20		110.20
Windsor, Essex & Lake Shore.....	36.17	1.13	27.30	1.85	29.15
Winnipeg, Selkirk & Lake Winnipeg.....	40.69		40.69		40.69
Yarmouth.....	3.00		3.00		3.00
Total.....	1,743.54	345.72	2,089.26	188.70	2,277.90

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Passengers and Freight carried for the year ending June 30, 1917—*Concluded.*

Length of Track Leased.	Car Mileage.			Passenger Traffic.			Frt. Traf.
	Passenger Car Mileage.	Freight, Mail and Express Car Mileage.	Total Car Mileage.	Fare Passengers Carried.	Transfer Passengers Carried.	Total.	Number of Tons of Freight Carried.
.....	1,587,399	108,746	1,696,145	6,688,327	.....	6,688,327	48,409
.....	328,199	.....	328,199	1,150,050	239,406	1,389,456	.....
.....	1,334,650	.....	1,334,650	14,696,841	.....	14,696,841	.....
.....	10,362,151	.....	10,362,151	53,679,757	18,887,866	72,567,623	.....
.....	392,514	99,202	491,716	701,066	4,776	705,842	40,630
.....	420,663	.....	420,663	697,594	.....	697,594	4,574
.....	86,870	.....	86,870	237,390	.....	237,390	.....
216.64	80,899,906	3,173,140	84,073,046	629,441,997	179,419,535	808,861,532	2,333,539

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TABLE 2.—Summary of Capital at the close of the year ending  
June 30, 1917.

Number.	Name of Railway.	Stocks.	Bonds.	Total Capital.
		\$	\$	\$
1	Berlin & Waterloo.....		146,963	146,963
2	Berlin & Northern.....	17,800	2,400	20,200
3	Berlin, Waterloo, Wellesley & Lake Huron.....	125,000	426,000	551,000
4	Brandon Municipal.....		450,000	450,000
5	Brantford & Hamilton.....	300,000	660,000	960,000
6	Brantford Municipal.....		270,000	270,000
7	British Columbia.....	9,173,000	7,068,138	16,241,138
8	Calgary Municipal.....		2,365,173	2,365,173
9	Canadian Resources Development.....	486,000		486,000
10	Cape Breton (a).....	1,359,000	1,096,000	2,455,000
11	Chatham, Wallaceburg & Lake Erie.....	760,600	694,500	1,445,100
12	Cornwall.....	200,000		200,000
13	Edmonton Interurban.....	600,000		600,000
14	Edmonton Radial.....		3,067,947	3,067,947
15	Fort William Terminal Railway & Bridge Co.....	125,000		125,000
16	Fort William.....		1,112,000	1,112,000
17	Grand Valley.....	1,100,000	688,800	1,788,800
18	Guelph Radial.....	193,000		193,000
19	Halifax Tramway (a).....	1,400,000		1,400,000
20	Hamilton and Dundas.....	100,000	100,000	200,000
21	Hamilton, Grimsby & Beamsville.....	235,000	150,000	385,000
22	Hamilton Radial.....	111,150	160,000	271,150
23	Hamilton Street.....	1,205,000	420,000	1,625,000
24	Hull.....	292,000		292,000
25	International Transit Co.....	150,000	180,000	330,000
26	Kingston, Portsmouth & Cataract.....	83,100	99,250	182,350
27	Lake Erie & Northern.....	1,500,000	1,600,000	3,100,000
28	Lethbridge Municipal.....		463,439	463,439
29	Levis County.....	422,900	151,100	574,000
30	London Street.....	572,680	605,000	1,177,680
31	London & Lake Erie.....	2,000,000	840,000	2,840,000
32	London & Port Stanley.....		900,000	900,000
33	Moneton Tramways (a).....	1,125,400	304,000	1,429,400
34	Montreal Tramways.....	3,394,300	35,608,153	39,002,453
35	Montreal & Southern Counties.....	1,000,000		1,000,000
36	Moosejaw.....	760,372	35,000	795,372
37	Nelson.....		81,000	81,000
38	Niagara Falls, Park & River.....		600,000	600,000
39	Niagara, St. Catharines & Toronto.....	925,000	1,098,000	2,023,000
40	Niagara, Welland & Lake Erie.....	250,000	52,000	302,000
41	Nipissing Central.....	530,000		530,000
42	Oshawa.....	40,000	18,452	58,452
43	Ottawa.....	1,876,900	425,000	2,301,900
44	Peterborough Radial.....	100,000		100,000
45	Pictou County.....	300,000	300,000	600,000
46	Port Arthur.....		863,200	863,200
47	Quebec Ry., Light & Power Co. (a).....	3,250,000	2,503,434	5,753,434
48	Regina.....		1,675,000	1,675,000
49	Sandwich, Windsor & Amherstburg.....	297,000	600,000	897,000
50	Sarnia.....	90,000	90,000	180,000
51	Saskatoon.....		725,000	725,000
52	Shawinigan Falls Terminal.....	300,000	150,000	450,000
53	Sherbrooke (a).....	1,127,000	1,126,700	2,253,700
54	St. John.....	800,000	1,000,000	1,800,000
55	St. Stephen.....	100,000	100,000	200,000
56	St. Thomas.....	85,028		85,028
57	Suburban Rapid Transit.....	100,000	500,000	600,000
58	Sudbury & Copper Cliff.....	162,600	75,000	237,600
59	Sydney & Glace Bay.....	500,000	389,000	889,000
60	Schomberg & Aurora.....	250,000	300,000	550,000
61	Three Rivers Traction.....	250,700	415,000	665,700
62	Toronto.....	12,000,000	4,684,633	16,684,633
63	Toronto Suburban.....	1,500,000	2,628,000	4,128,000
64	Toronto & York Radial.....	2,000,000	1,640,000	3,640,000
65	Toronto Civic.....		2,082,737	2,082,737
66	Windsor, Essex & Lake Shore.....	750,000	750,000	1,500,000
67	Winnipeg (a).....	13,380,000	5,000,000	18,380,000

(a) Represents all divisions of the Company



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TABLE 2.—Summary of Capital at the close of the year ending  
June 30, 1917—*Concluded.*

Number.	Name of Railway.	Stocks.	Bonds.	Total Capital.
		\$	\$	\$
68	Winnipeg, Selkirk & Lake Winnipeg.....	500,000	653,200	1,153,200
69	Windsor & Tecumseh.....	100,000	189,000	289,000
70	Yarmouth.....	250,990	250,000	500,990
	Final Totals.....	70,606,520	90,628,219	161,234,739

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TABLE 3.—Summary of Gross Earnings from

No.	Name of Railway.	Car Earnings.				
		Passenger.	Freight.	Mail and Express.	Other Car Earnings.	Total Car Earnings.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Berlin and Waterloo.....	49,236 37	1,749 50		241 87	51,227 74
2	Berlin and Northern.....	7,402 20		197 25	44 75	7,644 20
3	Berlin, Waterloo, Wellesley & Lake Huron.....	95,898 36	116,552 95	13,830 31	217 43	226,499 08
4	Brandon Municipal.....	36,676 60			200 00	36,876 60
5	Brantford and Hamilton.....	141,458 91	21,607 85	691 20	757 15	164,515 11
6	Brantford Municipal.....	97,306 12	2,592 76			99,898 88
7	British Columbia.....	2,234,657 07	466,076 07			2,700,733 14
8	Calais Street.....	37,678 80				37,678 80
9	Calgary.....	563,621 05	9,366 95		3,428 00	576,416 00
10	Canadian Resources Development.....	204 85				204 85
11	Cape Breton.....	232,186 56		9,235 65	940 20	242,362 41
12	Chatham, Wallaceburg & Lake Erie.....	66,798 95	57,168 57	2,682 42	543 15	127,193 09
13	Cornwall.....	19,448 20	11,770 62	832 41		32,051 23
14	Edmonton Radial.....	483,145 35	486 12		5,520 50	489,151 97
15	Fort William.....	115,873 66		350 00	574 50	116,798 16
16	Guelph Radial.....	42,865 71	3,229 59			46,095 30
17	Halifax Tramways.....	388,494 05				388,494 05
18	Hamilton and Dundas.....	68,821 02	158 99	1,020 05	978 35	70,978 41
19	Hamilton, Grimsby and Beamsville.....	87,142 86	28,084 45	8,670 22	894 70	124,792 23
20	Hamilton Street.....	735,906 20			1,322 34	737,228 54
21	Hamilton Radial.....	148,157 56	12,368 72	309 85	478 10	161,314 23
22	Hull.....	165,721 13	27,301 91	3,197 16		196,220 20
23	International Transit Co.....	86,879 45	5 00			86,884 45
24	Kingston, Portsmouth & Cararaqui.....	48,766 36				48,766 36
25	Lethbridge Municipal.....	46,502 29			86 80	46,589 09
26	Lewis County.....	90,441 60	3,618 08	350 00		94,409 68
27	London Street.....	411,007 49		1,503 26	320 56	412,831 31
28	London and Lake Erie.....	36,703 51	13,629 93	9,648 76		59,982 20
29	London and Port Stanley.....	147,470 44	147,826 72	4,340 84	1,501 67	301,139 67
30	Lake Erie and Northern.....	108,784 56	47,030 04	12,220 35	93 93	168,128 88
31	Moncton Tramways.....	16,683 36				16,683 36
32	Montreal Tramways.....	7,374,295 79			351,203 09	7,725,498 88
33	Montreal and Southern Counties.....	230,232 26	11,758 62	6,388 04	10,412 75	258,791 67
34	Moosejaw.....	102,059 80				102,059 80
35	Nelson.....	13,778 10				13,778 10
36	Niagara Falls, Park and River.....	132,753 92		720 64	1,729 33	135,203 89
37	Niagara, St. Catharines and Toronto.....	445,947 57	243,939 07	14,400 82	48,793 20	753,080 66
38	Niagara, Welland & Lake Erie.....	31,771 27	2 96			31,774 23
39	Nipissing Central.....	83,986 74	11,963 43		1,210 98	97,161 15
40	Oshawa.....	14,324 31	113,129 30	10,618 46	856 89	138,928 96
41	Ottawa.....	1,185,247 19			4,368 12	1,189,615 31
42	Peterborough Radial.....	67,715 80				67,715 80
43	Port Arthur.....	112,532 49			242 42	112,774 91
44	Pictou County.....					
45	Quebec Ry., Lt. & Power Co. (Citadel).....	549,356 90	Dr. 166 50	198 12	9,212 37	558,600 89
46	" " (Montmorency).....	204,586 05		6,107 46	11,326 83	222,020 34
47	Regina Municipal.....	207,563 34	7,157 46		3,780 75	218,501 55
48	Sandwich, Windsor & Amherstburg.....	339,252 97	7,348 15	735 00	595 22	347,931 34
49	Sarnia.....	55,621 21	6,234 03	5,026 51		66,881 75
50	Sherbrooke.....	54,292 55			55 00	54,347 55
51	Sudbury, Copper Cliff Suburban.....	25,980 95				25,980 95
52	Shawinigan Falls.....		44,797 00			44,797 00
53	St. Thomas.....	16,616 64				16,616 64
54	Suburban Rapid Transit.....	50,180 22	3,615 60	1,315 00	70 00	55,180 82
55	Saskatoon.....	182,075 98			836 40	182,912 38
56	Schomberg & Aurora Railway.....	9,844 53	7,242 95			17,087 48
57	Toronto.....	5,989,881 95				5,989,881 95
58	Toronto Suburban.....	168,895 15	1,076 43	1,994 02		171,965 60
59	Toronto and York Radial.....	503,054 12	70,466 70	5,510 41		579,031 23
60	Three Rivers Traction Co.....	58,129 25	5 95	233 56	127 00	58,495 76
61	Toronto Civic Railway.....	248,389 92				248,389 92
62	Winnipeg.....	2,084,516 73		5,235 45	427 92	2,090,180 10
63	Windsor, Essex and Lake Shore.....	144,319 54	32,047 26	3,008 27	550 51	179,925 58
64	Winnipeg, Selkirk & Lake Winnipeg.....	112,038 77	16,676 34	1,429 97	175 25	130,320 33
65	Yarmouth.....	10,399 71		400 00	284 15	11,083 86
	Total.....	27,621,582 36	1,547,919 60	132,401,46	464,402,18	29,766,305 60

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Operation for the year ending June 30, 1917.

Miscellaneous Earnings.							Total Gross Earnings.	No.
Advertising	Rent of Land and Buildings.	Rent of Tracks.	Rent of Equipment	Sale of Power.	Other Earnings.	Total Miscel- laneous.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
800 00		1,486 68	34 95	1,873 49	250 76	4,445 88	55,673 62	1
150 00	168 50					318 50	7,962 70	2
	498 76	600 00		336 94	10 19	1,445 89	227,944 97	3
446 75						446 75	37,323 35	4
	5,960 19		379 24			6,339 43	170,854 54	5
1,620 00	580 00					2,200 00	102,098 88	6
							2,700,733 14	7
150 00				3,880 69	702 11	4,732 80	42,411 60	8
8,926 41					123 75	9,050 16	585,466 16	9
							204 85	10
999 98	25 00				5 00	1,029 98	243,392 39	11
385 45	324 92		700 00	4 00	5,666 90	7,081 27	134,274 36	12
464 00				92 00	1,835 84	2,391 84	34,443 07	13
4,479 41	720 00	47 97			2,718 16	7,965 54	497,117 51	14
600 00					54 55	654 55	117,452 71	15
425 75	352 33					778 08	46,873 38	16
2,922 33	978 55				6,710 66	10,611 54	399,105 59	17
100 00	247 25	2,795 68	506 74			3,649 67	74,628 08	18
350 00	2,502 00		5,591 47			8,443 47	133,235 70	19
725 00	1,903 29		1,492 22			4,120 51	741,349 05	20
300 00	896 50		8,232 23			9,428 73	170,742 96	21
1,075 00		306 00	184 05			1,565 05	197,785 25	22
1,467 13					32,274 26	53,741 39	140,625 84	23
400 00	3,043 61				220 00	3,663 61	52,429 97	24
698 70	720 00				532 49	1,951 19	48,540 28	25
660 00						660 00	95,069 68	26
3,033 60	148 00				353 52	3,532 12	416,366 43	27
500 00					34 71	534 71	60,516 91	28
	3,257 03	6,071 92			6,216 59	15,545 54	316,685 21	29
	402 75		679 50			1,082 25	169,211 13	30
200 00						200 00	16,883 36	31
							7,725,498 88	32
1,436 77	467 26		1,400 00	1,884 00	252 11	5,440 14	264,231 81	33
846 45					2,076 68	2,923 13	104,982 93	34
64 50					249 57	314 07	14,092 17	35
1,129 16	278 37		2 49	781 51	8 80	2,200 33	173,404 22	36
225 28	823 48				2,460 61	3,509 37	756,590 03	37
237 15						237 15	32,011 38	38
625 00		229 00			874 25	1,728 25	98,889 40	39
240 00	1,256 44				5,411 00	6,907 44	145,836 40	40
3,175 00	727 10			375 84	387 87	5,115 81	1,194,731 12	41
476 67					33 05	509 72	68,225 52	42
711 00			178 71	300 00	645 29	1,835 00	114,609 91	43
								44
2,242 48					110 45	2,352 93	560,953 82	45
	1,690 55				5,399 05	7,089 60	229,109 94	46
3,767 23					1,095 31	4,862 54	223,364 09	47
1,040 00				32,581 51	2,263 32	35,884 83	383,816 17	48
400 00					3,071 53	3,471 53	70,353 28	49
557 00					429 33	986 33	55,333 88	50
							25,980 95	51
					503 21	503 21	45,300 21	52
328 25					436 97	765 22	17,381 86	53
		9,063 68	62 50			9,126 18	64,307 00	54
1,540 00	76 00				732 73	2,348 73	183,261 11	55
							17,087 48	56
25,000 00	1,778 41		2,187 54		62,756 94	91,722 89	6,081,604 84	57
507 25			1,345 00	32,509 53	990 12	35,351 90	207,317 50	58
1,300 00	1,016 00				27,620 50	29,936 50	608,967 73	59
465 50					1,314 38	1,779 88	60,275 64	60
1,116 00						1,116 00	249,505 92	61
9,502 50		500 04	1,800 00		1,361 41	13,163 95	2,103,344 05	62
560 00	100 00				223 54	883 54	180,809 12	63
600 00		1,000 00				1,600 00	131,920 33	64
				5,645 71	24,432 61	30,078 32	41,162 18	65
89,972 70	30,942, 29	22,100 97	24,776 64	80,265 22	223,300 12	471,357 94	30,237,663 54	

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TABLE 4.—Summary of Operating Expenses

No.	Name of Railway.	Maintenance—Way and Structures.			
		Track and Roadway.	Electric Line.	Buildings and Fixtures.	Total Way and Structures.
		\$    cts.	\$    cts.	\$    cts.	\$    cts.
1	Berlin and Waterloo.....	3,539 44	369 85	10 75	3,920 04
2	Berlin and Northern.....	324 41		12 38	336 79
3	Berlin, Waterloo, Wellesley and Lake Huron.....	12,929 79	2,157 84	2,484 76	17,572 39
4	Brandon Municipal.....	226 92	155 69	3 26	385 87
5	Brantford and Hamilton.....	20,191 32	2,464 84	192 62	22,848 78
6	Brantford Municipal.....	3,361 72	1,359 56	120 42	4,841 70
7	British Columbia.....	130,248 47	44,289 35	2,041 90	176,579 72
8	Calais Street.....	4,556 34	1,128 88	56 41	5,741 63
9	Calgary.....	6,702 26	3,014 98	639 37	10,356 61
10	Canadian Resources Development.....				
11	Cape Breton.....	14,654 83	3,848 99	1,089 08	19,592 90
12	Chatham, Wallaceburg and Lake Erie.....	11,824 39	524 79	2,022 25	14,371 43
13	Cornwall.....	3,440 30	213 25		3,653 55
14	Edmonton Radial.....	11,008 04	1,841 74	1,001 74	13,851 52
15	Fort William.....	4,004 85	1,160 94	1,503 94	6,669 73
16	Guelph Radial.....	3,218 12	539 58		3,757 70
17	Halifax Tramways.....	19,957 73	2,706 09	993 45	23,657 27
18	Hamilton and Dundas.....	9,133 12	1,270 98	77 71	10,481 81
19	Hamilton, Grimsby and Beamsville.....	14,243 05	3,694 91	875 48	18,813 44
20	Hamilton Street.....	12,678 49	7,617 98	409 58	20,706 05
21	Hamilton Radial.....	14,583 26	2,267 40	418 22	17,268 88
22	Hull.....	10,803 70	3,286 28	474 13	14,564 11
23	International Transit Co.....	740 12	76 06	30 45	846 63
24	Kingston, Portsmouth and Cataraqui.....	2,945 70	181 75	172 35	3,299 80
25	Lethbridge Municipal.....	3,954 86	516 56	725 52	5,196 94
26	Levis County.....	5,764 84	687 60	399 97	6,852 41
27	London Street.....	30,285 53	6,637 63	589 31	37,512 47
28	London and Lake Erie.....	7,980 43	685 94	423 46	9,089 83
29	London and Port Stanley.....	14,400 86	29,500 58	60 78	43,962 22
30	Lake Erie and Northern.....	33,889 98	7,401 36	282 51	41,573 85
31	Moncton Tramways.....	553 39	283 61	62 69	899 69
32	Montreal Tramways.....				
33	Montreal and Southern Counties.....	26,478 27	3,990 50	1,126 79	31,595 56
34	Moosajaw.....	4,728 29	308 91	269 98	5,307 18
35	Nelson.....	1,203 22	566 36	43 00	1,812 58
36	Niagara Falls, Park and River.....	23,202 10	3,471 58	1,009 03	27,682 71
37	Niagara, St. Catharines and Toronto.....	49,016 44	8,565 15	12,363 99	69,945 58
38	Niagara, Welland and Lake Erie.....	208 65		1 00	209 65
39	Nipissing Central.....	9,722 64	1,087 00	1,158 79	11,968 43
40	Oshawa.....	9,137 51	488 59	995 68	10,621 78
41	Ottawa.....	27,585 23	27,015 90	1,196 51	55,797 64
42	Peterborough Radial.....	1,749 46	247 12	98 88	2,095 46
43	Port Arthur.....	10,227 52	1,921 23	485 32	12,634 07
44	Pictou County.....				
45	Quebec Ry., Light and Power Co. (Citadel).....	19,321 93	7,856 38	905 17	28,083 48
46	" " (Montmorency).....	15,416 03	3,670 97	2,682 64	21,769 64
47	Regina Municipal.....	3,987 67	3,081 73	161 19	7,230 59
48	Sandwich, Windsor and Amherstburg.....	23,116 10	6,092 72	259 07	29,467 89
49	Sarnia.....	5,515 08	283 55	361 51	6,160 14
50	Sherbrooke.....	3,448 71	1,297 37	5,242 27	5,270 35
51	Sudbury, Copper Cliff Suburban.....	796 60	17 93	119 31	933 84
52	Shawinigan Falls.....	4,895 91	1,770 76	2,283 45	8,950 12
53	St. Thomas.....	246 59			246 59
54	Suburban Rapid Transit.....	5,736 15	1,344 22	67 39	7,147 76
55	Saskatoon.....	6,267 93	531 91	1,240 59	8,040 43
56	Schomberg and Aurora Railway.....	5,691 57	60 09	247 03	5,998 69
57	Toronto.....	75,189 77	42,464 27	11,369 24	129,023 28
58	Toronto Suburban.....	10,721 01	2,786 61	181 84	13,689 46
59	Toronto and York Radial.....	36,531 77	9,203 28	3,890 87	49,625 92
60	Three Rivers Traction Co.....	1,078 71	718 66	11 25	1,808 62
61	Toronto Civic Railway.....	2,840 56	804 45	851 00	4,496 01
62	Winnipeg.....	49,819 86	12,206 42	2,730 22	64,756 50
63	Windsor, Essex and Lake Shore.....	11,542 72	3,292 84	665 12	15,500 68
64	Winnipeg, Selkirk and Lake Winnipeg.....	11,750 62	384 43	283 94	12,418 99
65	Yarmouth.....	360 65	27 79	16 80	405 24
	Total.....	869,681 53	275,443 73	64,775 36	1,209,900 62

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for the year ending June 30, 1917.

Maintenance—Equipment.								No.
Steam Plant.	Electric Plant.	Cars.	Electric Equipment of Cars.	Miscellaneous Equipment.	Miscellaneous Shop Expenses	Total Equipment.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
	727 45	3,429 36	3,677 11	564 94	319 76	8,718 62	1	
		88 96				88 96	2	
141 48	960 60	745 30	5,007 44	871 40		7,726 22	3	
		491 65	267 06	127 67	1 52	887 90	4	
	1,223 05	4,524 92	6,009 22	4,862 64		16,619 83	5	
		1,519 42				1,519 42	6	
	16,367 27	102,427 21	44,827 39	903 22	8,527 79	173,052 88	7	
	328 19	1,355 47	501 12		53 26	2,238 04	8	
		33,030 39	12,772 06	125 51	2,225 98	48,153 94	9	
		62 92				62 92	10	
	2,883 16	8,368 88	5,440 92	1,006 13	927 70	18,626 79	11	
		2,492 02	1,938 98	1,564 41	132 67	6,128 08	12	
		2,098 81	1,365 39			3,464 20	13	
		26,831 15	12,044 87	1,082 14	3,259 15	43,217 31	14	
	123 74	6,630 82	5,543 46	300 47	1,938 74	14,537 23	15	
		2,255 07	2,585 90	285 29		5,126 26	16	
		15,212 90	9,579 17	3,171 88	1,843 51	29,807 46	17	
		919 86	356 86	7,647 53		8,924 25	18	
	1,206 98	11,226 47	5,795 03		3,801 58	22,030 06	19	
			36,846 19	27,924 90		64,771 09	20	
		7,820 00	3,250 44			11,070 44	21	
			24,698 59			24,698 59	22	
	443 50	2,520 55	2,319 01	608 21		5,891 27	23	
	168.70	3,525 34		18 77		3,712 81	24	
		4,054 69	1,535 44	150 21	125 45	5,865 79	25	
	85 19	11,738 81	7,412 18	2,550 80	1,820 13	23,607 11	26	
		31,206 05	13,016 03	2,869 77		47,091 85	27	
	2,725 48	9,219 97				11,945 45	28	
		15,676 40	6,263 62	106 56	4,213 28	26,259 86	29	
		830 25	3,364 35	860 35	21 00	6,016 45	30	
	940 50	3,063 53	735 98	26 18	305 20	4,130 89	31	
							32	
	124 35	10,358 33	6,793 84	1,633 38		18,910 10	33	
	519 42	3,339 75	30 42	44 17	95 50	4,029 26	34	
	164 71	1,045 09				1,209 80	35	
	58 40	1,944 08	454 48	29 63		2,486 59	36	
	628 46	31,053 03	50,078 30	215 78	2,588 68	84,566 25	37	
	47 52	1,233 81	162 76	18 15		1,462 24	38	
	236 95	5,153 35	3,581 69	206 06	914 24	10,092 29	39	
		1,785 07	2,416 12	915 66	5 00	5,121 85	40	
6,830 04	2,086 70	35,355 98	22,864 62	3,289 33	489 02	70,915 69	41	
	104 80	3,037 69	1,691 05	25 30		4,858 84	42	
	28 62	6,043 80	2,809 14	6 55	1,430 32	10,318 43	43	
							44	
		18,540 51	12,489 41	1,709 07	29 77	32,768 76	45	
	77 47	7,531 89	14,218 98	77 46	635 89	22,627 69	46	
		8,975 78	4,227 32		3,314 64	16,517 74	47	
		963 27	11,302 50	88 15		24,672 37	48	
			2,970 32		185 31	3,155 63	49	
		767 64	671 15	1,879 00	157 46	3,475 25	50	
			287 44	41 65		496 79	51	
				350 05	167 70	350 05	52	
		1,711 72	1 80		207 32	1,920 84	53	
	474 09					474 09	54	
	994 20	8,177 05	2,043 32	4,798 34		16,012 91	55	
	200 19	21 12		79 63		300 94	56	
16,833 52	16,341 43	156,882 90	129,014 56	37,577 67	31,188 28	387,838 36	57	
		2,896 35	1,732 91	26 63	444 42	5,100 33	58	
	141 43	26,956 11	26,065 58	15,547 76	103 08	71,711 80	59	
		4,900 34	735 35	405 55	207 42	6,248 66	60	
		12,947 58	3,079 18	11 53	464 44	16,500 73	61	
	943 31	89,875 52	46,477 16	1,141 67	8,622 14	147,059 80	62	
	1,714 43	9,618 20	6,367 24	474 82		18,174 69	63	
		5,186 21	4,158 51		7 87	9,827 35	64	
	154 46	519 01	550 46	130 49		1,412 93	65	
25,892 83	56,385 18	781,736 48	575,391 48	126,589 29	80,615 76	1,646,611 02		

TABLE 4.—Summary of Operating Expenses

No.	Name of Railway.	Transportation—Operation			
		Wages.	Fuel for Power.	Water for Power.	Lubricants and Waste.
		\$    cts.	\$    cts.	\$    cts.	\$    cts.
1	Berlin and Waterloo.....				
2	Berlin and Northern.....				
3	Berlin, Waterloo, Wellesley and Lake Huron.....	2,166 43	1,545 00		362 50
4	Brandon Municipal.....				
5	Brantford and Hamilton.....	4,154 12			
6	Brantford Municipal.....				
7	British Columbia.....	4,670 57		7,829 15	
8	Calais Street.....	1,576 43	1,257 96		
9	Calgary.....				
10	Canadian Resources Development.....				
11	Cape Breton.....				
12	Chatham, Wallaceburg and Lake Erie.....	8 40			
13	Cornwall.....	1,500 00	905 07	120 00	
14	Edmonton Radial.....				
15	Fort William.....	1,465 24			37 64
16	Guelph Radial.....				
17	Halifax Tramways.....	6,171 40	20,297 60	896 40	516 00
18	Hamilton and Dundas.....				
19	Hamilton, Grimsby and Beamsville.....	4,171 50			
20	Hamilton Street.....				
21	Hamilton Radial.....				
22	Hull.....				
23	International Transit Co.....				
24	Kingston, Portsmouth and Cataraqui.....				
25	Lethbridge Municipal.....				
26	Levis County.....	901 00			37 14
27	London Street.....				
28	London and Lake Erie.....				
29	London and Port Stanley.....				
30	Lake Erie and Northern.....				362 81
31	Moncton Tramways.....				
32	Montreal Tramways.....				
33	Montreal and Southern Counties.....	7,157 93			
34	Moose Jaw.....	5,062 78	9,607 89	159 51	1,024 06
35	Nelson.....	485 25			
36	Niagara Falls, Park and River.....	6,437 92			22 36
37	Niagara, St. Catharines and Toronto.....	10,190 92			
38	Niagara, Welland and Lake Erie.....				
39	Nipissing Central.....	2,204 80			
40	Oshawa.....	1,824 19			
41	Ottawa.....	34,097 34	144 84	3,141 84	95 82
42	Peterborough Radial.....				
43	Port Arthur.....				
44	Pictou County.....				
45	Quebec Ry., Lt. and Power Co. (Citadel).....				
46	“ “ “ (Montmorency).....	1,321 27			
47	Regina Municipal.....				
48	Sandwich, Windsor and Amherstburg.....	6,680 14	3,639 29		642 37
49	Sarnia.....				
50	Sherbrooke.....				
51	Sudbury, Copper Cliff Suburban.....	525 00			
52	Shawinigan Falls.....				
53	St. Thomas.....				
54	Suburban Rapid Transit.....	2,765 80			
55	Saskatoon.....				
56	Schomberg and Aurora Railway.....	1,065 48	1,740 63		
57	Toronto.....	31,974 28	5,982 26	79 46	139 82
58	Toronto Suburban.....	1,572 63			
59	Toronto and York Radial.....	16,544 67	7,332 19		310 09
60	Three Rivers Traction Co.....				
61	Toronto Civic Railway.....				
62	Winnipeg.....				
63	Windsor, Essex and Lake Shore.....	4,049 50	13,396 87		
64	Winnipeg, Selkirk and Lake Winnipeg.....	5,132 27			
65	Yarmouth.....	3,596 41	20 96		36 41
	Total.....	169,473 67	65,870 56	12,226 36	3,587 02

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for the year ending June 30, 1917—Continued.

Power Plant.			Transportation—Operation of Cars.						No.
Miscellaneous Supplies and Expenses.	Hired Power.	Total Operation Power Plant.	Superintendence.	Wages of Conductors.	Wages of Motormen.	Wages of Miscellaneous Car Service.	Wages of Car House Employees.		
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
	6,063 48	6,063 48	1,400 00	6,379 58	6,379 59			1	
	1,972 08	1,972 08		1,011 95	1,011 95			2	
	20,560 80	24,634 73	2,280 00	11,881 30	11,885 50	8,008 25	7,783 23	3	
	10,464 60	10,464 60		5,870 27	5,870 27		3,672 04	4	
	13,405 72	17,559 84	1,170 28	5,894 73	5,894 72	4,655 15	2,418 89	5	
	16,344 64	16,344 64		13,296 40	13,296 40		3,877 13	6	
50,021 43	624,922 09	687,443 24	81,818 39	416,199 52	416,199 51	59,761 32	75,186 25	7	
528 03	7,500 00	10,862 42		4,480 40	4,489 60		2,434 80	8	
	89,128 59	89,128 59	2,765 95	85,657 03	85,657 01		5,769 05	9	
	300 00	300 00		161 78	161 77			10	
	23,648 52	23,648 52	3,509 63	20,407 47	20,407 47	2,782 51	4,341 34	11	
	14,201 58	14,209 98	854 93	8,199 90	8,199 91	5,587 18	2,002 22	12	
61 80		2,586 87		5,593 49	5,593 49			13	
	97,460 10	97,460 10	7,552 98	74,372 79	74,372 80	5,612 18	9,596 12	14	
44 69	15,258 31	16,805 88	1,412 00	18,588 71	16,851 68		5,854 53	15	
	7,845 60	7,845 60	320 00	6,351 14	6,351 14			16	
4,597 00		32,478 40	750 00	42,371 93	42,371 92	5,544 71	9,040 25	17	
	7,546 97	7,546 97	578 40	6,402 05	6,402 05	16 85	167 82	18	
	12,654 51	16,826 01	1,121 13	8,656 19	8,656 19	7,909 74	955 19	19	
	69,308 83	69,308 83	15,166 51	85,913 25	85,913 24		6,947 05	20	
	20,045 07	20,045 07	2,607 48	13,705 90	13,705 91	2,899 15	1,225 30	21	
	16,784 47	16,784 47		22,113 38	22,113 38			22	
	10,999 98	10,999 98	781 50	9,325 46	8,911 70		2,591 44	23	
	4,312 90	4,312 90		5,834 75	5,561 54	5,425 82		24	
	14,697 35	14,697 35	444 00	5,170 10	5,170 11			25	
	10,976 36	11,914 50	1,440 00	11,813 66	12,111 92		3,060 99	26	
	36,884 41	36,884 41	7,399 54	60,954 45	61,510 74	6,230 50	6,992 92	27	
	13,389 61	13,389 61	1,905 40	7,793 59	7,793 59			28	
	40,295 50	40,295 50	6,594 04	9,912 04	19,149 19		5,410 28	29	
6,207 32	25,214 85	31,784 98	1,336 66	6,328 55	6,424 16	1,794 34	1,281 06	30	
	3,915 00	3,915 00	600 00	2,319 85	2,319 75	570 85		31	
								32	
898 31	33,999 80	42,056 04	9,412 15	18,600 82	18,600 82			33	
1,129 74		16,983 98	476 00	18,541 37	18,541 37	2,936 36	3,089 45	34	
		485 25	1,500 00	3,151 25	3,381 45		360 10	35	
173 86	75 00	6,709 14	4,308 11	10,331 83	10,365 07	178 64	3,258 45	36	
	36,723 86	46,914 78	16,721 67	58,714 27	58,714 27	31,947 96	9,229 98	37	
	1,693 49	1,693 49	150 00	3,016 38	2,915 62		186 53	38	
118 29	14,673 75	16,996 84	1,496 02	10,393 48	10,393 49	63 90	2,188 18	39	
	7,799 46	9,623 65	2,033 70	7,801 67	7,801 67	9,000 00	3,950 00	40	
790 15	22,588 66	60,858 65		170,924 40	170,924 40	5,848 81	19,399 57	41	
	3,000 00	3,000 00	18 00	9,959 09	9,733 80	1,308 55		42	
101 05	19,999 92	20,100 97	2,865 31	16,233 76	16,243 54	3,466 84		43	
								44	
	37,469 38	37,469 38	12,347 23	73,081 52	73,081 53	1,604 06	15,970 53	45	
	41,250 04	42,571 31	1,355 70	16,789 38	14,667 01	18,967 68	791 61	46	
	48,307 13	48,307 13	3,139 47	39,440 62	39,928 71	2,242 73	7,110 49	47	
	39,486 33	50,808 13	1,620 00	42,740 87	42,740 86		9,705 99	48	
	9,344 70	9,344 70		6,641 77	6,641 77		3,081 34	49	
	6,000 00	6,000 00	890 47	7,274 37	7,303 33	353 84	3,690 30	50	
	1,819 40	2,344 40	997 00	1,545 30	1,514 15		502 55	51	
	3,113 10	3,113 10						52	
	4,243 87	4,243 87		7,696 23	7,696 23			53	
303 10	27,554 24	30,623 14	1,377 37	18,927 57	18,273 07	1,193 25		54	
	29,717 54	29,717 54	4,432 89	28,493 94	28,493 93			55	
30 74	7,800 00	4,636 85	120 00	1,586 15	1,586 14	2,446 67		56	
430 57	733,235 14	771,841 53	202,894 09	649,827 89	639,150 08			57	
1,311 72	14,667 96	17,552 31	2,132 50	15,925 52	14,865 43	1,380 65	5,820 60	58	
216 72	84,000 00	108,403 67	14,312 59	35,915 78	35,915 78	4,695 52	19,496 46	59	
	8,898 17	8,898 17	319 00	5,038 16	5,038 16			60	
	57,780 27	57,780 27	8,176 47	45,267 78	45,122 48	2,927 07	9,716 85	61	
702 41	142,511 77	143,214 18	31,714 58	377,364 45	382,009 05	6,990 90	29,488 76	62	
1,311 23		18,764 60	1,109 90	7,355 78	7,355 78	16,074 78		63	
408 27	23,653 06	29,193 60	1,809 25	8,812 98	8,678 38	2,330 16	2,299 05	64	
390 71		4,044 49		1,972 32	1,972 31			65	
69,784 14	2,691,867 96	3,012,809 71	471,538 28	2,702,328 31	2,700,387 88	233,548 12	309,944 69		

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TABLE 4.—Summary of Operating Expenses

No.	Name of Railway.	Transportation—Operation			
		Car Service Supplies.	Miscellaneous Car Service Expenses.	Hired Equipment.	Cleaning and Sanding Track.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Berlin and Waterloo.....		444 40		
2	Berlin and Northern.....		99 91		
3	Berlin, Waterloo, Wellesley and Lake Huron.....		16,901 00		
4	Brandon Municipal.....	794 95	1,765 14		517 71
5	Brantford and Hamilton.....	2,135 13	2,754 85	1,349 65	
6	Brantford Municipal.....	8,362 30			
7	British Columbia.....	13,105 52	79,801 22	18,800 84	8,931 21
8	Calais Street.....		77 63		
9	Calgary.....	15,851 03	1,797 30		6,305 49
10	Canadian Resources Development.....		25 17		
11	Cape Breton.....	4,374 53			652 03
12	Chatham, Wallaceburg and Lake Erie.....		3,994 12	11,568 69	2 95
13	Cornwall.....				1,345 33
14	Edmonton Radial.....		17,239 83		5,763 99
15	Fort William.....	2,361 11	1,389 20		
16	Guelph Radial.....		2,733 81		
17	Halifax Tramways.....	1,548 58	9,627 95		11,613 47
18	Hamilton and Dundas.....	1,179 81	753 51	6,356 55	
19	Hamilton, Grimsby and Beamsville.....	2,296 04	1,888 58	9,315 80	
20	Hamilton Street.....	12,488 34	9,354 15	5,065 68	
21	Hamilton Radial.....	2,671 20	1,882 89	20,486 65	
22	Hull.....	1,423 13	1,080 00		
23	International Transit Co.....		1,428 26		
24	Kingston, Portsmouth and Cataraqui.....				
25	Lethbridge Municipal.....	262 53			1,427 92
26	Levis County.....	911 36	3,051 88		449 24
27	London Street.....		1,891 09		163 89
28	London and Lake Erie.....				
29	London and Port Stanley.....		1,164 25	20,638 93	
30	Lake Erie and Northern.....			409 39	
31	Moncton Tramways.....	405 04	1,530 41		
32	Montreal Tramways.....				
33	Montreal and Southern Counties.....	5,693 61	23,558 53	1,647 15	
34	Moose Jaw.....		159 29		
35	Nelson.....	116 83			
36	Niagara Falls, Park and River.....		832 75		470 79
37	Niagara, St. Catharines and Toronto.....		23,559 19	47,152 40	
38	Niagara, Welland and Lake Erie.....	117 74			
39	Nipissing Central.....	2,052 78	855 68	3,160 95	149 72
40	Oshawa.....		6,748 71	16,036 57	
41	Ottawa.....		36,991 25		
42	Peterborough Radial.....	896 25	324 56		594 17
43	Port Arthur.....	1,284 87	14 37		
44	Pietou County.....				
45	Quebec Ry., Lt. and Power Co. (Citadel).....		13,995 86		3,000 00
46	“ “ (Montmorency).....		7,826 60		
47	Regina Municipal.....	6,730 39	386 53		2,313 44
48	Sandwich, Windsor and Amherstburg.....				
49	Sarnia.....		573 50		
50	Sherbrooke.....		111 93		75 00
51	Sudbury, Copper Cliff Suburban.....	341 27	99 35		
52	Shawinigan Falls.....		21,866 77		
53	St. Thomas.....				
54	Suburban Rapid Transit.....	99 34	521 96	1,800 00	539 72
55	Saskatoon.....		10,970 62		
56	Schomberg and Aurora Railway.....	321 38		548 40	2,191 52
57	Toronto.....		241,693 67	5,670 91	5,694 53
58	Toronto Suburban.....	2,155 70	534 38		1,642 09
59	Toronto and York Radial.....		12,692 21	1,275 42	6,747 27
60	Three Rivers Traction Co.....	608 44	561 30		1,119 29
61	Toronto Civic Railway.....	6,356 79	414 75		992 70
62	Winnipeg.....	8,494 52	79,145 18		10,869 77
63	Windsor, Essex and Lake Shore.....		540 82		
64	Winnipeg, Selkirk and Lake Winnipeg.....		408 93		
65	Yarmouth.....		410 82		
	Total.....	105,440 51	648,476 06	171,283 98	73,573 24



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for the year ending June 30, 1917—Continued.

of Cars—Continued.		General.						No.
Snow and Ice Removal.	Total Operation of Cars.	Salaries, General Officers.	Salaries, Clerks.	Printing and Stationery.	Office Expenses.	Store Expenses.	Stable Expenses.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
158 58	14,762 15	1,000 08	958 48	304 91	308 19			1
133 25	2,257 06	115 00	1,128 90		65 00			2
2,229 49	60,968 77	5,798 80	19,780 65	1,012 30	1,302 50			3
591 87	19,082 25	1,393 57		10 15				4
890 74	27,164 14	2,120 48	6,873 24	613 36			5,553 28	5
913 85	39,746 08		4,155 36		957 43	519 41		6
8,444 94	1,178,248 72	20,324 57	64,833 85	5,641 47	17,450 67	5,500 00	3,876 23	7
	11,482 43			5 50				8
1,082 10	204,884 96	6,372 60	2,805 00	906 05	892 32	1,191 57		9
	348 72							10
1,842 22	58,317 20	6,363 12	6,804 81	1,046 50	1,424 52	1,033 37	336 86	11
976 05	41,385 95	3,700 05	2,809 30	764 81	819 42			12
	13,323 51		1,442 79	23 75				13
1,579 50	196,090 19	4,218 65	5,844 75	353 53	832 23	1,621 47		14
1,891 08	48,348 31	3,096 50	1,087 50	432 54	58 65	265 99		15
	15,756 09		1,247 36	143 28		250 02		16
10,675 18	133,543 99	9,744 00	1,372 80		1,834 40	937 20	1,942 80	17
338 21	22,195 25	1,022 81	3,152 51	178 76			48 00	18
973 45	41,772 31	1,975 93	6,998 83	685 81			1,109 72	19
2,909 99	223,758 21	9,447 36	17,663 79	1,174 49				20
1,666 99	60,851 47	2,543 61	7,515 30	537 21			799 05	21
7,766 67	54,496 56	3,263 98	3,150 18	831 32	974 56			22
447 18	23,485 54	617 80	804 71	155 72		19 10		23
498 60	17,320 71	2,929 50		98 25	796 09			24
	12,474 66		1,156 50	114 07	22 73	9 72		25
6,352 94	39,191 99	8,249 85	1,352 96	250 34	220 36		631 33	26
1,593 65	146,736 78	5,916 65	2,915 09	210 02	1,112 99	1,567 15	417 52	27
	17,492 58	2,960 00	6,381 10	1,063 98	370 10			28
	62,868 73	2,491 41	6,426 95	4,024 42	2,212 70	1,414 84		29
2,936 24	20,510 40	3,536 14	12,969 16		230 50			30
	7,745 90						2 25	31
	77,513 08		14,998 56	3,230 28	2,149 68	1,435 36		32
894 50	44,638 34	3,000 00	2,687 89	905 03	458 16		125 88	33
	8,509 63			152 09	60 00			34
1,828 88	31,574 52	585 28	518 46	190 48	152 99	154 35	198 00	35
7,605 21	253,644 95	10,604 74	18,014 05	5,940 60	2,698 37			36
148 81	6,535 08		639 00	35 75				37
2,009 35	32,763 55	1,048 84	2,131 31	762 23	150 11			38
	53,372 32	2,255 00	950 00	195 96	1,879 91		653 64	39
29,835 47	433,923 90	22,874 36	5,085 32	1,279 92	957 72	1,841 25	1,208 63	40
355 10	23,189 52	1,133 07	4,852 77	328 92	1,205 40	202 55		41
569 62	40,678 31	4,256 49		450 14	1,199 97	262 17		42
								43
27,283 12	220,363 85	12,303 48	6,151 74	2,080 28	287 51	2,607 14	908 34	44
5,111 15	65,509 13	5,244 88	8,545 10	3,220 67	697 45			45
1,479 61	102,771 99	2,504 00	5,073 78	166 43	53 07	1,573 38	693 11	46
	96,807 72	4,800 00	6,000 00	2,334 51	1,320 00			47
	16,938 38	1,819 00	1,872 00	397 42	280 69		1,887 65	48
2,472 41	22,171 65		2,083 05	422 09	583 13		315 24	49
	4,999 62	1,050 00	150 00	99 30				50
	21,866 77	1,072 57		149 03	21 84			51
	15,392 46	960 00	240 00	28 80	6 00			52
836 23	43,568 51	699 90	343 81	123 17				53
	72,391 38			493 79		61 36		54
805 98	9,606 24		200 00	4 00				55
6,825 93	1,751,757 09	45,760 28	72,605 41	5,774 52		13,372 63	5,659 82	56
1,458 03	45,914 90	4,157 62	2,562 50	415 46	556 01	187 17	429 90	57
5,112 29	136,163 32	7,800 00	9,372 24	1,197 65	3,388 68	2,841 10		58
4,371 89	17,056 24	1,392 04	1,927 70	504 58	283 33	2 50	696 79	59
254 85	119,229 74	1,179 64	8,015 80	3,047 65		2,488 50	1,377 92	60
8,240 02	934,317 23	28,294 58	21,221 62	3,460 95	7,659 35	3,309 04	7,472 74	61
	32,437 06	3,531 35	2,755 00	657 16	401 57	494 50		62
477 08	24,815 83	3,000 00	7,800 10	74 48				63
	4,355 45	1,361 60	556 68	133 24	563 99		255 00	64
								65
164,868 30	17,581,389 37	281,891 18	398,985 76	58,839 12	58,900 29	44,962 84	36,599 70	

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TABLE 4.—Summary of Operating Expenses

No.	Name of Railway.	General—					
		Advertising and Attractions.		Miscellaneous.		Damages.	
		\$	cts.	\$	cts.	\$	cts.
1	Berlin and Waterloo.....	135	50	250	00		
2	Berlin and Northern.....			314	38		
3	Berlin, Waterloo, Wellesley and Lake Huron.....	75	00	4,303	36	70	00
4	Brandon Municipal.....			52	28	4	00
5	Brantford and Hamilton.....	56	57	1,184	41	3,556	34
6	Brantford Municipal.....	13	50	272	76	564	40
7	British Columbia.....	6,795	53	29,340	48	43,732	35
8	Calais Street.....			10	00	3,025	05
9	Calgary.....	224	95	6,774	81	11,528	32
10	Canadian Resources Development.....						
11	Cape Breton.....	144	28	4,114	65	6,121	90
12	Chatham, Wallaceburg and Lake Erie.....	329	39	498	41	2,689	82
13	Cornwall.....	2,248	07	543	16	89	11
14	Edmonton Radial.....	3,610	61	2,165	91	15,549	35
15	Fort William.....					14	09
16	Guelph Radial.....			922	52	326	00
17	Halifax Tramways.....	25	67	1,849	60		
18	Hamilton and Dundas.....	29	55	467	54	1,621	09
19	Hamilton, Grimsby and Beamsville.....	53	10	1,136	24	3,770	28
20	Hamilton Street.....	195	70	2,107	58	22,104	82
21	Hamilton Radial.....	64	90	1,333	58	3,860	71
22	Hull.....	98	89	4,933	08	3,000	00
23	International Transit Co.....			29,902	79		
24	Kingston, Portsmouth and Cataraqui.....	248	65	1,397	67		
25	Lethbridge Municipal.....	1,184	81	868	97	19	37
26	Levis County.....	131	23	2,456	15	729	38
27	London Street.....	472	65	3,404	83	14,844	45
28	London and Lake Erie.....	570	02	3,763	70	302	14
29	London and Port Stanley.....	4,208	92	5,562	48	1,351	31
30	Lake Erie and Northern.....			2,324	23	3,212	14
31	Moncton Tramways.....			120	00		
32	Montreal Tramways.....						
33	Montreal and Southern Counties.....	2,795	89	448	38	9,270	47
34	Moose Jaw.....	18	45	135	75	90	75
35	Nelson.....						
36	Niagara Falls, Park and River.....	3,974	87	3,663	15	1,764	30
37	Niagara, St. Catharines and Toronto.....	6,562	46	13,783	81	24,971	05
38	Niagara, Welland and Lake Erie.....			738	68	7	50
39	Nipissing Central.....	304	80	77	85	577	79
40	Oshawa.....					11	00
41	Ottawa.....	1,504	88	19,377	79	10,679	47
42	Peterborough Radial.....	13	75	609	89	123	76
43	Port Arthur.....	8	95	506	01	10	20
44	Pietou County.....						
45	Quebec Ry., Light and Power Co. (Citadel)			5,427	14	2,249	29
46	“ “ “ (Montmorency).....	2,120	72	9,186	38	112	33
47	Regina Municipal.....	1,023	04	186	76	799	75
48	Sandwich, Windsor and Amherstburg.....	225	25	4,218	46	6,785	01
49	Sarnia.....	55	25	7,432	82	125	00
50	Sherbrooke.....			9,366	03		
51	Sudbury, Copper Cliff Suburban.....	49	60	75	66		
52	Shawinigan Falls.....			1,155	47		
53	St. Thomas.....			750	63		
54	Suburban Rapid Transit.....			264	05	503	00
55	Saskatoon.....			5,195	61	439	50
56	Schomberg and Aurora Railway.....			108	68		
57	Toronto.....	11,857	32	54,229	98	89,445	08
58	Toronto Suburban.....	481	41	2,002	90	184	45
59	Toronto and York Radial.....	3,436	65	41,177	43	12,000	00
60	Three Rivers Traction Co.....	43	20	1,570	22	177	00
61	Toronto Civic Railway.....	21	56	64	13	279	91
62	Winnipeg.....	4,754	54	20,440	97	21,749	19
63	Windsor, Essex and Lake Shore.....	1,693	49	1,200	00		
64	Winnipeg, Selkirk and Lake Winnipeg.....			433	13	91	76
65	Yarmouth.....			1,284	03		
	Total.....	61,873	57	320,516	50	321,514	69

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for the year ending June 30, 1917—*Concluded.*

<i>Concluded.</i>						Grand Total.	No.
Legal Expenses.	Miscellaneous Legal Expenses.	Rent of Land and Buildings.	Rent of Track and Terminals.	Insurance.	Total. — General.	Operating Expenses.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
		550 62		2,518 52	6,025 70	39,489 99	1
				311 70	1,934 98	6,589 87	2
	73 25	174 60	2,470 44	5,080 00	40,140 90	151,043 01	3
				169 72	1,629 72	32,450 34	4
	514 74	640 00	8,837 07	795 85	30,745 34	114,937 93	5
				1,718 80	8,201 66	70,653 50	6
2,187 40	8,200 00		14,082 34	10,917 89	232,882 78	2,448,207 34	7
				773 80	3,814 35	34,138 87	8
	955 05	1,534 50		2,224 95	35,410 12	387,934 22	9
			357 42		416 96	1,128 60	10
	1,437 42			1,964 38	30,791 81	150,977 22	11
	268 39		119 45	1,534 44	13,533 48	89,628 92	12
	10 00			882 99	5,239 87	28,268 00	13
	17 15	240 00	1,567 89	4,892 94	40,637 33	391,276 45	14
				2,583 92	7,816 19	94,177 34	15
				1,381 66	4,270 84	36,756 49	16
8,526 41	2,650 00			1,060 00	29,742 88	249,230 00	17
	208 76		5,936 14		131 69	61,945 13	18
	3,777 92	9,982 99	446 00		843 52	30,780 34	19
	1,967 68	16,340 16			2,345 84	73,347 42	20
	1,662 37		12,485 14		453 80	31,255 67	21
		106 50		3,054 09	19,306 10	129,849 83	22
	508 63			2,922 35	35,037 60	76,261 02	23
4,138 65				610 89	10,219 70	38,865 92	24
	214 00			614 14	4,204 31	42,439 05	25
	66 05	599 35		4,516 81	19,203 81	100,769 82	26
600 00				2,250 51	33,711 86	301,937 37	27
			1,658 97	1,193 64	18,263 65	70,181 12	28
	315 09			5,961 65	33,969 77	207,356 08	29
		305 84	600 00	1,400 02	24,578 03	124,463 71	30
				60 00	182 25	16,873 73	31
	8 53	5,143 52	61,141 15	3,539 52	104,161 34	*4,601,771 84	32
4 75	64 28			2,284 07	9,775 01	274,236 12	33
				303 15	515 24	80,733 77	34
10 00	1,556 93	10,000 00		1,720 06	24,488 87	12,532 50	35
2,166 05				7,361 90	92,103 03	92,941 83	36
	88 00	120 00	100 00	892 43	2,621 36	547,174 59	37
30 90			732 87	436 12	6,252 82	12,521 82	38
			1,191 71	1,527 44	8,664 66	78,073 93	39
35 50				10,187 51	75,032 35	87,404 26	40
	0 70	159 65		3,575 66	12,206 12	696,528 23	41
				1,561 14	8,255 07	45,349 94	42
						91,986 85	43
	1,728 69			5,324 30	39,067 91	16,873 73	44
965 62	965 62			2,590 37	33,649 14	357,753 38	45
				3,821 54	15,894 86	186,126 91	46
	1,000 00			900 00	27,583 23	190,722 31	47
	419 65			851 16	15,140 64	229,339 34	48
2 00				2,365 47	15,137 01	50,739 49	49
		80 00		1,036 36	2,540 92	52,054 26	50
50 00			1,998 89	128 10	4,575 90	11,315 57	51
			1 00	899 23	2,885 66	38,855 94	52
	750 00		12 48		2,696 41	24,689 42	53
				2,244 47	8,434 73	84,509 91	54
	50 00			305 45	668 13	134,596 99	55
	15,986 30			48,694 62	363,385 96	21,210 85	56
	2,210 22	1,018 40		7,942 98	22,149 02	3,403,846 22	57
	918 18			2,931 57	85,063 50	104,406 02	58
	567 56	282 50		2,415 27	9,892 69	450,968 21	59
				2,034 86	18,509 97	43,904 38	60
1,414 75	8,142 67		9,745 72	18,495 64	156,161 76	216,516 72	61
				8,898 67	19,631 74	1,445,509 47	62
			501 00	2,604 82	14,505 29	104,508 77	63
	62 27			2,604 82	14,505 29	90,761 06	64
				172 37	4,389 18	14,607 29	65
20,132 03	57,366 10	47,278 03	123,985 68	213,306 30	2,046,151 79	20,098,634 35	

\*Not distributed. †Rent of Right of Way.

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TABLE 5.—Income Account for the

No.	Name of Railway.	Income.			
		Net Earnings from Operation.	Net Loss from Operation.	Miscellaneous Income.	Total Income from Operation.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	Berlin and Waterloo.....	16,183 63			16,183 63
2	Berlin and Northern.....	1,372 83			1,372 83
3	Berlin, Waterloo, Wellesley and Lake Huron.....	76,901 96		1,040 37	77,942 33
4	Brandon Municipal.....	4,873 01			4,873 01
5	Brantford and Hamilton.....	55,916 61			55,916 61
6	Brantford Municipal.....	31,445 38			31,445 38
7	British Columbia.....	252,525 80		1,093,009 31	1,345,535 11
8	Calais Street.....	8,272 73			8,272 73
9	Calgary Municipal.....	197,531 94		16,542 95	214,074 89
10	Canadian Resources Development.....		923 75		-923 75
11	Cape Breton.....	92,415 17		125,133 18	217,548 35
12	Chatham, Wallaceburg and Lake Erie.....	44,645 44			44,645 44
13	Cornwall.....	6,175 07		81 81	6,256 88
14	Edmonton Radial.....	105,841 06			105,841 06
15	Port William.....	23,275 37			23,275 37
16	Guelph Radial.....	10,116 89		302 83	10,419 72
17	Halifax Tramways.....	149,875 59		224,651 72	374,527 31
18	Hamilton and Dundas.....	12,682 95			12,682 95
19	Hamilton, Grimsby and Beamsville.....	3,013 54			3,013 54
20	Hamilton Street.....	289,457 45			289,457 45
21	Hamilton Radial.....	30,251 43			30,251 43
22	Hull.....	67,935 42		35,190 63	103,126 05
23	International Transit Co.....	64,364 82		914 30	65,279 12
24	Kingston, Portsmouth and Catararqui.....	13,564 05			13,564 05
25	Lethbridge Municipal.....	6,101 23			6,101 23
26	Lewis County.....		5,700 14	2,665 03	-3,035 11
27	London Street.....	114,429 06			114,429 06
28	London and Lake Erie.....		9,664 21	48 97	-9,615 24
29	London and Port Stanley.....	109,329 13			109,329 13
30	Lake Erie and Northern.....	44,747 42		128 46	44,875 88
31	Moncton Tramways.....	9 63			9 63
32	Montreal Tramways.....	3,123,727 04			3,123,727 04
33	Montreal and Southern Counties.....		10,004 31	303 69	-9,700 62
34	Mooselaw.....	24,249 16			24,249 16
35	Nelson.....	1,559 67			1,559 67
36	Niagara Falls, Park and River.....	44,462 39		6,211 64	50,674 03
37	Niagara, St. Catharines and Toronto.....	209,415 44			209,415 44
38	Niagara, Welland and Lake Erie.....	19,489 56		27 78	19,517 34
39	Nipissing Central.....	20,813 47		371 80	21,185 27
40	Oshawa.....	58,432 14		1,346 55	59,778 69
41	Ottawa.....	498,202 89			498,202 89
42	Peterborough Radial.....	22,875 58			2,875 58
43	Port Arthur.....	22,623 06			22,623 06
44	Pictou County.....				
45	Quebec Ry., Lt. and Power Co. (Citadel)	203,200 44			203,200 44
46	" (Montmorency)	42,983 03			42,983 03
47	Regina Municipal.....	32,641 78			32,641 78
48	Sandwich, Windsor and Amherstburg.....	154,476 83		31,776 93	186,253 76
49	Sarnia.....	19,613 79			19,613 79
50	Sherbrooke.....	3,279 62		61,997 18	65,276 80
51	Sudbury, Copper Cliff Suburban.....	14,665 38			14,665 38
52	Shawinigan Falls.....	6,444 27			6,444 27
53	St. Thomas.....		7,307 56		-7,307 56
54	Suburban Rapid Transit.....		20,202 91	27,516 78	7,313 87
55	Saskatoon Municipal.....	50,664 12			50,664 12
56	Schomberg and Aurora Railway.....		4,123 37		-4,123 37
57	Toronto.....	2,677,758 62		90,000 00	2,767,758 62
58	Toronto Suburban.....	102,911 48		1,863 70	104,775 18
59	Toronto and York Radial.....	157,999 52			157,999 52
60	Three Rivers Traction Company.....	16,371 26			16,371 26
61	Toronto Civic Railway.....	32,989 20			32,989 20
62	Winnipeg.....	657,834 58		554,829 10	1,212,663 68
63	Windsor, Essex and Lake Shore.....	76,300 35			76,300 35
64	Winnipeg, Selkirk and Lake Winnipeg.....	41,159 27		16,205 55	57,364 82
65	Yarmouth.....	26,554 89		40 50	26,595 39
	Total.....	10,196,955 44	57,926 25	2,292,200 76	12,431,229 95

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year ending June 30, 1917—Concluded.

Deductions from Income.					Net		No.
Taxes.	Interest on Funded Debt.	Interest on Floating Debt.	All Other Deductions.	Total.	Income.	Loss.	
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
	7,832 10			7,832 10	8,351 53		1
200 79	170 00	2,258 92	91 65	2,721 36		1,348 53	2
5,087 21	17,040 00	606 15		22,733 36	55,208 97		3
	21,000 00	1,550 64		22,550 64		17,677 63	4
5,139 45	39,600 00	47,154 70		91,894 15		35,977 54	5
					31,445 38		6
140,335 82	643,940 06		137,883 87	922,159 75	423,375 36		7
790 93	5,000 00			5,790 93	2,481 80		8
2,955 82	110,182 85			133,138 67	100,936 22		9
						923 75	10
9,061 76	54,790 83	140 30	48,850 00	112,842 89	104,705 46		11
1,892 52	34,725 00	2,736 13		39,353 65	5,291 79		12
980 38		188 13		1,168 51	5,088 37		13
	139,206 24	88,690 99	26,094 78	253,992 01		148,150 95	14
	53,190 00		3,000 00	56,190 00		32,914 63	15
1,753 54				1,753 54	8,666 18		16
36,691 30		20,889 59	4,267 71	61,848 60	312,678 71		17
1,265 01	5,000 00			6,265 01	6,417 94		18
4,579 59	7,500 00	2,519 25		14,598 84		11,585 30	19
75,385 07	19,329 85	728 25		95,443 20	194,014 25		20
6,235 54	8,000 00	44,594 35		58,829 89		28,578 46	21
1,469 24		75,000 00	2,263 05	78,732 29	24,393 76		22
1,378 37	9,000 00	316 82		10,695 19	54,583 93		23
	10,075 00			10,075 00	3,489 05		24
5,604 24	21,427 39			27,031 63		20,930 40	25
713 97	7,555 00	9,274 91	5,000 00	22,543 88		25,578 99	26
7,241 91	31,732 89	1,205 70	221 00	40,401 50	74,027 56		27
						9,615 24	28
3,166 25	48,667 28		20,000 00	71,833 53	37,495 60		29
4,121 79	1,275 00			5,396 79	39,479 09		30
					9 63		31
98,400 00		1,658,542 38	491,430 95	2,248,373 33	875,353 71		32
3,475 00		68,224 04		71,699 04		81,399 66	33
	1,413 08	3,253 83	1,723 02	6,389 93	17,859 23		34
	3,353 00			3,353 00		1,795 33	35
5,518 11	30,000 00			35,518 11	15,153 92		36
10,792 05	54,900 00	6,028 95		71,721 00	137,694 44		37
654 63	2,600 00			3,254 63	16,262 71		38
1,019 18			10,775 02	11,794 20	9,393 07		39
2,796 05	50 00			2,846 05	56,932 64		40
58,453 60	17,000 00	28,601 63		104,060 23	394,142 66		41
65 98	9,884 40			9,950 38	12,925 20		42
	69,097 56			69,097 56		46,474 50	43
							44
					203,200 44		45
					42,983 03		46
	80,500 00		11,327 08	91,827 08		59,185 30	47
17,400 00	31,500 00			48,900 00	137,353 76		48
1,080 97	4,484 25			5,565 22	14,048 57		49
566 56	57,427 66	2,171 47	3,986 99	64,152 68	1,124 12		50
	4,500 00		5,860 62	10,360 62	4,304 76		51
	7,500 00	1,279 17		8,779 17		2,334 90	52
						7,307 56	53
3,553 74	25,000 00	6,616 42	140 62	35,310 78		27,996 91	54
	35,930 15	3,138 55		39,068 70	11,595 42		55
103 85		28,643 88		28,747 73		32,871 10	56
1,146,848 92	235,046 96			1,381,895 88	1,385,862 74		57
2,628 39	29,999 72	6,255 83	19,661 07	58,545 01	46,230 17		58
13,466 86	82,000 00	51,599 74		147,066 60	10,932 92		59
540 93	14,926 26	259 16		15,726 35	644 91		60
	87,239 26		3,005 76	90,245 02		57,255 82	61
160,109 61	250,000 00	177,588 32	27,486 33	615,184 26	597,479 42		62
2,218 00	37,500 00	19,332 56		59,050 56	17,249 79		63
5,178 72	32,660 00	4,059 96	1,592 24	43,490 92	13,873 90		64
919 26	11,275 00	176 20	205 14	12,575 60	14,019 79		65
1,851,845 91	2,512,028 79	2,363,626 95	824,866 90	7,552,368 55	5,528,763 90	649,902 50	

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TABLE 5.—Income Account for the year ending June 30, 1917.

Name of Railway.	Deductions from Net Income.				
	Reserves and Special Charges.	Dividends.	Total Deductions.	Surplus for Year.	Deficit for Year.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Berlin and Waterloo.....				8,351 53	
Berlin and Northern.....					1,348 53
Berlin, Waterloo, Wellesley and Lake Huron.....		12,500 00	12,500 00	42,708 97	
Brandon Municipal.....	5,968 08		5,968 08		23,645 71
Brantford and Hamilton.....					35,978 54
Brantford Municipal.....				31,445 38	
British Columbia.....	812,917 25	349,200 00	1,162,117 25		738,741 89
Calais Street.....	2,000 00		2,000 00	481 80	
Calgary.....	79,142 22		79,142 22	21,794 00	
Canadian Resources Development.....					923 75
Cape Breton.....	10,960 00	47,790 00	58,750 00	45,955 46	
Chatham, Wallaceburg and Lake Erie.....				5,291 79	
Cornwall.....				5,088 37	
Edmonton Radial.....					148,150 95
Fort William.....	31,793 60		31,793 60		64,708 23
Guelph Radial.....	8,000 00	7,680 07	15,680 07		7,013 89
Halifax Tramways.....	33,453 22	112,000 00	145,453 22	167,225 49	
Hamilton and Dundas.....		10,000 00	10,000 00		3,582 06
Hamilton, Grimsby and Beausville.....					11,585 30
Hamilton Street.....		113,225 00	113,225 00	80,789 25	
Hamilton Radial.....					28,578 46
Hull.....				24,393 76	
International Transit Co.....				54,583 93	
Kingston, Portsmouth and Cataraqui.....				3,489 05	
Lethbridge Municipal.....	9,963 72		9,963 72		30,894 12
Lewis County.....					25,578 99
London Street.....		34,360 80	34,360 80	39,666 76	
London and Lake Erie.....					9,615 24
London and Port Stanley.....	10,914 12		10,914 12	26,581 48	
Lake Erie and Northern.....				39,479 09	
Moncton Tramways.....				9 63	
Montreal Tramways.....		337,880 50	337,880 50	537,473 21	
Montreal and Southern Counties.....					81,399 66
Moosajaw.....				17,859 23	
Nelson.....					1,795 33
Niagara Falls, Park and River.....				15,155 92	
Niagara, St. Catharines and Toronto.....				137,694 44	
Niagara, Welland and Lake Erie.....	3,000 00		3,000 00	13,262 71	
Nipissing Central.....				9,393 07	
Oshawa.....	8,996 57		8,996 57	47,936 07	
Ottawa.....	65,000 00	281,553 00	346,553 00	47,589 66	
Peterborough Radial.....	4,447 96		4,447 96	8,477 24	
Port Arthur.....					46,474 50
Pictou County.....					
Quebec Ry., Lt. and Power Co. (Citadel) " " (Montmorency)				203,200 44	
				42,983 03	
Regina Municipal.....					59,185 30
Sandwich, Windsor and Amherstburg.....				137,353 76	
Sarnia.....		5,400 00	5,400 00	8,648 57	
Sherbrooke.....				1,124 12	
Sudbury, Copper Cliff Suburban.....				4,304 76	
Shawinigan Falls.....					2,334 90
St. Thomas.....					7,307 56
Suburban Rapid Transit.....					27,996 91
Saskatoon.....	18,174 29		18,174 29		6,578 87
Schomberg and Aurora Railway.....					32,871 10
Toronto.....	30,000 00	960,000 00	990,000 00	395,862 74	
Toronto Suburban.....	560 00		560 00	45,670 17	
Toronto and York Radial.....				10,932 92	
Three Rivers Traction Co.....				644 91	
Toronto Civic Railway.....	60,737 03		60,737 03		117,992 85
Winnipeg.....	77,862 16	197,097 24	274,959 40	322,520 02	
Windsor, Essex and Lake Shore.....				17,249 79	
Winnipeg, Selkirk and Lake Winnipeg.....	11,764 00		11,764 00	2,109 90	
Yarmouth.....				14,019 79	
Total.....	1,285,654 22	2,468,686 61	3,754,340 83	2,638,802 21	1,514,281 64

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TABLE 6.—Summary of Equipment for the year ending June 30, 1917—Continued.

Name of Railway.	Passenger Cars.				Other Cars.							Total All Cars.	
	Closed.	Open.	Com- bina- tion.	Total.	Freight	Mails, Express and Bag- gage.	Com- bina- tion.	Work.	Snow Plough.	Sweeper	Miscel- lanc- ous.		Total.
Berlin & Waterloo.....	8	6		14				1		1		2	16
Berlin & Northern.....	3			3							7	7	10
Berlin, Waterloo, Wellesley & Lake Huron.....	9	4	2	15	3			2		2	3	12	27
Brantford Municipal.....	10	10		20						1		1	21
Brantford & Hamilton.....	6			6				6				6	12
Brantford Municipal.....	13	4		17	1			1		1		4	21
British Columbia.....	381	5		386	456	14	5	45	1	6	*21	548	934
Calais Street.....	4	4		8				1		1		2	10
Calgary.....	85	1		86	7			2		1	7	17	103
Canadian Resources Development.....	1			1				2				2	25
Cape Breton.....	22			22	3	1		1	3	1	22	24	31
Chatham, Wallaceburg & Lake Erie.....	6	2		8	20			1				21	29
Cornwall.....	7	3		10	2					1		3	13
Edmonton Radial.....			79	79				4		2	3	9	88
Fort William.....	26	1		27				1		1		2	29
Guelph Radial.....	8	4		12	1					1		4	16
Halifax Tramways.....	40	22		62				3		5	22	30	92
Hamilton & Dundas.....	1	2		3									3
Hamilton, Grimsby & Beamsville.....	8	2		10	4							4	14
Hamilton Street.....	92	19		111						4	1	5	116
Hamilton Radial.....	8			8	11					1		12	20
Hull.....	31	13		44	† 2	1		2	2	3	1	11	55
International Transit Co.....	11			11								2	13
Kingston, Portsmouth & Cataraqui.....	8		12	20				2		2		4	24
Lethbridge Municipal.....	10			10									10
Lewis County.....	15	9		24		1		2		3		8	32
London Street.....	50	13		63						2	3	7	70
London & Lake Erie.....	12			12		10		1				12	24
London & Port Stanley.....	15			15	4			2			3	11	26
Lake Erie & Northern.....	10			10		1	2	22	1	1	2	28	38
Moncton Tramways.....	4			4				1		1		2	6
Montreal Tramways.....													
Montreal & Southern Counties.....	24			24	1	2	4	2	2	2	1	14	38
Moosejaw.....	21			21				1		1		2	23
Nelson.....	2			2						1		1	3
Niagara Falls, Park & River.....	11	16		27			2					5	32

TABLE 6.—Summary of Equipment for the year ending June 30, 1917—Concluded.

Name of Railway.	Passenger Cars.				Other Cars.							Total All Cars.	
	Closed.	Open.	Com- bina- ton.	Total.	Freight	Mails, Express and Bag- gage.	Com- bina- ton.	Work.	Snow Plough.	Sweeper	Miscel- lanc- ous.		Total.
Niagara, St. Catharines & Toronto	41	14		55	38	1		16	3	1	12	71	126
Niagara, Wolland & Lake Erie	3			3					1			1	4
Nipissing Central	5			5			1	3				4	9
Ottawa	3	3	1	7		2		3		1	5	11	18
Peterborough Radial	127	40		167				4	4	12	2	22	189
Port Arthur	10	8		18				1	1	2		3	21
Pictou County	24	1		25		1			2			3	28
Quebec Ry. Light & Power Co. (Citadel)	62	34		96				1	4	9	7	21	117
Quebec Ry. Light & Power Co. (Montmorency)	15			15				1			2	2	17
Regina Municipal	34			34	29			1	1	2		33	67
Sandwich, Windsor & Amherstburg	35	22		57	4			12	3			19	76
Sarnia	10	9		19		1						1	13
Shelbrooke	10	9		19					1	1		2	21
Stadbury, Copper Cliff Suburban	3			3									3
Stawingian Falls													
St. Thomas	4	8	2	14				1	1			2	16
Suburban Rapid Transit													
Saskatoon	18			18				4		1	2	7	25
Schomberg & Aurora Railway													
Toronto	286	131	530	897				12	13	13	10	35	932
Toronto Suburban	15	3		18	1			2		2		6	24
Toronto & York Radial	50	4	2	56	10			12	4		1	37	93
Three Rivers Traction Co	9			9								2	11
Toronto Civic Railway	32			32						3		3	35
Winnipeg	307	25		332				7	1	8		17	349
Windsor, Essex & Lake Shore	11			11	19					1		3	34
Winnipeg, Selkirk & Lake Winnipeg	12			12	5			15		1		3	36
Yarmouth	3	3		6					1			1	7
Total	2,104	447	628	3,116	621	49	16	198	48	99	148	1,179	4,295

\*Including 17 locomotives.  
†Locomotives.



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TWELFTH REPORT  
OF THE  
BOARD OF RAILWAY COMMIS-  
SIONERS FOR CANADA

FOR THE  
YEAR ENDING MARCH 31

1917

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA  
J. DE LABROQUERIE TACHÉ  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY  
1918

**THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA.**

Sir H. L. DRAYTON, K.C., *Chief Commissioner.*

D'ARCY SCOTT, *Assistant Chief Commissioner.*

Hon. W. B. NANTEL, K.C., LL.D., *Deputy Chief Commissioner.*

S. J. MCLEAN, M.A., LL.B., Ph. D., *Commissioner.*

A. S. GOODEVE, *Commissioner.*

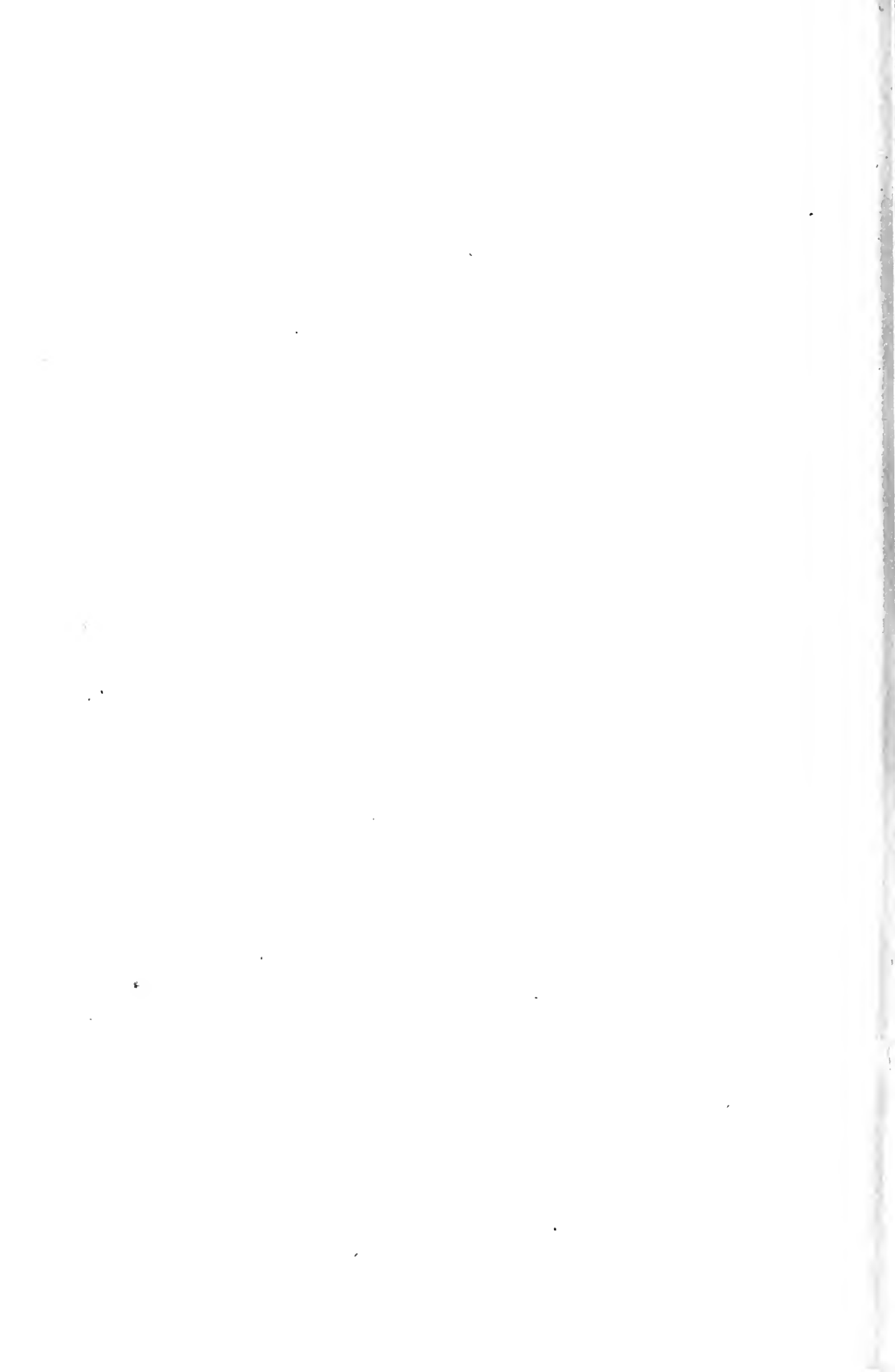
A. D. CARTWRIGHT,  
*Secretary.*

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# REPORT

OF THE

## BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

*To the Governor in Council:*

Pursuant to the provisions of section 62 of the Railway Act, as amended by section 12 of chapter 32, 8-9 Edward VII, the Board of Railway Commissioners for Canada has the honour to submit its Twelfth Report, for the year ending March 31, 1917.

Since the submission of the Board's last report there have been no further amendments to the Railway Act, but there is before Parliament for its approval a Bill to consolidate and amend the Railway Act, which it is expected will be dealt with during the present session of Parliament. The need of the consolidation of the Act has been felt for some time, and the passage of the Bill consolidating and amending the Act is a matter of much importance to the country at large.

### PUBLIC SITTINGS OF THE BOARD.

During the year covered by the period from April 1, 1916, to March 31, 1917, the Board held fifty-eight public sittings, at which 364 applications were heard. The number of public sittings held in the various provinces were as follows:—

In the province of Ontario	37
“ “ Quebec	4
“ “ Nova Scotia	1
“ “ Manitoba	3
“ “ Saskatchewan	4
“ “ Alberta	4
“ “ British Columbia	3
“ “ New Brunswick	2

The applications heard at the above sittings of the Board include a variety of matters falling within its jurisdiction under the Railway Act, from the complaint of a private individual to larger matters of general public interest affecting the community as a whole.

### FORMAL AND INFORMAL MATTERS.

The number of informal matters dealt with by the Board, as distinguished from matters heard at public sittings, constitutes a considerable percentage of the total applications and complaints dealt with by the Board, that is to say out of a total of 3,320 applications and complaints received and dealt with by the Board, 11 per cent were set down for normal hearing, and 89 per cent were disposed of without the necessity of a formal hearing. These informal complaints that are dealt with and settled

without the necessity of a hearing, in many instances entail a considerable amount of inquiry and consideration on the part of the Board's officers, and cover a wide range of subjects, such as, for example, a complaint of a more or less trivial matter to a matter of general public interest as affecting the community at large, involving the application of a general principle in regard to a railway rate.

RAILWAY GRADE CROSSING FUND.

In accordance with the provisions of section 7, of 8-9 Edward VII, chapter 32, entitled an Act to amend the Railway Act, provision was made that the sum of \$200,000 each year, for five consecutive years from the 1st day of April, 1909, was appropriated and set apart from the Consolidated Revenue Fund for the purpose of aiding in the providing by actual construction work of protective safety, and conveniences for the public in respect of highway crossings of the railway at rail level, in existence on the said 1st day of April, the said sums to be placed to the credit of a special account to be known as "The Railway Grade Crossing Fund," to be applied by the Board, subject to certain limitations set out in the amending Act, solely towards the cost (not including that of maintenance and operation) of actual construction work for the purpose specified.

In dealing with such crossings, the Board issued, between the 1st day of April, 1909, and March 31, 1917, 367 orders, providing protection at 408 crossings, as follows:—

By electric bells.....	226
" gates.....	91
" subways.....	49
" overhead bridges.....	20
" diversion of highways.....	18
" closing of streets.....	3
" removal of view obstructions.....	2
	<hr/>

It will be seen by comparing the total number of crossings protected with the Eleventh Annual Report of the Board that the increase for the year ending March 31, 1917, in the number of crossings protected, numbers 28, made up as follows:—

By electric bells.....	18
" gates.....	8
" diversion of highways.....	2
	<hr/>

In connection with the granting of aid to protective works under this fund, attention is again directed to the fact that the Board has found that the limitation imposed by the Act has prevented contributions being made in as large a degree as would seem to be proper in the public interest in connection with the larger schemes for elimination of grade crossings. Such works in the larger cities will run into amounts exceeding \$100,000, and occasionally as high as several million dollars, so that the limitation of \$5,000 (not to be applied to more than three crossings in any one municipality, or more than once to any one crossing), fixed by the Act, would be a mere fraction of the total amount involved.

GENERAL DECISIONS AND RULINGS OF THE BOARD.

Submitted herewith are some of the more important matters dealt with by the Board at its public sittings for the year ending March 31, 1917.



SESSIONAL PAPER No. 20c

## GENERAL ORDERS ISSUED BY THE BOARD.

The following is a brief statement of some of the matters dealt with under General Orders of the Board:—

The suspension of certain tariffs showing charges for salt and ice in refrigerator cars.

Provision in regard to the tariffs of the railway companies for the use of heated refrigerator cars and subdivision of territory west of Westfort and certain maximum tolls for boat in addition to the freight rates from or to the territory west of and including Montreal and Lachute be substituted for certain tariffs suspended and that the differences over the maximum tolls do not exceed from or to the territory south and east of Montreal and Lachute the differences expressed in the suspended tariffs.

Provision for the amendment of the Canadian Car Service Rules Nos. 1, 2, 6 and 15.

Provision for certain charges for demurrage and track storage to apply upon grain and lumber either in transit at Cartier, Sarnia, Capreol and North Bay, Ont., for a period from the 1st January, 1917, to April 30, 1917.

Provision that all railway companies subject to the Board's jurisdiction supply cars for the movement of coal as and when required, not only to points on the originating line of railway, but also to points on other lines of railway, and that the railway companies without sufficient equipment make the necessary changes in flat or livestock cars in order to provide for the existing emergency.

Provision that tariffs of freight rates from points in the United States to points in Canada include or be supplemented by a rule to the effect that the said rates unless specifically indicated as being impeditive be applied to certain points in Canada not enumerated in the said tariffs, and that the railway companies subject to the jurisdiction of the Board arrange accordingly.

Provision for the consolidation of the supplemental regulations regarding rules and regulations for the inspection and testing of locomotive boilers and their appurtenances and for an extension of time for the external inspection of locomotive boilers.

Approval of revised Supplement No. 10 to the Express Classification for Canada C.R.C. No. 3 relating to carload wagon service and pick-up and delivery service.

Provision that railway companies subject to the Board's jurisdiction be permitted to forward bituminous coal from the United States, billed for clearance of customs at the frontier, to its destination in Canada if the destination be a customs port or outport, and if not, then the customs port or outport nearest to but short of its destination, for customs clearance thereat, instead of at the frontier; the carriage from the frontier to the interior point of clearance to be in bond under customs manifest prepared by the railway company and signed by a customs officer.

Provision in regard to the allowance for grain doors supplied by shippers at and west of Port Arthur, Ont.

## EASTERN RATES CASE.

What is commonly referred to as the Eastern Rates Case was an application of the Canadian Freight Association on behalf of the railway companies operating in Canada east of Port Arthur, Ont., and subject to the jurisdiction of the Board, for increased tolls on their freight traffic generally.

The application as filed shows that the following grounds were in the first instance relied upon in its support:—

(a) It is in the interest of the country at large, as well as of the companies and their shareholders, that further revenues should be obtained from the carriage of freight traffic.

(b) That the rate of return in net operating income upon the property investment of the companies has seriously declined.

(c) That the principal cause of this decline is the steady and constant increases in operating expenses, due to matters of continuing character, such as wage increases, legislative requirements and the necessity of maintaining a higher standard of track, equipment and facilities generally.

(d) That the return upon money invested in railway facilities in the territory in respect of which increases in rates are asked is unreasonably low and inadequate.

(e) The effect of these factors is to seriously diminish the borrowing powers of the companies and compel the obtaining of necessary capital at much higher rates of interest, thereby increasing fixed charges which must be met out of the net earnings which have been decreased, and will in all likelihood be further decreased by the necessity of paying higher rates of interest on any moneys borrowed.

(f) That in consequence of the exceptional conditions at present existing, various money markets previously open to the companies are now closed, the result being to very materially limit the sources from which money may be obtained.

(g) That among other grounds the companies will urge as a reason for the proposed increases the fact that after a full hearing the Interstate Commerce Commission recently made an order increasing the rates in the Official Classification territory to the south, notwithstanding the fact that in the opinion of the applicants the conditions under which the companies were there operating were much more favourable than those which apply to the applicants.

The application was heard at sittings of the Board held at the following places and on the following dates:—

Ottawa, March 1, April 14, May 10, May 17, June 29 and 30, 1915.

Montreal, March 18, 1915.

Toronto, March 29 and 31, 1915.

Hamilton, April 23 and 24, 1915.

A large number of boards of trade and shipping associations appeared on the application.

On the 9th June, 1916, the Board issued its judgment, dealing fully with the financial position of the companies and the enhanced cost of conducting transportation, and permitting certain increases in the freight rates on various commodities treated separately and "in extenso" in the judgment.

#### NANAIMO BOARD OF TRADE V. CANADIAN PACIFIC RAILWAY COMPANY.

If a carrier does not choose to meet water competition the Board's whole right to interfere with a toll is confined to a case where the toll charged is unreasonable for the service rendered. Therefore, where a carrier changes the route of its car ferry it is not an unjust discrimination for it to charge a reasonable toll for the rail haul necessitated instead of the former terminal toll only.

Plain Company v. Canadian Pacific Railway Company, 9 Can. Ry. Cas., 223. Canadian Railway Companies v. Grand Trunk, Canadian Pacific and Canadian Northern Railway Companies, 12 Can. Ry. Cas., 350. Blind River Board of Trade v. Grand Trunk, Canadian Pacific Railway, Northern Navigation, and Dominion Transportation companies, 15 Can. Ry. Cas., 146, p. 156 followed.

The facts are fully set out in the judgments of Chief Commissioner Drayton and Commissioner McLean, March 16, 1916. 20 Can. Ry. Cas., p. 224.

## SESSIONAL PAPER No. 20c

## HUNTING-MERRITT V. CANADIAN PACIFIC AND BRITISH COLUMBIA ELECTRIC RAILWAY COMPANIES.

A slightly higher toll basis not justifiable from branch and lateral line points but from adjacent main line points.

Almonte Knitting Company v. Canadian Pacific and Michigan Central Railroad Companies (Almonte Knitting Company Case), 3 Can. Ry. Cas., 441. Mulkin & Sons v. Grand Trunk Railway Company (Tan Bark Rates Case), 8 Can. Ry. Cas., 183. Oiler and Bridgeport Lumber Company v. Dominion Atlantic Railway Company, p. 238, followed.

The obligation of a carrier under section 317 is to supply cars according to their respective powers. Where a carrier is called upon to supply a car which is not carried on its equipment register it is within its powers to supply a car on its equipment register which is next available to the length asked for. When foreign cars of larger size than are carried on their equipment register are available carrier may furnish such cars but the Board has no jurisdiction to compel carrier to supply a larger form of foreign equipment.

The facts are fully set out in the judgment of Mr. Commissioner McLean, concurred in by the Chief Commissioner, March 28, 1916. 28 Can. Ry. Cas., 181.

## MUNICIPALITY OF LASALLE V. CANADIAN PACIFIC AND NEW YORK CENTRAL RAILWAY COMPANIES.

Ordinary local trains should stop at stations where there is sufficient volume of traffic to call for additional train service, as the operating conditions and control of operations are entirely different and distinct from through express trains. It is no answer to such a claim that the existing service is unremunerative.

The facts are fully set out in the judgment of Chief Commissioner Drayton, April 7, 1916, 20 Can. Ry. Cas., 191.

## GRIFFIN V. TORONTO EASTERN RAILWAY COMPANY.

Damages have never been allowed by the Board to an adjoining landowner for the construction of an electric railway along a highway. The Board dismissed the claim of the applicant for damages under section 235, alleging that his lands had been injuriously affected by the construction of an electric railway on the highway, made two years after the work was finished.

The facts are fully set out in the judgment of Chief Commissioner Drayton, April 12, 1916. 18 Can. Ry. Cas., 211.

## REMY V. LAKE ERIE AND NORTHERN RAILWAY COMPANY.

The Board has no jurisdiction to grant damages for land injuriously affected by the construction of a railway on a highway where the applicant has signed an agreement releasing the railway company from such claims. Such a release must stand until set aside by a court of competent jurisdiction.

The facts are fully set out in the judgment of Chief Commissioner Drayton, April 13, 1916. 20 Can. Ry. Cas., 207.

## LONDON AND LAKE ERIE RAILWAY COMPANY V. MICHIGAN CENTRAL AND LONDON AND PORT STANLEY RAILWAY COMPANIES.

The Board is not concerned with the disputes of rival railway companies if such are with the view that one desires to do business with another to the exclusion of a third, its only interest being that of the public in the transportation of passengers and freight. Under the special circumstances of this case the respondent Michigan

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Central Railroad Company are obliged, under sections 217 and 334, to make reasonable traffic arrangements to enable the applicant to do business with it by issuing through joint tickets for the transportation of passengers.

The facts are fully set out in the judgment of Chief Commissioner Drayton, April 14, 1916. 20 Can. Ry. Cas., 195.

*In re* PASSENGER TOLLS.

The Railway Act does not require carriers to meet short line competition if they do not desire to do so.

Edmonton Cloverbar Sand Company v. Grand Trunk Pacific Railway Company. 17 Can. Ry. Cas., 95, followed.

The facts are fully set out in the judgment of Mr. Commissioner McLean, April 19, 1916. 20 Can. Ry. Cas., 223.

TINKESS V. BELL TELEPHONE COMPANY.

Under 7 and 8 Edward VII, chapter 61, section 5, the Board has no jurisdiction to deal with the rearrangement of the respondent telephone service between different exchanges, the matter being one of internal management of its own business.

The facts are fully set out in the judgment of Mr. Commissioner McLean, April 19, 1916. 20 Can. Ry. Cas., 249.

MARITIME TELEGRAPH AND TELEPHONE CO. V. DOMINION ATLANTIC RAILWAY.

The practice of the Board has been to allow the right of way of railway companies to be crossed by the construction overhead or underground of lines of wires or water pipes or other pipes, without compensation. The Board's order merely creates an easement which can be cancelled or varied as occasion may require from time to time.

The facts are fully set out in the judgment of Mr. Commissioner McLean, May 3, 1916. 20 Can. Ry. Cas., 213.

CANADIAN NORTHERN ONTARIO RAILWAY COMPANY V. CANADIAN PACIFIC RAILWAY COMPANY.

Public interest, economy of movement to shippers and convenience must be established before the Board will grant one carrier interchange traffic facilities with another. No carrier is entitled to such facilities as of right. The property and advantages of one carrier should not be interfered with for the benefit of another; but objections by a carrier on the ground that the other carrier will thereby obtain a great advantage at its expense will be overruled in the interest of the public.

The facts are fully set out in the judgment of Chief Commissioner Drayton, June 9, 1916. 20 Can. Ry. Cas., 200.

BELL TELEPHONE COMPANY V. FALKIRK TELEPHONE COMPANY.

The Board is not given any power under 7-8 Edward VII, chap. 61, to direct that local telephone service shall be given to an applicant who is not a subscriber of a company subject to its jurisdiction, and therefore has no jurisdiction over the switching connected therewith.

The facts are fully set out in the judgment of Mr. Commissioner McLean, June 20, 1916. 20 Can. Ry. Cas. 256.

COLEMAN V. TORONTO AND NIAGARA POWER COMPANY.

Under section 247 the Board has no jurisdiction to authorize a highway to be constructed under the wires of a power company.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, October 14, 1916. 20 Can. Ry. Cas. 258.

## SESSIONAL PAPER No. 20c

## MOODIE V. CANADIAN PACIFIC RAILWAY COMPANY.

The Board will recognize the public necessity for a highway crossing over a railway especially at or near a point where for a long period the railway company has allowed the public the use of such crossing, and it will order the railway company to make the crossing conform to its Standard Regulations Affecting Highway Crossings as amended May 4, 1910. The Board is not called upon to deal with the question of encroachment by a railway company upon the highway.

Village of Weston v. Canadian Pacific and Grand Trunk Railway Companies (Dennison Avenue Crossing Case No. 593) 7 Can. Ry. Cas. 79 followed.

The facts are fully set out in the judgment of Mr. Commissioner Goodeve, October 19, 1916. 20 Can. Ry. Cas. 217.

## BOWLBY V. HALIFAX AND SOUTHWESTERN RAILWAY COMPANY.

It is in the carrier's discretion whether it will meet water competition and it is not the privilege of the shipper to demand less than normal tolls because of such competition which the carrier in its own interest does not choose to meet.

Plain v. Canadian Pacific Railway Company, 9 Can. Ry. Cas. 222, at p. 223. Blind River Board of Trade v. Grand Trunk, Canadian Pacific Railway, Northern Navigation and Dominion Transportation Companies, 15 Can. Ry. Cas. 146 followed. Where the carrier is subject to effective water competition in a varying degree and also to potential water competition it is in its discretion whether it shall meet it and the fact that it has met the competition at one point does not place it under any obligation to meet it at another point, nor is the toll as it is put in to meet such competition to one point a necessary measure of the toll to another.

Dominion Millers' Association v. Grand Trunk and Canadian Railway Companies, 12 Can. Ry. Cas. 363, at p. 368. In *re* Western tolls (Western Tolls Case) 17 Can. Ry. Cas. 123, at pp. 161, 162 followed.

The facts are fully set out in the judgment of Mr. Commissioner McLean, October 18, 1916. 20 Can. Ry. Cas. 231.

## CITY OF BRANTFORD V. GRAND TRUNK RAILWAY COMPANY.

The senior and junior rule which is sometimes applied by the Board when determining who should pay the cost of the crossing of one railway over another should not be applied where a highway is crossed by a railway as the municipality being the owner of the street and not being the owner of the street railway should not be considered junior to the steam railway company and the costs of protecting the crossing should be apportioned equally between them.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, November 2, 1916. 20 Can. Ry. Cas. 166.

## MUNICIPALITY OF SASMAN V. CANADIAN NORTHERN RAILWAY COMPANY.

In applying the senior and junior rule between railway companies the construction of the crossing and not approval of the location gives priority, but between municipalities and railway companies that principle cannot be applied. When it is sought to cross a railway by a highway where a road allowance previously existed, then no matter how long the railway may have been constructed it is considered to be junior and the railway company should install and maintain the necessary crossing.

Canadian Northern Railway Company v. Canadian Pacific Railway Company (Kaiser Crossing Case) 7 Can. Ry. Cas. 297. Canadian Northern Railway Company v. Canadian Pacific Railway Company. 11 Can. Ry. Cas. 432 followed.

Where there is no road allowance, and the municipality desires to use the land of the railway company upon which to construct a highway, the entire cost of the highway improvements will be borne by the applicant.

8 GEORGE V, A. 1918

Township of Gloucester v. Canada Atlantic Railway Company. 3 O.L.R. 85. 1 Can. Ry. Cas. 327 followed.

The facts are fully set out in the judgment of Chief Commissioner Drayton, December 1, 1916. 20 Can. Ry. Cas. 246.

#### APPEALS FROM DECISIONS OF THE BOARD.

For the year ending March 31, 1917, there were two appeals made to the Governor in Council from the decisions of the Board.

One of these appeals, that of the Canadian Pacific Railway Company from three orders of the Board, dated May 31, 1912, dismissing the application of the company to construct a spur from a point on the Toronto to London line of the company to connect with the Toronto to Owen Sound line of the company, and to cross certain highways and the line of the Grand Trunk Railway Company, was referred back to the Board for a reconsideration of the original application, which is still pending.

The other appeal, that of the Canadian Pacific Railway Company from an order of the Board, dated June 9, 1916, directing that independently of the General Inter-switching Order and pending the adjustment of the entire switching question before the Board, the toll of the Canadian Pacific Railway Company for switching live stock from its connection with the Canadian Northern Railway at Montreal to the Eastend Cattle Market there, should be \$5 per car, and that the company accept such traffic from the Canadian Northern Railway Company and resume the necessary switching service over its line to the Eastend Cattle Market at the toll provided. This appeal is still pending.

There were no appeals from the decisions of the Board to the Supreme Court of Canada during the above period.

A list of the appeals from the Board's decisions to the Supreme Court of Canada, since its inception, will be found under Appendix "E" of this report.

#### ORDERS, GENERAL ORDERS, AND CIRCULARS.

The total number of orders issued for the year ending March 31, 1917, was 1065. The number of general circulars issued by the Board, directed to all railway companies subject to its jurisdiction, for the year was twenty-two. The general orders, as distinguished from other orders issued by the Board, are those affecting all railway companies subject to the Board's jurisdiction. It will be noted that the number of general orders issued by the Board for the year ending March 31, 1917, was twenty-two, as compared with twelve for the previous year.

A list of the general orders and circulars for the year ending March 31, 1917, will be found compiled under Appendix "F" to this report.

#### JUDGMENTS OF THE BOARD.

The principal judgments of the Board delivered between the 1st of April, 1916, and the 31st of March, 1917, will be found under Appendix "A."

#### APPLICATIONS TO THE BOARD.

The total number of applications, including informal complaints made to the Board, for the year ending March 31, 1917, was 3,320. At page 16 will be found a table classifying the applications and complaints made to the Board under the various sections of the Railway Act.

SESSIONAL PAPER No. 20c

TRAFFIC DEPARTMENT OF THE BOARD.

In the Traffic Department of the Board the number of tariffs received and filed for the year ending March 31, 1917, were as follows:—

Freight tariffs including supplements.. . . . .	50,480
Passenger tariffs including supplements.. . . . .	12,349
Express tariffs including supplements.. . . . .	2,232
Telephone tariffs including supplements.. . . . .	2,270
Sleeping and parlour car tariffs including supplements.. . . . .	233
Telegraph tariffs and supplements.. . . . .	64

This makes a total of 67,628 for the year, as compared with a previous total for the year ending March 31, 1916, of 92,017. The total number of tariffs filed from February 1, 1904, to March 31, 1917, was 720,600.

The details in regard to the tariffs will be found under Appendix "B" to this report.

ENGINEERING DEPARTMENT OF THE BOARD.

In the Engineering Department of the Board a large number of inspections were made covering the whole Dominion. These inspections for the year ending March 31, 1917, number 238, and cover inspections for the opening of a railway for the carriage of traffic, pursuant to the requirements of section 261 of the Railway Act, inspections of culverts, highway crossings, cattle guards, road crossings, bridges, subways, and general inspections falling within the scope of the work of the Engineering Department of the Board.

OPERATING DEPARTMENT OF THE BOARD.

Under the work of this department is included the inspection of locomotive boilers and their appurtenances, the inspection of safety appliances on cars and locomotives, the investigations into accidents causing personal injury or loss of life, the reporting on the locations of stations, matters of protection at highway crossings, and train and station service performed by the railway companies.

Under Appendix "C" will be found a full and detailed report of the Chief Operating Officer of the department.

ACCIDENTS AND ACCIDENT INVESTIGATIONS.

On reference to the report of the Board's Chief Operating Officer it will be seen from the comparative statement of killed and injured that the number of accidents among passengers carried and railway employees, as compared with the previous year 1915-16, shows a marked increase; but with regard to trespassers a decrease. The figures given show that the number of passengers killed and injured for the year ending March 31, 1916, was 157, and for the year ending March 31, 1917, 296, an increase of 138. The total number of employees killed and injured for the year 1915-16 was 908, and for the year 1916-17, 1,329, an increase of 421. In this connection it will be noted by reference to the table given below, that the total number of passengers carried on railways shows a marked increase, and the number of employees with railways also a marked increase, and these facts must be taken in connection with the increase in the total number of killed and injured.

Attention is again directed to the comparative statements of the Chief Operating Officer, setting out in detail the situation as regards highway-crossing accidents during the past five years, and it will be observed therefrom that there has been a total of 556

accidents, covering 252 persons killed and 477 persons injured. There have been 151 accidents at protected crossings covering 66 persons killed and 122 persons injured, and at unprotected crossings there have been 415 accidents covering 186 killed and 355 injured.

In the year 1916-17 there were 36 automobile accidents at highway crossings, in which 20 persons were killed and 54 injured. Twenty-nine of these accidents occurred at unprotected highway crossings, when 14 persons were killed and 46 injured. These figures show a very considerable increase over the automobile accidents for the year 1915-16, in which only 6 persons were killed and 4 injured, and the Board is taking steps as to ascertaining what is the best method of protection at highway crossings where the same are used extensively by automobiles.

As has been previously stated there are a good many instances where the public disregard is evidenced in regard to protective appliances, by persons crawling under gates or going around them, or endeavouring to cross railway tracks in disregard of the alarm given by automatic signal bells.

The following is a table giving comparisons between the total number of passengers carried by the railway companies, the number of passengers killed and injured, and the same information as to employees, and as to trespassers, showing the number of trespassers killed and the relative percentage thereof to the total number of persons killed for the year. The figures giving the total number of passengers and employees carried are for the year ending June 30, 1916, the last figures available, and are taken from the railway statistics of the Dominion of Canada, published by the Department of Railways and Canals:—

Passengers—		
Number of passengers carried on railways.....		49,027,671
“ “ killed.....		16
“ “ injured.....		280
Employees—		
Number of employees with railways.....		144,770
“ “ killed.....		155
“ “ injured.....		1,174
Trespassers—		
Number of trespassers killed.....		129
43 per cent of trespassers killed to total of 300.		

It will be noted that of what may be termed preventable loss there were 129 killed under the heading of trespassers, and 79 injured. This is a reduction of 14 in the number killed, and 23 in the number injured, from the year 1915-16.

The following table shows the totals by provinces as regards trespassers killed and injured for the year ending March 31, 1917:—

Province—	Killed.	Injured.
Ontario.....	70	54
Quebec.....	31	10
Manitoba.....	5	5
Saskatchewan.....	10	2
Alberta.....	2	3
British Columbia.....	7	2
Nova Scotia.....	3	2
New Brunswick.....	1	1
Yukon.....	.....	—
	<hr/> 129	<hr/> 79

FIRE INSPECTION DEPARTMENT OF THE BOARD.

The railway fire inspection work has been carried on, as in former years, in co-operation with the various Dominion and provincial fire-protective organizations. During the past year seventy-three employees of such organizations were under appointment as local officers of the Board, in connection with the administration of the various regulations contained in General Order No 107.



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Letters prescribing special fire patrols in forest sections were issued to the following railway companies: Algoma Central and Hudson Bay, Esquimalt and Nanaimo, Canadian Northern, Canadian Pacific, Edmonton, Dunvegan, and British Columbia, Grand Trunk, Grand Trunk Pacific, Great Northern, Kettle Valley, Temiscouata, Victoria and Sidney, Western Canada Power. Supplementing the special patrol measures, instructions relative to the reporting and extinguishing of fires have been issued by the various railway companies to all their regular employees, with excellent results.

The fire-guard requirements for 1916 were identical with those prescribed for 1915, and were issued to the Canadian Pacific, Canadian Northern, Edmonton, Dunvegan, and British Columbia, Grand Trunk Pacific, and Great Northern railways. During the season a total of 11,398.60 miles of fire-guards were constructed in the Prairie Provinces, under the requirements prescribed by the chief fire inspector.

In forest sections, 388 fires were reported as being directly attributable to railway causes, out of a total of 558 fires originating within 300 feet of the track, along lines subject to the Board's jurisdiction. This is a decrease of 128 fires from the figures for 1915. The fires definitely attributable to railway causes thus represent 69 per cent of the total, 18 per cent being ascribed to known causes other than railways, and 13 per cent to unknown causes. Of the 388 fires chargeable to railway causes, 101 fires, or 25 per cent, are incipient fires which did no damage; 287 fires, or 74 per cent, are larger fires which burned over 11,285 acres valued at \$35,559. The total damage from all fires is estimated at \$39,471. Of this, the railways are charged with 90 per cent, known causes other than railway fires 8 per cent, and unknown fires 2 per cent. Thus, on all lines subject to the jurisdiction of the Board throughout Canada, the fires in forest sections definitely attributable to railway agencies did damage amounting to only \$35,559—a remarkably good showing, considering the unfavourable weather conditions, and one which reflects great credit upon the railways concerned. Various tables showing forest fire statistics will be found in the report of the Fire Inspection Department, Appendix "D."

ROUTINE WORK OF THE BOARD.

RECORD DEPARTMENT.

Since the publication of the last annual report there has been no change in connection with the clerical staff of this department.

Below is given a table setting forth the number of applications, filings and letters received during the year ending March 31, 1917, together with the number of orders issued:—

Number of applications made. . . . .	3,320
“ filings received during the year. . . . .	3,131
“ out-going letters during the year. . . . .	30,270
“ orders issued during the year. . . . .	1,065

HONOUR ROLL.

The following members of the Board's staff have volunteered and are on active service in France with the Canadian Overseas Expeditionary Forces:—

- E. E. Nelson, Private, 11th Battalion.
- W. Downes, Corporal, 25th Battalion, C.F.A.
- T. E. Dunsmore, Private, 38th Battalion.
- E. W. Wadsworth, Sergeant, 207th Battalion.
- R. Harvey, Private, 207th Battalion.
- L. Bourgault, Private, Heavy Siege Artillery.

The vacancies in the Board's staff created by the enlistment of the members above referred to have not been filled.

accidents, covering 252 persons killed and 477 persons injured. There have been 151 accidents at protected crossings covering 66 persons killed and 122 persons injured, and at unprotected crossings there have been 415 accidents covering 186 killed and 355 injured.

In the year 1916-17 there were 36 automobile accidents at highway crossings, in which 20 persons were killed and 54 injured. Twenty-nine of these accidents occurred at unprotected highway crossings, when 14 persons were killed and 46 injured. These figures show a very considerable increase over the automobile accidents for the year 1915-16, in which only 6 persons were killed and 4 injured, and the Board is taking steps as to ascertaining what is the best method of protection at highway crossings where the same are used extensively by automobiles.

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SESSIONAL PAPER No. 20c

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- R. Harvey, Private, 207th Battalion.
- L. Bourgault, Private, Heavy Siege Artillery.

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STATEMENT showing applications made to the Board under the various sections of the Railway Act, for the fiscal year ending March 31st, 1917.

Sections of Railway Act.	1916.												1917.			Totals.
	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.				
	Rescinding of Orders, Sec. 29.....	3	2	3	1	1	1	2	1	2	1	3	.....	19		
Rules and Regulations, Secs. 30, 269, 307, 13.....	.....	.....	.....	.....	.....	1	1	.....	1	.....	.....	.....	3			
Extension of time, Sec. 50.....	.....	.....	.....	1	1	3	2	.....	.....	.....	.....	.....	8			
Location of line, Secs. 157, 168.....	.....	2	.....	2	.....	2	1	.....	1	.....	.....	.....	8			
Correction Plans, Sec. 162.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2			
Railway as constructed, Sec. 164.....	4	2	1	1	1	1	1	.....	2	1	2	.....	18			
Deviation of line, Sec. 167.....	1	1	.....	.....	2	3	1	.....	1	.....	2	.....	15			
Mines and Minerals, Secs. 169, 171.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3			
Expropriation of lands, Secs. 172, 191.....	1	.....	.....	2	.....	3	3	.....	1	1	.....	.....	10			
Appeals, Sec. 56.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	4			
Compensation for damage, Secs. 192, 214.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3			
Branch lines, Secs. 221, 226.....	12	23	27	24	20	28	19	21	22	13	14	14	237			
Railway Crossings and Junctions, Secs. 227, 229.....	3	4	8	6	1	4	5	4	.....	.....	1	1	37			
Interlocking appliances, Sec. 227.....	4	.....	1	1	.....	.....	3	.....	2	.....	3	.....	26			
Highway crossings, Secs. 235, 243.....	15	13	21	25	68	29	23	15	9	8	22	15	263			
Highway Diversions, Sec. 237.....	5	6	2	2	3	2	2	2	2	4	5	4	31			
Protection at Crossings, Sec. 243.....	4	3	7	10	6	2	15	5	7	6	5	2	72			
Telegraph and Telephone Lines, Sec. 244.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	2	.....	6			
Telegraph and Telephone Connections, Sec. 245.....	.....	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	5			
Telephone Wire Crossings, Sec. 246.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1			
Telephone Wire Crossings, Sec. 246.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2			
Power Wire Crossings, Sec. 246.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3			
Telephone Agreements, Sec. 248.....	3	8	9	6	7	4	9	7	4	9	7	6	79			
Water Pipes, Sec. 250.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3			
Sewers, Sec. 250.....	.....	1	3	2	1	1	1	2	3	2	.....	.....	15			
Culverts, Sec. 250.....	.....	1	4	2	1	.....	.....	.....	.....	.....	.....	.....	13			
Farm Crossings, Secs. 252, 253.....	3	1	3	1	2	3	5	1	1	2	2	2	28			
Cattleguards, Secs. 254, 255.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4			
Fencing of Right of Way, Sec. 254.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1			
Construction over Nay. Waters, Sec. 233.....	1	3	3	2	.....	.....	.....	.....	.....	.....	.....	.....	14			
Bridges, Secs. 256, 257.....	6	8	9	6	3	3	5	2	3	14	10	4	73			
Tunnels, Secs. 256, 257.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1			
Stations, Sec. 258.....	2	3	1	3	8	5	3	6	2	5	7	1	5			
Station Accommodation and Agents.....	11	6	8	4	5	12	10	3	6	8	7	13	93			
Condition of Roundhouses.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1			
Opening of Railway, Sec. 261.....	3	3	4	4	1	1	3	2	1	1	.....	.....	23			
Condition of Railway, Sec. 262.....	2	3	4	7	10	5	2	6	3	5	2	5	50			

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Rolling Stock, Secs. 264, 268.	1	1	2	1	1	3	2	2	1	4	1	1	9
Train Service.....	5	2	1	2	2	5	2	2	1	4	13	8	53
Working of Trains, Sec. 269.....	2	1	2	1	2	5	1	1	1	14	14	20	13
Obstruction to Traffic, Sec. 279.....	3	2	1	1	3	1	1	1	2	5	5	8	60
Accommodation for Traffic, Sec. 284.....	6	8	7	3	4	4	5	2	2	1	4	8	173
Accident Reports, Secs. 292, 293.....	20	25	13	13	11	18	23	8	8	9	14	12	4
Fires from Locomotives, Secs. 297, 298.....	1	1	1	1	1	1	1	1	1	1	1	1	11
By-Laws <i>re</i> Tolls, Sec. 314.....	2	2	2	2	2	2	2	2	2	2	2	2	29
Interswitching, Secs. 317 and 334.....	1	1	1	1	1	1	1	1	1	1	1	1	18
Freight Classification, Sec. 321.....	1	1	1	1	1	1	1	1	1	1	1	1	3
Forms of Tariffs, Secs. 322, 339.....	1	1	1	1	1	1	1	1	1	1	1	1	19
Disallowance of Tariffs, Sec. 323.....	2	5	1	1	1	1	1	1	1	2	2	3	13
Standard Freight Tariffs, Sec. 327.....	1	1	1	1	1	1	1	1	1	1	1	1	2
Standard Passenger Tariffs, Sec. 331.....	1	1	1	1	1	1	1	1	1	1	1	1	8
Adjustment in Rates.....	1	1	1	1	1	1	1	1	1	1	1	1	12
Special Tariffs, Secs. 329, 332.....	3	2	1	2	1	1	1	1	1	1	1	1	10
Joint Tariffs, Sec. 335.....	1	1	1	1	1	1	1	1	1	1	1	1	3
Provisions for Carriage, Secs. 340, 342.....	1	1	1	1	1	1	1	1	1	2	1	2	10
Express Tolls, Secs. 348, 354.....	1	1	1	1	1	1	1	1	1	2	2	2	9
Carriage by Express, Sec. 252.....	1	2	3	3	2	2	2	1	1	3	3	2	18
Telephone Tolls, Secs. 355, 360.....	1	1	1	1	1	1	1	1	1	1	1	1	5
Amalgamation Agreements, Secs. 361, 363.....	1	1	1	1	1	1	1	1	1	1	1	1	5
Traffic Agreements, Sec. 364.....	3	1	2	3	1	2	3	1	1	11	9	12	45
Enquiries.....	59	87	74	73	78	91	94	128	3	13	4	4	31
Requests.....	11	11	8	6	6	4	7	9	9	14	13	13	112
Complaints.....	11	11	8	6	6	4	7	9	9	14	13	13	112
Miscellaneous.....	11	11	8	6	6	4	7	9	9	14	13	13	112
Totals.....	205	250	244	228	294	232	267	231	234	312	448	375	3,320

## APPENDIX "A"

COMPLAINT OF THE DOMINION MILLERS' ASSOCIATION *re* INCREASE IN MINIMUM WEIGHTS ON GRAIN AND GRAIN PRODUCTS.

Complaint was made regarding the increase in minimum weights on grain and grain products. The existing minimum weights were 35,000 pounds for oats and buckwheat, 40,000 pounds for barley, shelled corn, Kaffir corn, pearl barley, whole peas, pot barley, rye and wheat. It was proposed, in the case of the 60,000 to 70,000-pound capacity cars to increase the minimum of peas to 51,000 pounds, of shelled corn and Kaffir corn to 56,000, and in the other items already referred to, to 60,000.

The same provision was made in the case of 80,000-pound capacity cars, while, in the case of 100,000-pound capacity cars, increases running up to 80,000 pounds were provided.

The objections were, first, to the increase in the grain weights and, secondly, to the increase in the weight of flour and other grain products. It was not contended that the minimum weight of the proposed tariffs could not be loaded into the cars, but it was stated that the conditions in connection with labour, cost, trimming of cars, and handling of grain to and from warehouses in Western Ontario rendered it difficult to obtain the loading called for. In general, stress was laid upon the established commercial conditions. The objection advanced against the increase in weights on flour and other grain products was that commercial conditions were adjusted to the existing minimum weights, and that increased minimum weights would render the financing of the car movements more difficult, and in some cases impossible.

The Board held as follows:—

But the physical capacity is, as has been recognized in the way the weights on flour and other grain products have been worked out as explained by Mr. Tilston in his evidence, not the sole criterion. The railways, in the tariffs which they now seek to amend, have also given weight to difference in condition as one factor to be considered. In the amending tariffs, they also, by difference in minimum weights on grain in different sections, recognize differences in condition as a factor to be considered. The Board has recognized, in matters of classification and of rates, that established trade conditions or obligations, while not of necessity conclusive obstacles in the way of change, must be considered.

No general rule can be laid down. Each case must be looked into on its merits. It is a question of judgment what is a fair mean between the physical carrying power of the car, and the public interest as affected thereby, and the conditions under which business is carried on.

Having due regard to the contentions advanced, there has been a case made out for increase in weights but not to the full extent proposed by the tariffs.

The increases on grain products, other than flour, are justified. In the case of flour, an increase to 45,000 pounds is justified in the case of cars of 60,000 and 70,000 pounds capacity. The minimum weights as proposed in the tariffs are justified for the larger cars.

The tariffs carry provision for minimum weights in cars of 100,000 pounds capacity, the minimum weights of grain being as already stated. In the case of grain products, 60,000 pounds is called for in 100,000-pound car; malt, 54,000 pounds; flour, 70,000 pounds.

Objection was taken to these weights being carried in the tariff as it was pointed out that the 100,000-pound car was not being built by the Canadian Pacific and the Grand Trunk, and it was not established that these railways intended to build such a type of car. The only railway which was referred to in evidence as constructing

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them was the Canadian Government Railway system. It was apparently feared that the Canadian Pacific or the Grand Trunk by supplying such a car to a shipper would unduly penalize him by requiring a heavier loading.

The Board has already held in the *Complaint of the Kootenay Shingle Company, Limited, v. Great Northern Ry., File 26018, decided October 19, 1915*, that where a railway carries on its equipment register the type of car asked for, and has for its own convenience furnished a larger car, then the minimum of the car asked for shall apply. The same rule applies here. If a shipper is desirous of using the 60,000 or 70,000-pound car and asks for such car and the railway supplies him with the larger car, then the minimum of the smaller capacity car as asked for will apply, assuming, of course, that the actual loading does not exceed the maximum for the type of car ordered.

The following notation is carried on C.P.R. tariff C.R.C. No. E-2907, C.R.C. No. E-2715, C.R.C. No. E-3120, and C.R.C. No. E-2480; "Mixed carloads—on mixed carloads the highest rate and highest minimum carload weight will apply."

Mr. Watts, in a communication on file, desires this notation to be considered.

The notation which the tariffs, which it is not proposed to amend, carried was—"Mixed carloads will be charged at the minimum weight for the commodity in the mixed car taking the highest minimum weight." This notation, however, did not appear on the tariff relating to ex-lake traffic.

Rule 2 of the classification provides "When articles under one distinctive heading are of the same class in carloads, the carload rating and highest minimum weight for such class will apply."

The notation as carried in the proposed amended tariffs is thus in accordance with the classification. Since the classification governs, it is in reality not necessary to carry the notation on the tariffs. The rates have been checked and it appears that the various commodities are carried at the same rates between the same points.

The increased minimum weights found justifiable in the case of flour shall not become operative until the amended minimum weight in the case of the 60,000-pound and 70,000-pound car is covered by tariff; and the increased minimum weights on grain products, other than flour, are not to become operative until the amended minimum weights on flour become operative.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated March 30, 1917, concurred in by Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

APPLICATION OF THE CANADIAN PACIFIC RAILWAY COMPANY FOR AN ORDER DIRECTING THE GRAND TRUNK PACIFIC RAILWAY COMPANY TO BEAR A PORTION OF THE COST OF LAND ACQUIRED FROM THE NATURAL RESOURCES DEPARTMENT OF THE C. P. R. CO., FOR THE CONSTRUCTION OF TRANSFER TRACK BETWEEN THE C. P. R. CO., AND THE G. T. P. R. CO., AT FROBISHER, SASK.

Judgment of Commissioner Goodeve, dated March 29, 1917.

This case was heard at Winnipeg, June 12, 1916, when judgment was reserved.

While the amount involved is a very nominal one, the principle to be decided is extremely important, particularly to the C. P. R. in view of the large amount of land held in the company's name, but not used, or contemplated as being used, for railway purposes. The argument of the C. P. R. Company, being that the land in question had never been regarded as land held for railway purposes, or shown within the limits of its right of way and, therefore, section 176 of the Act did not apply, but that it should be treated in all respects as if owned by private or third parties. The reply of the G. T. P. R. Company being that this should not be distinguished from the Orillia case.

It was shown at the hearing, and an examination of the Orillia case discloses, that the point involved is quite distinct from that in the Orillia case. In the latter the land in dispute was shown clearly to be used for railway purposes, and as part of the right of way of the Grand Trunk Railway.

It was held that lands owned by a railway company which were not physically a part of the railway undertaking, or bought or obtained for railway purposes, and were not put to any railway use, should not come under section 176 of the Railway Act, but should be dealt with in the same manner as lands of private individuals and under clauses of the Act covering the expropriation of the same.

Upon these grounds the G. T. P. R. Company was ordered to pay its proportion of the cost of the land involved.

*Re* INCREASE IN LAKE AND RAIL RATES FROM STATIONS IN EASTERN CANADA TO FORT WILLIAM AND OTHER LAKE POINTS.

This matter came before the Board for consideration upon the protest of the Montreal Board of Trade against the tariffs filed by the railway companies increasing lake and rail rates on sugar to Fort William and other lake points. The railway companies were called upon by the Board to justify the proposed increases and the matter came before the Board for hearing at a sittings held in Ottawa on the 20th March, 1917, at which the parties immediately interested were represented.

It transpired at the hearing that a number of other commodity rates, as well as class rates, were in the same position as the sugar rates; that, therefore, whatever justification there might be for increasing sugar rates would apply to the other rates covered by the same tariffs.

Held that the Board has no jurisdiction over the rates charged or the division of lake and rail rates demanded by the different steamship companies operating boats on the St. Lawrence or the Great Lakes, other than the rates on the steamers operated by the C. P. R. Held also that the rail portion of the proposed rates would not appear to be excessive when compared with the local rail rates between the same points. Held also that the railway companies might in their discretion meet water competition if they saw fit to do so, and might also determine the extent to which they should meet it, and that the Board, therefore, could not interfere with the tariffs filed.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated March 29, 1917, concurred in by Mr. Commissioner McLean and Mr. Commissioner Goodeve.

*Re* MAXIMUM LENGTH OF TRAINS ON CANADIAN RAILWAYS.

It was pointed out that under existing financial conditions and inadequate supply of rolling stock, and the importance of having as great as possible a movement of freight, the Board was not justified in making any direction in the matter. It was further set out that with the termination of the war and the getting back to more normal conditions, the matter would be gone into fully on its merits.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated March 24, 1917, concurred in by Chief Commissioner Drayton, Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

*Re* COMPLAINT OF WESTERN CANADA FLOUR MILLS COMPANY, LTD., GODERICH, ONT., *re* STOP-OFF CHARGE OF TWO CENTS.

The applicant flour mills company receives its grain by lake from the west, and as there is no rail-haul in, there is no milling-in-transit rate out. The matter was before the Board in 1908. It was then pointed out that, under the existing tariff, on the mileage from Goderich to Montreal, the rate properly applicable would be 15 cents. The railway had applied a rate of 12 cents, and the Board directed that this should be continued, the matter having been put upon a commodity-rate basis.

The present complaint was based on the allegation that there was, in fact, included in the 12-cent rate, as charged, a 2-cent charge for the milling-in-transit service, which was not performed, and that, therefore, the rate should be reduced to 10 cents.



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The Board held that the commodity-rate basis of 12 cents as put in it did not consider that a specific portion of it, viz., 2 cents, was earmarked for such a stop-off arrangement as would apply under the milling-in-transit. It recognized that ordinarily a 15-cent rate to Montreal would apply, and that what had been given was a commodity-rate basis which it was held it was not justified in disturbing.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated March 21, 1917, concurred in by the Chief Commissioner.

*Re* LAKE AND RAIL RATES, TORONTO TO WESTERN POINTS, VIA CANADIAN NORTHERN RY.

Complaint having been made to the Board by Mr. John P. H. Stevenson, customs broker, of Toronto, that while the Canadian Northern Railway Company has lake-and-rail rates from Orono and Yarker, non-competitive points on the C.N.R. east of Toronto via lake boats from Toronto to Port Arthur thence C.N.R. to western points, the company's eastern lines' Lake-and-rail Tariff C.R.C. No. E. 771, does not show any rates from Toronto, the point where the lake movement begins.

Held that the long and short haul clause, subsection 3 of section 326, applies in this case, and that the through rates from Toronto cannot be greater than the through rates from Orono, Yarker, and other C.N.R. points east via Toronto.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated February 26, 1917, concurred in by Mr. Commissioner McLean.

*Re* COST OF MAINTENANCE OF BIRCH AVENUE SUBWAY, TORONTO, HAMILTON AND BUFFALO RY., HAMILTON, ONT.

By Order No. 15090, dated October 11, 1911, as amended by Order No. 19945, dated August 2, 1913, the city of Hamilton was authorized to construct a subway under the tracks of the Toronto, Hamilton and Buffalo Railway, to extend Birch avenue in a northerly direction.

The Board directed that an Order should go that the subway be maintained by the city.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated February 26, 1917, concurred in by Mr. Commissioner McLean.

*Re* COMPLAINT OF THE VANCOUVER BOARD OF TRADE AGAINST INCREASE IN FREIGHT RATES ON CANNED GOODS AND HARDWARE CONSIGNED TO POINTS ON THE PACIFIC COAST.

Suspension of the tariff was asked for by the Vancouver Board of Trade. In order to have suspension of a tariff, a prima facie case has to be established and the Board's regulations set out what is necessary in this connection. Protests were also received from other parties.

Upon consideration of the matter, the Board held as follows:—

It appears that the Interstate Commerce Commission has found, 40 I.C.C. 35, June 5, 1916, that water competition via the Panama Canal is less effective. It has said, *Ibid*, p. 38:—

“The result of all the evidence offered was to show that there is not at this time any effective competition between the two coasts, and that there is little likelihood of any material competition by water during the present calendar year, irrespective of the action the Commission may take with respect to these petitions”.

It was found as a fact, at p. 39:—

“As the situation now stands, however, the rail rates on all these schedule “C” commodities from eastern defined territories to Pacific Coast terminals are lower than the present conditions warrant, while at the same time higher rates are applied at intermediate points”.

Canned goods and hardware are included in schedule “C” referred to.

Following this decision, the rates from eastern defined territories to Pacific Coast terminals were increased.

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Following the decision of the Interstate Commerce Commission, 32 I.C.C., 611, January 29, 1915, reduced rates were put in on August 15, 1915, from Chicago by the American railways, the reduction on canned goods, for example, being 15 cents. The reduction was found, by the Interstate Commerce Commission, justified by water competition. Following this, the Canadian rates were, on December 18, 1915, reduced by 10 cents.

Effective December 30, 1916, rates from Chicago were, in general, increased 10 cents on carloads. This, as has been indicated, following a finding that water competition to the coast was less effective.

The Canadian rates to which exception is taken are 10 cents increases over those put in December 18, 1915. The situation turns on the question of water competition, which the Canadian railways met in a measure when the competition was more effective, and which they now meet in less degree when the same competition is less effective. This is not contrary to the Railway Act.

A *prima facie* case for suspension has not been made out.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated February 9, 1917, concurred in by Chief Commissioner Drayton.

*Re* APPLICATION FOR AN ORDER GRANTING THE GRAND TRUNK RAILWAY COMPANY AUTHORITY TO MAKE A REFUND OF FREIGHT CHARGES FROM MIDLAND, ONT., TO CLEVELAND, OHIO.

What is involved is a question of discrimination in rates on lumber from Penetang to Cleveland, as compared with rates from Midland to Cleveland.

It was alleged by the railway that this was justified on the basis of water competition. An analysis of the tariffs was made, pointing out to what extent rates in the territory in question to points in the United States had been grouped. The following statement was made by the Board:—

Examples of the rate practice as to inland points have been given. Kalamazoo, Michigan, Johnstown, Penn., may also be mentioned as inland points to which the rates from Meaford and Penetang are the same. An examination of the rate structure shows that this is the case as to normal rates to all United States territory covered by the tariff.

The Grand Trunk by its tariff C.R.C. No. 56, effective November 15, 1899, carried a rate of 10 cents from the Penetang-Meaford group to Black Rock, while from the Huntsville group the rate was 1 cent over this. Huntsville is 93 miles from Midland and 44 miles longer haul to Black Rock. This difference has been carried through various tariffs on file, and it appears that the companies have established a rate from Huntsville to Cleveland by adding to the Penetang rate the difference existing in the rates to Black Rock.

The rates from Huntsville, North Bay, and Whitney have been built up regardless of whether the shipping point was subject to water competition or not. Huntsville, 84 miles from Allandale, has been put 1 cent over Penetang, 39 miles from Allandale. North Bay and Whitney are 4.7 cents over Penetang; that is to say, that their added distance of 125 miles, as compared with the Midland added distance of 0.3 miles, represents a rate difference of 1.6 cent.

The ton-mile and car-mile earnings on the rates as charged for the points referred to may be compared:—

To Cleveland.	Miles.	Rate.	Ton-mile rate.	Car-mile earnings on 34,000 lb. minimum.
From Penetang . . . . .	378.1	16.3	.862c.	14.66c.
“ Midland . . . . .	378.4	19.4	1.025c.	17.43c.
“ Huntsville . . . . .	422.5	17.3	.819c.	13.92c.
“ Whitney . . . . .	504.9	21.0	.832c.	14.14c.
“ North Bay . . . . .	503.5	21.0	.834c.	14.18c.

With due regard to the grouping arrangements that have been utilized in connection with the movement of this business and the respective earnings as indicated,

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the rate adjustment from Midland to Cleveland is unjustly discriminatory to the extent that it exceeds the rate of 16.3 cents as charged from Penetang, and should be adjusted to the same basis.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated February 5, 1917, concurred in by Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

## APPLICATION OF THE SHINGLE AGENCY OF BRITISH COLUMBIA FOR STOP-OVER PRIVILEGE.

Judgment of Commissioner Goodeve, dated January 26, 1917, concurred in by Chief Commissioner Drayton and Commissioner McLean.

This matter was first brought to the attention of the Board by letter dated June 23, 1916, addressed to Sir Henry Drayton as Chairman of the Railway Commission, by Mr. Hyde, Secretary of the above agency, in which he asked for "the privilege of a Milling-and-sorting-in-transit rate." It was set down for hearing on Monday, the 26th day of June, at Vancouver, when Mr. Hyde appeared in person for the applicants.

It developed at the hearing that the application was not really for a shingle milling-and-sorting-in-transit rate but an application to include the consolidation of shingles and lumber to be supplied from different mills in a mixed carload and shipped under a single carload commodity rate.

The applicant based his claim for consideration on the ground that the Great Northern Railway Company, operating in this district had a tariff allowing this privilege, but it was pointed out by the Chairman of the Board that unless discrimination was proven this would not give the Board jurisdiction to make the Order asked for.

No discrimination having been proven, the application was refused.

*Re* COMPLAINT OF MUNITIONS AND MACHINERY, LIMITED, SOREL, QUE., REGARDING DEMAND OF THE QUEBEC, MONTREAL AND SOUTHERN RY. CO. FOR AN ADDITIONAL 2½ CENTS PER 100 POUNDS ON SHELL SHIPMENTS SOREL TO MONTREAL, ACCOUNT OF THE IMPERIAL MUNITIONS BOARD.

A rate of 11½ cents from Sorel to Montreal was quoted. It was contended by the applicant that the rate in question was to meet the rate of a water carrier. The railway contended that the rate was simply for local delivery in Montreal, and that the addition of 2½ cents per 100 pounds was properly chargeable to cover terminals and export business at Montreal.

The Board held:—

As part of the tariff record, it is stated that, effective October 21, 1916, by Supplement 1 to Tariff C.R.C. 580, the Quebec, Montreal and Southern Railway Company agreed with the Grand Trunk Railway Company to absorb the terminal charge on shipments of shell forgings from October 21, 1916, to November 25, 1916; but that it was not intended that this should be applied to shipments made previous to October 21.

Reference was made by the railways to the value of the forging. This does not appear to be material, as it does not appear that this was a matter discussed in the preliminary negotiations. It is stated by the railway that in putting in the tariff of October 21, the representative of Munitions and Machinery, Limited, agreed that if the absorption was made effective from October 21 to November 25 he would not take it as establishing a precedent, either on account of shipments made previous to October 21 or on shipments that might be made during 1917.

In the reply of Munitions and Machinery, Limited, it is stated that when they were solicited for the traffic in the first instance no question was raised as to whether the traffic was for local or export movement; and it was stated, which is, of course patent, that everybody knew where the shells were going. It is further stated that the railway's statement that the tariff supplement, which has just been referred to, was one which the applicants agreed would not be used as a precedent sets out a state-

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ment of fact which was in no way discussed between the applicant and the representative of the railway.

The history leading up to the issuance of the tariff has been set out. The question is, what does the tariff say? A tariff is not to be interpreted by understandings. It should bear on its face exactly what it covers and to what traffic it is applicable. Aside from Tariff C.R.C. No. 580, there was no other tariff in force from Sorel to Montreal covering this traffic, except a class tariff. The tariff issued to meet—to quote its own statement—water competition, did not limit the movement. It was open under this tariff either to have a movement local to Montreal or to shipside at Montreal for export; either movement was, under tariff, covered by the 11½-cent rate; and the rate so provided for is the sole legal rate which the railway has authority, under the Railway Act, to collect.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated January 25, 1917, concurred in by Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

*Re* APPLICATION OF THE GRAND TRUNK PACIFIC RAILWAY CO. REGARDING APPORTIONMENT OF COST OF TRANSFER TRACK, CALGARY, ALTA.

On an analysis of the traffic concerned and the consideration of the general practice of the Board whereunder the junior road diverting traffic from an older line is required to bear the cost of the establishment of an interchange, the cost of maintenance for the interchange in question was placed upon the Grand Trunk Pacific.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated the 23rd January, 1917, concurred in by Chief Commissioner Drayton, Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

*Re* APPLICATION OF THE GENERAL TRAFFIC SERVICE CO., OF CHICAGO, ILL., ON BEHALF OF THE WOODS MOBILETTE CO. REGARDING COMBINATION OF RATES ON AUTOMOBILES AND PARTS MOVING FROM WINNIPEG, MAN., TO HARVEY, ILL.

The question here involved in the matter of possible existing rate combinations being used to defeat legally-filed and published through rates.

It was held that the Board has ruled, in dealing with a situation arising in Canada, that it is a fundamental proposition, under the policy outlined by the Railway Act, that when a rate, whether joint, or whether limited to points situated on one line of railway alone, has gone into force in conformity with the provisions of the Railway Act, it is the only legal rate in respect of the traffic mentioned and from the points mentioned. *In the matter of Through Rates vs. Combination of Locals, File 9754.* Reference may also be made to *re Through rates on lumber exceeding the sum of the locals, File 24647;* and *Complaint of F. L. Getzler re through rates on pig-iron, Welland to Montreal, exceeding the combination of class and commodity rates. File 26848.*

The route from Winnipeg to St. Paul is continuous. A joint tariff of 85 cents has been filed; such filing is in compliance with the Statute. It is in effect contended that the route can be made discontinuous and a combination of rates substituted for the through rate filed. This is not permitted by the statute, and the Board, therefore, has no authority to sanction the adjustment asked for.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated January 22, 1917, concurred in by Assistant Chief Commissioner Scott and Deputy Chief Commissioner Nantel.

HARRIS AND ATWOOD *vs.* CANADIAN NORTHERN RAILWAY, FILE NO. 27403.

The applicants applied for a farm crossing over the tracks of the railway company. No objection was made to the crossing by the company provided that the cost of construction and maintenance be placed upon the applicants. Submission of the railway company was that the conveyance of the property to it contained no reservation for a crossing and that, therefore, its statutory obligation to construct the crossing at its own expense was discharged.

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Held Chief Commissioner (January 20, 1917) that while the owner by agreement can extinguish the right of crossing, the statutory right is not discharged by implication, and that notwithstanding the fact that conveyances of railway right of way for valuable consideration cover the value to the right of a farm crossing as well as to the value of the land required, such conveyances do not extinguish the owner's right to his crossing under section 252 of the Act. There must be an express extinguishment either by the conveyance of the right of way itself or by a sufficient agreement otherwise evidenced.

Order for crossing at the company's expense granted. Assistant Chief Commissioner Scott, Deputy Chief Commissioner Nantel, Commissioners McLean and Goodeve concurred.

*Re* COMPLAINTS OF MESSRS. HAY & CO., LTD., WOODSTOCK, ONT., AND J. H. STILL MANUFACTURING CO., LTD., ST. THOMAS, ONT., REGARDING INCREASED MINIMUM WEIGHTS OF FLAT CARS ON LOGS FOR MANUFACTURING PURPOSES.

The increase in the minimum weights of logs on 36-foot flat cars for manufacturing purposes from 35,000 pounds to 50,000 pounds was objected to. It was claimed that it was practically impossible to get the loading asked for, it being stated that on account of the logs being cut in various lengths, from 10 to 16 feet, it was not practicable to load three lengths on a 36-foot-car, and that to get the weight asked for it would be necessary to load three lengths on a 36-foot car.

A table was submitted bearing on the impossibility of standardizing the lengths of the logs so as to get the minimum loading, and it was also submitted that, under the contracts with the farmers who cut the logs and brought them in, it was impossible to get them so arranged in piles at the loading point as to permit, without the added labour cost, a loading on the cars which would permit the minimum asked for.

Exhibits were filed by the railways showing loadings in excess of the minimum requirements. It was contended by the applicants that loadings from timber limits were not characteristic, because mechanical devices were available there for loading which were not available in connection with the business of the applicants.

The Board ruled as follows:—

The difficulties of loading due to the way the business is necessarily carried on have been set out at length. Mr. Hay very frankly stated that it would not pay to cut the logs into shorter lengths because of the extra wastage. He and those connected with him are naturally desirous of getting the maximum of logs from the tree. It is stated it is not feasible to so separate the logs according to size as to facilitate uniform loading. A photograph submitted as an exhibit by him shows how uneven, of occasion, the loading is.

The Board has dealt in particular cases with the question, if any, of the bearing of the particular costs of the manufactures upon freight rates. It has ruled that it is not part of the obligation of the railways, under the Railway Act, to equalize costs of production through lower rates so that all may compete on an even keel in the same market. *Canadian Portland Cement Co. v. G. T. and B. of Q. Ry. Cos.*, 9 *Can. Ry. Cas.*, 211; *Canadian Oil Cos. v. G. T., C. P., and C. N. Ry. Cos.*, 12 *Can. Ry. Cas.*, 357; *Blougas Co. v. Canadian Freight Association*, 12 *Can. Ry. Cas.*, 305; *Dominion Sugar Co. v. Canadian Freight Association*, 14 *Can. Ry. Cas.*, 195.

Reference may also be made to *National Refining Co. v. C.C.C. & St. L.*, 20 *I.C.C.R.*, 649.

In complaint of the *Western Retail Lumbermen's Association of Winnipeg* regarding the increase in the minimum on brick in Western Canada, File 9475-19, it was pointed out that a railway company is not justified in imposing rates on the same commodity differing according to the use to which the commodity is put, and that the same inhibition attached to a differentiation of minimum weights based on the use to which the commodity is put. It was further pointed out that a railway com-

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pany is not under obligation to so adjust its minimum weights as to offset any inherent disadvantages of the business.

It was stated that the question of minimum weights had to be looked at from the standpoint of general convenience, advantage and interest. The generality of use of the commodity involved and how the arrangement met this use had to be considered, and it was pointed out that as to the great bulk of the brick business no objection had been taken to the minimum.

In the generality of the cases the 50,000 pound minimum is not objected to. The evidence submitted points to the conclusion that in a great majority of cases the minimum can be and is loaded. The Board would not be justified in directing a reduction in general to be made because in a particular instance it is slightly in excess of the average loading capacity. The reason why it is so in excess appears to be bound up with the conditions under which the business is carried on. The handicap complained of is part of the cost of production. It is not a handicap which is created by the railway, and the railway cannot with propriety be asked to equalize this handicap.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated January 20, 1917, concurred in by Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

*Re* FREIGHT SHED FOR NEW TORONTO AND MIMICO, G.T.R.

By Order No. 25258, dated August 11, 1916, the Board approved of the location of a new freight shed and passenger station for the village of Mimico, on the G.T.R. and C.P.R. joint section between Toronto and Hamilton.

Before these facilities were constructed the corporation of the village of New Toronto applied to the Board to have the location of the freight shed at Mimico, referred to, changed by locating the shed about a mile further west.

The Board directed that an Order should go amending Order No. 25258 by changing the location of the freight facilities to New Toronto as applied for.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated January 19, 1917, concurred in by Chief Commissioner Drayton and Mr. Commissioner McLean.

TRAFFIC CONGESTION—FILE NO. 27563.

The matter of traffic congestion, particularly with reference to coal, coke, and grain shipments, was brought about not only through shortage of railway equipment, but by other causes. The Chief Commissioner, after reviewing the situation and referring at length to the causes contributing to this congestion, in his reasons for judgment, dated January 8, 1917, says:—

“The imperative duty of the Board is to see, in the first instance, that this country fails in no regard in supplying materials necessary in the prosecution of the war. This, of course, means that the transportation required by the Imperial Munitions Board from the different factories producing munitions or materials required by the Empire and its Allies, must be properly and efficiently supplied. It also means that the full movement of grain and flour required both by Great Britain and by the Allied nations be fully and completely maintained.

“In like manner, it is the duty of the Board to see that the freight movement of the necessities of life for our own people and raw materials required for our export trade, on which depends so much in the matter of exchange and the financial standing of the country, is not allowed to suffer.”

Everything possible was done by the Board to expedite the movement of these commodities with the equipment and competent men available from the freight service. To relieve the situation it was decided that the passenger service must be cur-

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tailed to secure more engines and men, and to this end the railway companies were required to cut off all unnecessary passenger movements. Specific directions were made with respect to the service between Hamilton and Toronto, in which territory there was a daily operation of forty trains. The direction was that sixteen of these trains be cancelled; the railways to determine the ones which could be cancelled with the least possible inconvenience to the public. The restrictions in passenger service to be taken off upon the opening of navigation.

Assistant Chief Commissioner Scott and Commissioners McLean and Goodeve concurring.

*Re* BETTER TRAIN SERVICE ON MASSENA SPRINGS SUBDIVISION, G.T.R.

What was involved here was the train service between Massena Springs and Montreal. Connections at a considerable number of points complicated the situation. It was alleged that the train left Massena Springs at too early an hour in the morning, and petitions were filed asking that it leave about two hours later.

There was also an application for permission to ride on the milk train between Fort Covington and Montreal. An analysis of the individuals and places affected is shown by the names on the petition which was made.

The Board recognized that the early hour at which the train left Massena Springs was a hardship, but held that there was not sufficient traffic moving to justify additional train service to take care of the Massena Springs-Montreal business by itself, and that therefore, it had to be combined with the other local business moving to Montreal.

It was also pointed out that the change asked for would disrupt the existing schedule and cause increased inconvenience to the parties who were not heard in the present application.

It was pointed out that as to the passenger service on the milk train as asked for, the milk train had been put on in the first place because it was complained that this traffic delayed the passenger train coming into Montreal, and under these circumstances it did not appear reasonable to put a new burden of passenger business on the milk train, when the intention in the installation of the milk train had been as above pointed out.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated January 8, 1917, concurred in by Assistant Chief Commissioner Scott and Deputy Chief Commissioner Nantel.

APPLICATION OF THE SHINGLE AGENCY OF BRITISH COLUMBIA *re* COMPLEMENT OF NAILS WITH SHINGLE SHIPMENTS.

Judgment of Mr. Commissioner Goodeve, dated January 4, 1917, concurred in by Chief Commissioner Drayton.

The applicants place their claim for special treatment chiefly upon the ground of the economic saving that would result to one of the chief natural resources in the province of British Columbia.

It was shown in the judgment that the granting of the application would involve a discrimination in rates as against other shippers and manufacturers of shingle nails; and also a discrimination against small independent shingle manufacturers in outlying districts who would be unable to supply nails with their shingle shipments.

On these grounds the application was refused.

## CANADIAN CAR SERVICE RULES—DEMURRAGE CHARGES—FILE NO. 1700-140.

The railway companies applied for an Order amending the Canadian Car Service rules so as to provide that the demurrage charge for each twenty-four hours be increased from \$1 to \$4, and that the additional free time beyond forty-eight hours authorized under the rules be cancelled.

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At the request of the Board, the shippers and shippers' associations represented at the hearing met the railways in an effort to arrive at an agreement. As a result of the conference, the application was abandoned and it was agreed that the free time of forty-eight hours should be allowed after cars had been spotted for unloading.

The Board directed that the necessary changes be made in the Canadian Car Service rules to give effect to this arrangement.

The settlement arrived at was later taken up with the Boards of Trade in the West and the western section of the Canadian Manufacturers' Association. Some of these concurred, while others suggested that the demurrage rates should be even higher, in order to assist in keeping the urgently required rolling stock constantly in service. The objections to the arrangement were made by certain coal and lumber dealers. Held that notwithstanding these objections, the settlement arrived at must, in the public interest, be adopted.

The Chief Commissioner in his reasons for judgment, dated December 23, 1916, referring to this branch of the subject, said:—

“It must be borne in mind that all of the coal delivered in Toronto—which is the only place to protest—originates in American mines, and is hauled to a very large extent in American cars.

“A much larger proportion of the coal brought into Toronto is unloaded mechanically than is unloaded by hand, but in any event, in the public interest, the settlement must be given effect to and the movement of coal facilitated, even if local Toronto dealers are penalized an extra 2 cents a ton for the third day coal cars may be held.”

With regard to the lumber situation. The issue was whether the lumber merchants should or should not have an extra day which, if denied them, merely meant a charge of \$1 a day per car, amounting to a small sum per thousand feet.

Chief Commissioner:—

“The settlement after all is only temporary. It was agreed to by the shippers, not because the railways were entitled to any increased demurrage, not because the railways were not themselves in large part responsible for delays in transportation owing to lack of motive power and cars, but because it was felt that the increased demurrage fee was the only practical way in which a real public emergency resulting from shortage of cars could be in some degree relieved.”

The reciprocal per diem allowance was increased from 45 cents to 75 cents per day per car and an additional penalty of \$5 per car if it moves in a direction away from the lines of its owner when available for return movements. This \$5 penalty was to apply if the company having possession of the car notifies the owning company of the diverted movement; if the owning company is not notified the penalty to be \$10 per car.

The increased tolls allowed under the judgment to come into effect on January 1, 1917.

Judgment concurred in by Assistant Chief Commissioner Scott and Commissioner McLean.

#### *Re* CLASSIFICATION OF “HEALTH SALT.”

Application was made to the Board by the Harry Horne Co., manufacturers of an article known as “Health Salt,” to have it given the third-class rating in the Canadian Freight Classification.

The article is marketed by various firms besides the applicants, namely “Canadian Health Salt” made by E. G. West & Co., Toronto, “British Health Salt” made at Hamilton, and “Kkovah Health Salt” imported and manufactured in Manchester, England.

Held that it would not be possible to compile a practicable classification that enumerated specifically all the items of commerce, or even of the drug trade with its



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long list of staple and proprietary articles; that the grouping of the articles must of necessity be more or less broad. Held also that it was elementary in order that the cheaper goods may be carried any distance that the classification must be arranged according to the ability of the various articles to bear their share of the cost of transportation, so that luxuries and things which move in comparatively small quantities are rated higher than the indispensables. That furthermore, while war conditions may affect rates *per se* they ought to have no bearing on classification. The application was therefore refused.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated December 16, 1916, concurred in by Mr. Commissioner McLean.

COMPLAINT OF J. A. KAMMERER, *re* CANADIAN PACIFIC RAILWAY CO.

This was a complaint of J. A. Kammerer against the Canadian Pacific Railway Company for refusal to place a car for him on a private siding.

It appeared that the Canadian Pacific Railway Company had, on January 2, 1914, made an agreement with the Credit Valley Stone Co., Ltd., granting that company the right to use the siding connecting with the said railway upon certain terms.

Clause 12 of the agreement provided for its termination.

The complainant bought a stone crusher and had it hauled to the premises of the Credit Valley Stone Co. Subsequently the Credit Valley Stone Co. failed and the siding agreement with the railway company was cancelled.

Held that the Board had no jurisdiction to grant the subsequent application, and that a railway company is only bound to supply facilities for the receiving and loading of traffic at a stopping place and not anywhere on its right of way between stations, and that the application must be dismissed.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated December 16, 1916, concurred in by Commissioner McLean.

*Re* CANADIAN NORTHERN TOWN PROPERTIES COMPANY, LTD., AND NATIONAL TRUST COMPANY, LTD., AND MCKENZIE MANN & CO., LTD., FOR LEAVE TO CROSS THE CANADIAN NORTHERN RAILWAY.

These applications were made under section 237 of the Railway Act. Notices of the applications were served upon the municipalities interested and the Department of Public Works at Edmonton for the crossing in Alberta, and the Highway Commissioners for the province of Saskatchewan for the crossing in that province. The provincial authorities offered no objection to the crossings, provided that the cost of construction and maintenance be borne and paid by the applicants.

The applicants pointed out that their interests were not of a permanent character, but that the highway was; that as registered taxpayers in the municipality they paid a large proportion of any cost under the ordinary mode of assessment; and that the cost, therefore, should be distributed among the property owners. In other words, that it should be placed upon the municipality.

Held per Chief Commissioner, for the reasons set forth in his memorandum of December 6, 1916, that as townsite companies, after the property had been sold and paid for, would, in all probability, cease to exist and there would be no practical way in which the responsibility of maintaining the crossings could be enforced; and that as the whole question is one for the local authorities rather than the Board, the Board should consider whether as a matter of administration and practice any more highway crossings should be authorized by the Board, except where required by the appropriate department of the local Government or the municipality.

The memorandum, under direction, was submitted to the provincial authorities with the request that they submit their views on the question, giving the Board a reference to the sections in the different local Acts relating to the constitution of highways.

## COAL TRANSPORTATION TRAFFIC PRACTICES.

The Board's attention was forcibly brought to the acute coal situation in the West, caused not only by the scarcity of labour and strikes at the mines, but directly by car shortage and the refusal of railway companies to provide coal miners with cars required for coal to be delivered at points on the lines of other railways. The question is fully dealt with by the Chief Commissioner in his reasons for judgment dated December 8, 1916.

Earlier decisions of the Board were to the effect that railway companies could not reasonably be required to supply cars for a short haul upon its own line and a long haul on the line of another company. *Imperial Steel and Wire Company vs. Grand Trunk Railway Company*, 11 C.R.C. 395, and the *Canadian Pacific Railway Company vs. Nelson and Fort Sheppard Railway Company*, decided by the late Chief Commissioner Killam in 1906.

In view of these authorities, the companies from time to time refused to supply cars to be routed for destinations off their own lines.

The question was taken up by the Board and as a result the Canadian Northern at Drumheller supplied open cars for deliveries at C.P.R. points and the C.P.R., at Lethbridge and other points, furnished cars for shipments to points whether on its own line or those of other railways. The condition was aggravated by the further requirements for grain traffic, and efforts were made to encourage the movement of coal during summer months and before the grain rush.

Chief Commissioner:—

“ I am of the opinion that the Board must, in the first instance, lay down the general principle that coal must be moved, not only to points on the originating line of railway, but also to points on other lines.

“ Cars must be supplied for this purpose as well as for delivery at points on the originating line to the full extent cars are available. In all cases where transfer at the junction point results in the line on which the traffic originates obtaining the long haul, the duty is thrown upon that line to supply the cars. In cases where the long haul is enjoyed by the receiving instead of the originating line, the receiving line must supply the cars. In cases where the line that ought to supply the cars, under these principles, is unable to supply them, then the other line, although not enjoying the long haul, shall supply the cars, but shall be paid by the line in default a per diem charge of \$1.25 instead of the usual per diem of 45c., and this increased per diem charge shall be collected in the case of all such cars from the time the car leaves until it is returned to the line of the owning company.”

While the jurisdiction of the Board to regulate the per diem allowance might be open to question, there is no question as to its control over the division of through rates, and the per diem allowance method was considered an easier and more simple solution than a rearrangement of through rate divisions, which might be made applicable to meet the emergency.

Under the facility clauses of the Railway Act, the Board may order companies to furnish at the place of starting and at the junction of the railway with other railways adequate and suitable accommodation for the receiving and unloading of traffic offered for carriage, and for these purposes it may direct that specific works be constructed—or that cars, motive power or equipment be allotted, distributed, used, or moved as specified by the Board.

In view of these powers, the Chief Commissioner expressed the opinion that the Board had jurisdiction to make the Order above indicated.

The receiving company was required to return cars promptly to the owning line, and, in order to meet emergencies, companies without sufficient equipment were directed forthwith to make necessary changes in flat or live stock cars to enable them to carry coal.

Assistant Chief Commissioner Scott and Commissioner McLean concurred.

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## PER DIEM CHARGES.

The per diem charge of 45 cents has remained stationary notwithstanding the shortage of car equipment and that the cost of freight cars has advanced. Railways have placed embargoes on the traffic of other lines with the result that shippers are penalized for the misuse of cars by railways to a greater extent than the railways themselves are. Railways short of equipment can pay this 45 cents per diem charge and make money. Cars interchanged have been used by the receiving line practically as its own equipment, resulting in car shortage on lines which otherwise would have been able to properly look after their own business. The question of this abuse was taken up with the railway companies.

The Chief Commissioner in his judgment dated December 7, 1916, expressed the view that penalties ought to be provided, and points out that as the use of cars in certain trades differs from that in others, a general rule of close application could not be adopted as a basis for misuse, but that with a large per diem charge the different carriers ought to be able to use at least a fair portion of their own equipment; the penalties to be charged only after the lapse of a reasonable time for the return movement; the railway companies to agree as to what this reasonable time is.

APPLICATION OF THE TOWN OF VIRDEN, MAN., *re* FOOT SUBWAY UNDER CANADIAN PACIFIC RAILWAY COMPANY'S YARD.

This was an application of the town of Virden, Man., for an Order requiring the C. P. R. Co. to construct a foot subway under its tracks at a convenient spot in the said town.

Held that the Board had decided on several former occasions that where a railway company lays out a townsite and benefits from the sale of lots in that townsite that it should assist in providing suitable facilities for the public to get across the railway property in that townsite. Reference was made to the judgment of the late Chief Commissioner Mabee, vol. 11, p. 165, followed by the present Chief Commissioner Sir Henry Drayton, in the *City of Medicine Hat v. C.P.R. Co., Can. Ry. Cas., vol. 16, p. 413*. Held that the principle established in these decisions should be followed in the present case.

Held that an Order should go for a pedestrian subway to be constructed by the Canadian Pacific Railway Company according to plans approved by the Board's Chief Engineer, and that the cost of the subway be equally divided between the railway company and the town of Virden; the work to be completed by July 1, 1917.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated November 25, 1916, concurred in by Chief Commissioner Drayton.

*Re* HAGERSVILLE CRUSHED STONE COMPANY *v.* MICHIGAN CENTRAL RAILROAD COMPANY REGARDING RATES ON CRUSHED STONE.

Direction was given as follows:—

Michigan Central tariff C.R.C. No. 2490, effective November 27, 1915, carried a 70-cent rate from Hagersville to Amherstburg. This rate, adding the increase allowed in the Eastern Rates Case, becomes by tariff C.R.C. No. 2596, effective November 1, 1916, 75 cents. This rate is not changed by Supplement No. 12 to C.R.C. No. 2490, effective November 20, 1916, the history of which tariff has been so far as the Board is concerned, referred to. The supplement amends the rates so that Oldecastle, Paquette, Pelton, Walkerville Junction, and Windsor are given an 85-cent rate.

Amherstburg is about a mile further from Hagersville than is Windsor, the mileages being 171.8 and 170.7 respectively. The distances from Essex to Windsor and to Amherstburg are substantially the same. Both Windsor and Amherstburg are located on the Detroit river. Windsor has a main line movement; Amherstburg has a branch line movement from Essex, and might, if any difference were justified, be

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expected to be on a higher basis. It is a rate established and continued by the railway. As a measure of whether the rate on a main line movement to Windsor is or is not out of line, it is reasonable to make use of it.

In consideration of the various factors affecting the matter, a rate not exceeding 75 cents to Windsor is reasonable.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated November 20, 1916, concurred in by Assistant Chief Commissioner Scott.

APPLICATION OF THE CITY OF CHATHAM FOR REMOVAL OF TELEGRAPH AND TELEPHONE WIRES.

This was an application of the city of Chatham, Ont., for the removal of the wires of the Canadian Pacific Railway Company's telegraph, the Great North Western Telegraph Company, and the Bell Telephone Company, as at present located on King, William, Queen, and Fourth streets, in the city of Chatham.

Held that there was no justification for the continuance of the line of poles and wires of the Great North Western Telegraph Company on King and William streets, and in the public interest they should be removed. Held further that the portion of the application relating to the Great North Western Telegraph Company's poles on Queen and Fourth streets, including the Bell Telephone Company's wires, as they are on the Great North Western telegraph poles, should be dismissed. Held further that if at some future time conditions on Fourth and Queen streets with regard to pole lines are changed, the city of Chatham could make any further application to the Board it desires.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated November 21, 1916, concurred in by Mr. Commissioner McLean.

CAR SUPPLY FOR GRAIN SHIPMENTS.

Complaints were filed with the Board complaining of the failure of the C. N. R. Co. to provide the necessary cars to move the grain, and requesting that the Board make an order under the enabling legislation of 1916 requiring the C. N. R. Co. to furnish all facilities within its powers to carry grain to a point of interchange with another company or any terminal elevator, and directing such other companies to then complete the transportation.

Held, Chief Commissioner in his judgment of November 20, 1916, that it was impossible to do this at the time for two reasons: (1) that the legislation in question which was passed entirely to meet a greater emergency, only comes into operation after the close of navigation, and the Board, therefore, had no jurisdiction at the time to make such an order; and (2) that the first duty of the connecting carrier would be to farmers on its own line whose grain had not been marketed. It was suggested that the railways could very materially assist in seeing that cars were handled with the least possible delay both to and from wheat fields, and producers could similarly assist in seeing that cars were loaded with as little delay as possible. The Chief Operating Officer of the Board proceeded west under direction with a view of further assisting as much as possible the more rapid movement of grain.

THE OTTAWA PAINT WORKS' COMPLAINT.

The complaint was against the advances made in paints, dry or in oil, and lead, white or red, in straight carloads.

The discrimination complained of by Ottawa was that Montreal had been given rates lower than the class tariff which Ottawa had not enjoyed.

Chief Commissioner in his judgment dated November 22, 1916, concurred in by Commissioner McLean, held that so far as paint rates were concerned the case was covered by the judgment in the Eastern Rates Case, and the discrimination could be removed by applying to Montreal the class tariff rate; that the rate on dry white lead was in an entirely different position to the paint rate. No question of discrimina-

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tion was raised. This article being a raw material should take the commodity rate on the other raw material, linseed oil, which was advanced two cents per 100 pounds instead of to fifth-class as asked by the carriers.

C.N.R. SERVICE BETWEEN HUBERDEAU AND MONTREAL.

Complaints were made against the train service given by the C.N.R. on its line from Huberdeau to Montreal, Que., that the trains were rarely on time, that the time allowed in Montreal was entirely too short to enable those going into Montreal to do any business and return the same day, and that it compels passengers to travel the entire distance to Montreal by the C.N.R. instead of availing themselves of the short route by way of the C.P.R. The mileage from Huberdeau to Montreal via C.P.R. from Montfort Junction is 77.6, while the mileage from Huberdeau to Montreal via C.N.R. is 115.7. Complaint was also made by the post office authorities that it interfered with a proper mail service along the route. The service the year before made connection with the C.P.R. at Montfort Junction timed to arrive at Montreal at 9.20 in the morning; leaving Montreal for Huberdeau at 4 p.m., thereby securing to passengers practically the day in Montreal for business.

The company contended that it should be allowed to take advantage of its own line from Montfort Junction east and that it should also be allowed to effect economies to the fullest extent consistent with the proper public service.

The Chief Commissioner in his judgment of November 13, 1916, agreed with the submission of the railway company that it would not be reasonable to order the C.N.R. to operate its Montfort branch in connection with the C.P.R. and lose business to its own line, if it could handle it as well over its own rails. In fact, he would go so far as to say that the C.N.R. was entitled to its own traffic if it could give a service reasonably as good as that obtained over the former connection; but such service, however, was not being given under the present schedule, and the direction was that an Order go requiring the company to replace and maintain the service of the year before.

*Re* JOINT RATES.

A large number of joint tariffs were filed by railway companies. In some of these tariffs filed joint rates were cancelled without substituting new joint rates for those cancelled.

Chief Commissioner Drayton, November 11, 1916, "under the Act the duty is thrown upon the companies of filing joint tariffs to cover transportation in cases where the movement over two or more lines is necessary in order to establish a continuous route and through billing."

Held, that an Order go disallowing all notices of cancellation of joint freight tariffs which have not been superseded by other joint freight tariffs duly filed with the Board and applicable between the same points and to the same classes of traffic. The Order, however, not to be applicable to joint rates which may have been necessary under the former system of railway construction, but which, by reason of the present construction, have become unnecessary.

*Re* APPLICATION OF CANADIAN NORTHERN RAILWAY CO. TO CLOSE STATION AT LOWER ARGYLE, N.S.

The traffic earnings were set out and shown to be approximately only one-tenth of what is called for by the Board's Order in the Flag Station Case. The largest revenue that was alleged by the applicant was \$2,144. This total included an error, however. Adding express business, the best total available is less than \$2,000. The low earning power of the railway was referred to, and it was stated that the matter had to be looked upon from the standpoint of what accommodation was reasonable for

the public to expect. It was held that under the circumstances disclosed it was reasonable to permit the company to close the agency, the earnings being inadequate to justify the retention of an agent.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated November 8, 1916, concurred in by Assistant Chief Commissioner Scott.

#### CAR SERVICE RULES.

Application was made by the Security Traffic Bureau of St. Paul, Minn., for a ruling in connection with claims made by it to the Canadian Freight Association for clients.

The Board had previously expressed the view in connection with a claim for demurrage under the Car Service Rules that "the car was liable to the car-service charge in force at the time of its arrival at destination." On the strength of this judgment the applicants asked a refund of all demurrage charges on the cars in question over the rate in force up to and including December 14, 1912, of one dollar per day. By an Order of the Board made in the fall of 1912 an increase of the demurrage toll from one dollar to two dollars a day for the first 24 hours to which the toll would properly apply, and to three dollars a day for each succeeding 24 hours was allowed. This Order was merely temporary to meet the emergency shown to exist, commencing December 15, 1912, and terminating March 31, 1913, both inclusive. The claim of the applicants was that as each of the cars with regard to which the ruling was asked arrived at destination before the tariff under the temporary Order became effective, the railway could only collect demurrage at the rate of one dollar a day.

Held, Chief Commissioner Drayton, November 9, 1916, concurred in by Assistant Chief Commissioner Scott, and Commissioner McLean, that the demurrage tolls chargeable on cars should be levied under the tariff in force at the date of arrival at destination; that demurrage tolls are recoverable under the Car Service Rules, and are not included in the ordinary transportation tariffs; that the right to demurrage accrues on the default of the consignee, is applicable to each day in default, accrues day by day, and expires just as soon as the default is removed; that demurrage charges have nothing to do with questions of transit one way or the other—they can only arise after transit is completed; that there ought to be no refund and to order otherwise would be to offend against the provisions of the Act prescribing equality of treatment and prohibiting discrimination.

#### *Re* CITY OF BRANTFORD BY-LAW AGAINST WHISTLING AND G.T.R.

The question was raised by the G.T.R. as to the sufficiency and application of a by-law passed by the city, the submission being that the by-law in question was a general one to prevent the obstruction of streets, etc., and that, to be applicable, it must have passed under section 274 of the Railway Act.

Held, Chief Commissioner Drayton, concurred in by Assistant Chief Commissioner Scott, that the statutory duty of the company is quite clear. The question whether that duty has or has not been observed by the company is one for the courts. November 9, 1916.

#### THE VERNON BOARD OF TRADE AND C.P.R.

The Vernon Board of Trade complained of the failure of the C.P.R. to supply sufficient refrigerator cars for shipments from Okanagan Valley.

The matter was taken up with the company with a view, if possible, to obtaining sufficient refrigerator cars to relieve the situation. It was found that this was impossible. It was shown that, owing largely to the unprecedented and unforeseen conditions created by the war, the shortage of refrigerator car equipment was quite general amongst the railways on the American continent. The price of steel and the scarcity of labour made it practically impossible for companies to add to their stock of refrigerator cars to any appreciable extent. The Canadian Pacific Railway Company

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offered to supply lined box cars with racked floors, equipped with a stove and the necessary fuel for each car, and agreed, in view of the emergency, to carry without charge an attendant to be employed by the shipper to accompany such cars to see that the fires were kept burning properly and the shipments protected from damage by frost. This attendant to be carried back free of charge.

Held by the Chief Commissioner, November 9, 1916, that the Board could make no better arrangement or order. Assistant Chief Commissioner Scott concurred.

*Re* DIVISION OF COST OF PROTECTION, G.T.R. CROSSING, COLBORNE STREET, BRANTFORD, ONT.

The railway had put in a day watchman at its own expense. A subsequent adjustment was obtained whereby the work of protecting the track and operating the interlocking plant was looked after by a day and a night watchman. The same parties under these circumstances should have equal division of the cost.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated November 8, 1916.

*Re* COMPLAINT OF THE LAKE SUPERIOR PAPER CO., LTD., SAULT STE. MARIE, ONT., AGAINST EXCESSIVE FREIGHT CHARGES OF THE ALGOMA CENTRAL AND HUDSON BAY RAILWAY CO., ON CARLOADS OF PULPWOOD.

The Lake Superior Paper Company complained of increases in rates on shipments of pulpwood moving a distance of from 175 to 200 miles. The suspension of the tariff was asked for, but it was held that a *prima facie* case for suspension had not been made out, and the tariff was allowed to go into operation.

It was alleged by the applicants that, under an agreement with the railway, the paper company was to have exclusive rights to get pulpwood on the lands of the railway, south from a point 175 miles from Sault Ste. Marie, and stated, further, that north of this there was an arrangement by letter whereunder a blanket rate of \$3 per cord, for the distance of 175 to 300 miles, was to apply. This would work out at 4 mills per ton per mile. The paper company claimed that it had established its business on this basis, and that it was unreasonable to make the change.

The Board held that a contractual basis of the rate referred to did not oust the jurisdiction of the Board as to reasonableness of rates, and that reasonableness of rates, not adequacy of consideration therefor, was the ruling criterion, reference being made in this connection to *Crows Nest Pass Coal Co. v. Canadian Pacific Ry. Co.*, 8 *Can. Ry. Cas.* 33, at pp. 40-41.

An analysis was made of the traffic of the railway, the bulk of which is low grade. Comparisons were made between the earnings and traffic conditions of the Algoma Central and the Temiscouata Railway which is heavily interested in the movement of pulpwood and other forest products. While their operating ratios are substantially the same, the average haul on the Algoma Central is about twice as great as on the Temiscouata, 94½ per cent of the traffic handled by the Temiscouata originates on the road. In the case of the Algoma Central, about 98.9 per cent originates on the road.

The Board held as follows:—

Tariff C.R.C. No. 345 filed provides that the 176-200 mile group shall have a rate of 7 cents. In Eastern Canada, the mileage scale is 6½ cents. The balance of the mileage under C.R.C. No. 345, up to 300 miles, has an 8-cent rate. In the Eastern Canada scale, the rate is stopped as follows: 7 cents for the 201-225 mile group; 7½ cents for the 226-250 mile group; and 8 cents for the balance. Under the rates authorized by the judgment in the Eastern Rates Case, pulpwood rates are for the eastern groupings as follows:—

Over 176 and not over 200 miles, . . . . .	6½ cents
Over 200 and not over 225 miles. . . . .	7½ "
Over 225 and not over 250 miles. . . . .	7¾ "
Over 250 and not over 275 miles. . . . .	8 "
Over 275 and not over 300 miles. . . . .	8½ "

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On the hauls up to 175 miles inclusive, the rates in C.R.C. No. 345 are lower than the approved rates for Eastern Canada. In view of those lower rates for the shorter hauls, and having in further consideration the nature and amount of the traffic on the Algoma Central as compared with the traffic on the lines in Eastern Canada, the rates and scaling as set out in C.R.C. No. 345 are not unreasonable.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated November 8, 1916, concurred in by Assistant Chief Commissioner Scott.

## IMPORT RATES.

Railway companies applied for permission to materially increase their import rates. The importers objected that with high ocean rates the burden on their traffic was already unduly heavy.

Held that while undoubtedly ocean rates were very high, that fact of itself was no reason why companies should be required to carry imports at a probably low and unremunerative basis; that the present application for increased import rates should however, stand until the full effect of the increase authorized under the recent Eastern Rates Case judgment should be demonstrated. See judgment of the Chief Commissioner, dated November 6, 1916, concurred in by Assistant Chief Commissioner Scott and Commissioner McLean.

IN *re* TARIFFS OF TOLLS FOR HEATED CAR SERVICE.

The question of the tariffs from the East to the West has been gone into and the figures of cost submitted by the Canadian Pacific and by the Grand Trunk have been carefully checked.

In dealing with the question of the longer haul movement between the East and the West, the proposed tariff made use of a series of groups, these being as follows: Group A, west of Fort William to Winnipeg; Group B, remainder of Manitoba; Group C, Saskatchewan; Group D, Alberta; Group E, British Columbia, east of and including Kamloops, Penticton, Prince George; Group F, the remainder of British Columbia.

In using the group system, instead of having a flat computation on a mileage basis, the rates taper on the mileage of the group; that is to say, the longer distance obtains the advantage of a somewhat lower rate, if the matter is looked at from the standpoint of mileage alone. The cost items have been carefully analyzed and the groupings have been rearranged, and in this rearrangement there has been considered the characteristic points to which shipments are made. There has also been a revision in regard to rates.

In revising the groupings as set out in the subjoined table, the mileages as given are those from a common typical shipping point in the East, St. Catharines having been taken for this purpose. It may be also stated that the mileages as a rule are averages. This seems fairer. For example, to Group 4, the average distance from Winnipeg to the four terminal points has been added to the mileage from St. Catharines to Winnipeg. The following table sets out the rates which are reasonable for this phase of the service:—

To Groups.	Miles.	Rate.
1. West of Westfort to and including Kenora and Rainy River. . . . .	1,200	\$10 00
2. West of Group 1 to and including Winnipeg and Emerson. . . . .	1,334	11 00
3. Remainder of Manitoba. . . . .	1,538	13 00
4. West of Group 3 to and including Viceroy, Moosejaw, Saskatoon and Prince Albert. . . . .	1,784	15 00
5. Province of Saskatchewan west of Group 4. . . . .	1,024	16 00
6. West of Group 5 to and including the C.P.R. Macleod-Calgary-Edmonton line. . . . .	2,137	18 00
7. North of Edmonton and west of Group 6 to Penticton, Kamloops, and Prince George. . . . .	2,584	22 00
8. West of Group 7 to Vancouver and Prince Rupert. . . . .	2,943	25 00



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The charges above set out may be measured for the group mileages both in terms of ton-mile earnings and car-mile earnings. For this purpose, the loading of 24,000 pounds, the classification minimum for apples, is taken. In the computations per car mile, fractions of a mill are omitted:—

Group.	Per ton mile.	Per car mile.
1.	6/10 of a mill	8 mills
2.	6/10 of a mill	8 "
3.	7/10 of a mill	8 "
4.	7/10 of a mill	8 "
5.	6/10 of a mill	8 "
6.	6/10 of a mill	8 "
7.	7/10 of a mill	8 "
8.	7/10 of a mill	8 "

The proposed tariffs are intended to apply on all traffic requiring heating, and the clause in the tariff that the charge for heating was to be in addition to the car rental as well as the freight charges was open to the construction that it was proposed to make the charge for refrigerator rental authorized under General Order No. 152 in the case of vegetables apply to all other traffic in heated refrigerators. Order No. 152 provides as follows:—

- For any distance not exceeding 300 miles, \$3 per trip.
- For any distance over 300 miles but not exceeding 500 miles, \$5 per trip.
- For any distance over 500 miles but not exceeding 750 miles, \$6 per trip.
- For any distance over 750 miles but not exceeding 1,000 miles, \$7.50 per trip.
- For any distance over 1,000 miles, \$10 per trip.

The proceedings at Calgary show that one of the parties applicant interpreted the tariff as applying to all traffic loaded in heated refrigerators, and this misunderstanding was not corrected. The provisions of the tariff, however, have to be read in connection with the provisions of General Order No. 152 as limited.

It appears, further, that while the car rental refers only to vegetables, in fact its scope is extremely limited, and it does not appear what vegetables can be referred to, except, perhaps, an occasional earload of onions. It was stated at Toronto that it was only in exceedingly exceptional cases that potatoes were handled in refrigerator cars with oil heaters, the normal practice being to have the heating supplied by the shippers themselves, this heating being by coal stoves and the movement not being in refrigerator cars.

The provisions of the General Order looked at in connection with the heated car service charge create an extremely anomalous condition. If, for example, a shipper pays \$5 for a refrigerator car not heated, on a movement from Toronto to Montreal, he would, on a movement of vegetables, if he required the car heated, pay one cent a mile in addition, or a total of \$8.34, whereas a heated car carrying other traffic than vegetables would pay the heating toll of \$3.34, there being no car rental charge in this case; so there is the anomaly of an unheated car costing more than the heated car.

On full consideration of the conditions now existing, it appears that the situation is so different from that existing when Order No. 152 was issued that it should be reseeded; at the same time, this is without prejudice to such application, if any, as may be made, keeping in view the rearranged conditions.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated October 25, 1916, concurred in by the Chief Commissioner, Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

*Re* CROSSING NIAGARA, WELLAND, AND LAKE ERIE RAILWAY OVER MICHIGAN CENTRAL RAILWAY ON SOUTH MAIN STREET, WELLAND.

This was an application of the Michigan Central Railway Company to the Board for reconsideration of that portion of the Board's Order No. 17324, dated August 27, 1912, authorizing the Niagara, Welland, and Lake Erie Railway Company to cross the Michigan Central railway on South Main street.

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It appeared that the Order in question was issued on the consent of the municipality, it dealing chiefly with the right-of-way of the Niagara, Welland, and Lake Erie Railway on the highways of the municipality, and that the municipality was not heard on the subject of the company's tracks on South Main street.

Held that an Order should go amending Order No. 17324, by eliminating from it the authorization to the Niagara, Welland, and Lake Erie Company to cross with its tracks the tracks of the Michigan Central at grade on South Main street, and authorizing the Niagara, Welland, and Lake Erie Company to cross the Michigan Central tracks underneath through the subway. That on the question of the cost the Michigan Central Railway Company should pay half of the cost of the subway not exceeding the \$6,500 offered by the company.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated October 31, 1916, concurred in by Mr. Commissioner McLean.

*Re* PROTECTION AT C.P.R. CROSSING BY THE ST. VINCENT DE PAUL PENITENTIARY TRAMWAY.

The Board was asked by the Canadian Pacific Railway Company and the Department of Justice to decide what, if any, protection should be installed at the crossing in question, and, if some protection was thought necessary, how the cost thereof should be apportioned.

Held that the crossing should be protected by the installation of a half interlocking plant and that each party should pay one-half of the cost of the installation and one-half the cost of renewal and repairing charges in connection therewith. That the plant should be installed by the C.P.R. Company and maintained by it, accounts being rendered to the Department of Justice for its share of the expense, and that the plant should be installed not later than January 1, 1917.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated October 31, 1916, concurred in by Mr. Commissioner Goodeve.

*Re* TRANSFER TRACK, CANADIAN NORTHERN RAILWAY AND CANADIAN PACIFIC RAILWAY,  
MOOSEJAW.

The city of Moosejaw and the village of Avonlea, Sask., desired transfer connection between the C.N.R. and the C.P.R. in Moosejaw. The transfer track proposed by the C.N.R. connected with the C.P.R. on city blocks 154 and 155. The C.P.R. opposed the application as interfering with its terminal property in Moosejaw and made an alternative proposal connecting the tracks of the two companies on city block 155. This latter proposal objected to by the city.

The Chief Commissioner in his judgment of October 21, 1916, expressed the view that the construction proposed by the C.P.R. would be against public interest and productive of more real damage than the construction of the spur through its property which at that time was not being put to any railway use. In addition, the construction favoured by the C.P.R. entailed a crossing of the street railway at grade, while the construction along Maple street suggested by the city and the Canadian Northern Railway carried the spur under the overhead bridge on Fourth avenue.

Held, that the transfer track and connection should be constructed on city block 155. The city concurred upon terms to the construction through blocks 172, 155, and 156 and the use of the streets, and the direction was that work in accordance with the corrected plans filed be commenced at once and completed without delay, if men were available for the purpose. The city to be at no loss or damage resulting from the work on its streets.

*Re* RIVERDALE PARK CROSSING, TORONTO.

This was an application by the city of Toronto for protection during the summer months at the crossing of the tracks of the Canadian Pacific, Canadian Northern and Grand Trunk Railway Companies' lines over a foot path connecting the portions of Riverdale Park which are separated by the Don river and the tracks in question.

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Held that a watchman should be employed from the 1st May until the 31st October in each year, and that the cost of the watchman during the three months should be divided among the four parties concerned, and the city of Toronto should pay 25 per cent, the C. N. R. 40 per cent, the C. P. R. 25 per cent, and the G. T. R. 10 per cent.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated October 13, 1916, concurred in by Commissioners McLean and Goodeve.

*Re* INTERCHANGE CONNECTION, LAKE ERIE AND NORTHERN RY., TORONTO, HAMILTON AND BUFFALO RY., AND GRAND TRUNK RY., BRANTFORD.

Application for interchange tracks was made to the Board by a large number of manufacturing concerns in the city of Brantford. It appeared that the chief object of their desiring the interchange was to enable them to get prompt shipment in or out from there to the C. P. R. points.

Held that the putting in of an interchange as applied for would be of great benefit to a number of important industries in Brantford; that it was clearly in the public interests and would not be seriously prejudicial to the business of other companies, as while it would take some business from them it would bring new business to them.

Held that an order should go granting the application, and that the order should be a permissive one allowing the Lake Erie and Northern Railway Company to construct the interchange track.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated October 11, 1916, concurred in by Mr. Commissioner McLean.

APPLICATION OF CITY OF HAMILTON *re* CONVEYANCE BY THE HAMILTON RADIAL ELECTRIC RY. CO. OF CERTAIN LANDS FOR THE EXTENSION OF BIRCH AVENUE.

This was an application of the city of Hamilton for an order that the Hamilton Radial Electric Railway Company convey a piece of property required for the extension of Birch avenue in the city of Hamilton to the city.

The application involved a question of the interpretation of the provisions of the Board's order 15241, dated October 11, 1911. Clause 1 of the said order stated as follows:—

“That the city corporation shall construct the extension of Birch avenue from its present northerly terminus to Gilkison street as shown on the annexed plan, and the cost of such construction shall be paid by the city corporation.”

Held that there was nothing to warrant the Board in coming to the conclusion that the city had the right to take the railway company's property for an extension of Birch avenue without paying for it, and that the application should accordingly be refused.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated October 13, 1916, concurred in by Mr. Commissioner McLean.

*IN re* APPLICATION OF THE CANADIAN CAR SERVICE BUREAU FOR RULING ON CONDITIONS IN CANADIAN BILL OF LADING AND CANADIAN CAR SERVICE RULES.

The ruling was as follows:—

The Canadian Bill of Lading sets out a period of seventy-two hours' free time in the case of bonded goods. The United States Bill does not refer to clearance of customs. The National Demurrage Rules, however, provide for twenty-four hours for this purpose.

Section 5 of the United States Bill of Lading contains in the second paragraph thereof the words: “Nothing in this section shall be construed as lessening the time allowed by law or as setting aside any local rule affecting car service or storage.”

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Rule 2 of the Car Service Rules provides for forty-eight hours' free time. Subsection (d) of the same rule allows twenty-four hours additional free time for clearance of customs.

The Car Service Rules thus earmark twenty-four hours for the clearance of customs where such service is necessary. The Board ruled in the case of the Wood Coal Company and the Barber-Ellis Company, above referred to, that the twenty-four hours additional free time for the clearance of customs was the first period in point of time, and that under the rule the forty-eight hours for unloading ran from the termination of the time allowed for clearance of customs.

Section 5 of the United States Uniform Bill of Lading already referred to makes this provision, subject to the time allowed by law or by any local rule affecting car service. This is to be construed by the law or local rule in regard to car service in Canada.

The legal situation in the matter in the United States differs from that existing in Canada. There it is open to the individual state legislatures to pass laws dealing with the question of free time, and such laws have been passed by them. The National Demurrage Rules in use in the United States, while they have the endorsement of the Interstate Commerce Commission and a fairly general support, have been taken up by acceptance and not as a result of a formal Order. These rules came into force after the Bill of Lading in question was adopted. In Canada, the Car Service Rules are in force as a result of the Order of the Board; so, also, are the provisions of the Bill of Lading; so both of these are part of the law relating to the topic under discussion.

The Car Service Rules constitute a code dealing with the question of average reasonable time for delivery, delays to cars, and penalties for such delays. The Canadian Bill of Lading is a document defining the liability of the carrier. Incidentally, it does refer in Section 6 to the limits of the free time; but this is referred to as defining the period when the liability of the carrier *qua* carrier ceases, the liability thereafter being that of a warehouseman only.

The subject matter of the Car Service Rules and of the Bill of Lading are quite distinct.

Section 2 of the Car Service Rules is concerned with the period of seventy-two hours on bonded freight, made up of forty-eight hours' free time and twenty-four hours for clearance of customs, from the standpoint of the peculiar scope of the Car Service Rules as above referred to.

The Bill of Lading earmarks seventy-two hours as the maximum free time for bonded goods, but it does not say how that time shall be distributed. For this, reference must be made to the Canadian Car Service Rules; and the interpretation of this given in the case already referred to governs.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated October 6, 1916, concurred in by Chief Commissioner Drayton and Assistant Chief Commissioner Scott.

*Re* COMPLAINT OF CHARLES STEVENS, NAPANEE, ONT., *re* EXCESSIVE FREIGHT RATES ON WOOD ASHES.

Application was made for commodity rates on wood ashes in carloads for the purpose of manufacturing potash. The railways proposed the application to wood ashes of the fertilizer rates. It was held by the Board that the rates as proposed by the railways were reasonable.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated October 3, 1916, concurred in by Assistant Chief Commissioner Scott.

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*Re* COMPLAINT ON BEHALF OF MCKENZIE & THAYER, SASKATOON, SASK., *re* CANADIAN NORTHERN RAILWAY RATES ON SHIPMENTS OF BRICK.

What was involved was a movement from a point in the United States to a point in Canada. Between these points no specific through rates were in existence, and it was contended that by taking the sum of rates between points in the United States and the International Boundary, and rates beyond, a lower rate could be obtained than by the lower rate to Minnesota Transfer, plus the through rate from Minnesota Transfer to Saskatoon, and it was contended that, to the extent there was on the locals a lower rate combination, there was an overcharge that should be refunded.

The decision pointed out that, under section 336 of the Railway Act, where traffic moved from a point in a foreign country to Canada by any continuous route, a joint tariff was necessary to be filed.

The joint tariff as filed from Minnesota Transfer was held to be in compliance with the Railway Act, and the Board, therefore, had no authority to make the declaration asked for, or to direct the refund asked for.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated September 28, 1916, concurred in by Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

*Re* COMPLAINT OF T. M. STEVENS & CO., VANCOUVER, B.C., REGARDING ADVANCES IN FREIGHT RATES ON SAGO AND TAPIOCA.

The question of an advance in rates on sago and tapioca in connection with the publication of tariff, is involved.

The tariff as filed bears on its face the statement that it is issued July 7, 1916, effective August 1, 1916. As a matter of fact, the filing date with the Board was later, it not being until July 13 that the tariff in question was received.

Under section 328 of the Railway Act, as amended by 1 and 2 Geo. V, chap. 22, section 11, it is provided that when a special freight tariff advances any toll previously authorized to be charged under the Railway Act, the company is to file and publish such tariff 30 days previous to the date the tariff is intended to take effect.

In view of the fact that the tariff was issued as of July 7, 1916, effective August 1, 1916, and the further fact that it was not filed with the Board until July 13, the non-compliance with the provisions of the Railway Act was taken up with the railway companies. The answer of the Great Northern is submitted by its solicitor, Mr. Haydon, said answer being sent out in the letter of the general solicitor of the company. It states, *inter alia*, that "the Interstate Commerce Commission usually allows rates on import traffic to be put into effect on short notice; that under the circumstances the Canadian Commission should do likewise....."

The Board is advised by the Canadian Pacific Railway Company as follows:—

"In this matter, through an oversight, Mr. R. H. Countiss, who issued Transcontinental Tariff 26-D neglected to file it with the Board the full thirty days in advance of its effective date as required by sections 328 of the Railway Act.

"Accordingly, I have to request that the Board consent to alter the effective date of the tariff to August 8, and arrangements will be made to refund, on application, the excess charges on any shipments which moved between August 1 and August 8, when it should properly have been effective."

As to the position taken by the general solicitor of the Great Northern that the Board should grant short notice on import traffic, that is manifestly a question of what power is given under the Railway Act. The Board is bound by the explicit provisions of the Railway Act.

As to the suggestion contained in the latter paragraph of the letter of the Canadian Pacific as above quoted, the initial filing not having been in compliance with the

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provisions of the Railway Act, there is no power in the Board to alter the effective date of the tariff to August 1. The full 30 days notice is required in connection with filing with the Board. At best, however, there was only a period from July 13 to August 1 covered by notice, and this does not establish a credit of so many days in connection with a later and amended notice of filing. The tariff as filed has not met the requirements of the Railway Act, and the railway companies cannot legally collect rates thereunder in respect of movements within the scope of the Railway Act. If the railway companies desire to put the tariff in question into force, immediate steps should be taken to file in accordance with the terms of the Railway Act.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated September 9, 1916, concurred in by Chief Commissioner Drayton, Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve.

*Re* INCREASE IN RATE ON COAL FROM NIAGARA FRONTIER VIA MICHIGAN CENTRAL.

This was a complaint made by the city of St. Catharines, the town of Thorold, and other parties interested, against the increase in rates on coal in carloads from the Niagara frontier to Thorold and St. Catharines for Niagara, St. Catharines and Toronto rail delivery.

It appeared that the Michigan Central Railway Company and the Niagara, St. Catharines & Toronto Railway Company had for many years a joint rate in effect on coal from the Niagara frontier to St. Catharines and other Niagara, St. Catharines & Toronto points, of 40 cents per ton, and of this rate the Michigan Central Railway received two-thirds and the Niagara, St. Catharines & Toronto Railway one-third. It appeared further that this rate was cancelled on May 5, 1916, because the companies were unable to agree upon the proportion each company should pay of the revenue.

Held that a joint rate on coal from the frontier to St. Catharines and adjacent points over the Michigan Central & Niagara, St. Catharines & Toronto Railways, should be established, but that it was not reasonable to expect that it should be as low as a one line rate. Held also that the Niagara, St. Catharines & Toronto Railway Company had made out a proper case for an increase. Held also that as far as the Board was concerned, it would accept the new tariff effective on short notice, and it was directed that an Order should go for the establishment, as soon as possible, of the joint rate of 47 cents with the proportion to the Michigan Central Company of 27 cents and to the Niagara, St. Catharines & Toronto Company of 20 cents per ton.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated September 20, 1916, concurred in by Mr. Commissioner McLean.

*Re* CANADIAN NORTHERN AND STOP-OVER CHARGES ON SHIPMENTS OF GRAIN IN GOOSE LAKE DISTRICT.

Complaints were made by shippers that the railways were making a stop-over charge of one cent per 100 pounds on grain transhipped at Saskatoon under the Order of the Board. The railways denied that this charge was being made. The Canadian Northern Railway tariff under which the grain moved provided for a charge of one cent per 100 pounds for extra terminal services limited to milling-and-storage or cleaning-in-transit movements. The Order complained against dealt with the transfer of grain originating on the Canadian Northern Railway tracks in Goose Lake district to the Grand Trunk Pacific for furtherance east. The shippers shipped at the regular Canadian Northern through rate. The division of the joint movement was settled between the railway companies.

Chief Commissioner, judgment dated July 31, 1916, concurred in by Commissioner Goodeve, held that the question turned entirely upon the rate situation applicable to the Canadian Northern Railway; that the rule in its tariff above referred to must be applied to movements made under the substituted service on the Grand Trunk Pacific Railway; and that as a result the one cent per 100 pounds could not be exacted from shippers in

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respect to grain which the Canadian Northern simply handed over to the Grand Trunk Pacific at Saskatoon, but that all grain taken into the elevator for storage or cleaning in transit in respect to which the Canadian Northern could have made the charge under its tariff the charge could still be made notwithstanding that the Grand Trunk Pacific carried the grain east instead of the Canadian Northern Railway.

*Re* PROTECTION OF CROSSING OF CANADIAN PACIFIC RAILWAY AT TWELFTH STREET,  
NEW WESTMINSTER, B.C.

The city applied for the installation of a bell at this crossing. Both the Canadian Pacific Railway and the British Columbia Electric cross Twelfth street close to each other. The electric railway company's crossing is protected by a bell. The Board's Engineer reported that if another bell was installed it would be necessary at least to bond the track on each side of the street for 400 or 500 feet, and as the tracks are only used for switching purposes, the cars would necessarily have to stand at times on the bonded area waiting to be routed to the different tracks west of the street, switches of which are close to Twelfth street. The result would be a constant ringing of the bell until the cars were clear of the bonded area and might be the cause of the real danger point being overlooked.

Held, Chief Commissioner Drayton, July 27, 1916, concurred in by Commissioner Goodeve, that an Order go requiring the Canadian Pacific Railway Company to stop and flag its trains over the crossing.

THE VANCOUVER, VICTORIA AND EASTERN RAILWAY AND NAVIGATION COMPANY AND THE  
MUNICIPALITY OF BURNABY.

The railway company applied for approval of changes in its line of railway involving the carrying of North street over the railway by means of a bridge. The municipality objected first, that this unnecessarily interfered with its rights in the North road, and second, as to the character of the construction. The railway proposed a wooden structure, the municipality contending that if the crossing applied for was allowed a steel bridge should be constructed. The municipality's suggestion was that the railway should be carried under the North road by means of a tunnel.

Held, Chief Commissioner, in his judgment dated July 28, 1916, concurred in by Commissioner Goodeve, that a steel bridge with a width of 24 feet on the road and six foot sidewalks extending on each side should be provided at this crossing; the railway company to file detail plans embodying these directions.

*Re* PROOF COPIES OF THE PROPOSED NEW CANADIAN FREIGHT CLASSIFICATION NO. 17. FILE  
NO. 25672-9.

The new classification made not only radical changes in ratings but substantial changes in the rules as well. These changes made it difficult for the Board and practically impossible for shippers to properly consider the effect of the new rules and the new classification without definite information as to all the changes sought.

Held, Chief Commissioner, July 26, 1916, concurred in by Assistant Chief Commissioner Scott, that an Order should go directing the railway companies to file with the Board and serve on the parties a statement showing, in the first instance, all changes made in the Rules and the grounds on which the changes are sought to be justified, and showing the results the changes would make on traffic in Eastern and Western Canada respectively.

*Re* COMPLAINT OF MESSRS. DOUCET & FRERES, GRANDES PILES, P.Q., *Re* FREIGHT RATES ON  
BRICK.

The complaint as launched involved two matters. First, the question as to whether the railway company was under obligation to reduce rates in order to offset the unfavourable economic condition of the producer; and, second, the question of the general reasonableness of the rates in themselves.

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It was pointed out in the judgment of the Board that there was no such obligation under the Railway Act to reduce rates to offset any unfavourable economic condition to which the applicants might be subjected. The obligation was simply to enforce reasonableness of rates, and the rate factor was only one factor in connection with the general situation.

As to the general reasonableness of the rates, it was said:—

The question of the general reasonableness of the rates may now be dealt with.

The applicants complain of the rates to various points. They state they had decided to take a contract with people in Yamachiche, hoping to get a rate of 3½ cents; but they found they were being asked 5 cents, and this rate seemed to them to be unfair. The applicants claim that formerly there was a 3½-cent rate to Yamachiche.

The Board's tariff files show no records of a 3½-cent rate from Grandes Piles to Yamachiche. Before January 1, 1911, there was a rate of 4½ cents, this being the rate charged in accordance with the railway company's special mileage scale on brick and other building materials. Effective February 1, 1911, the rate was raised to 5 cents, at which point it has since stood. The Applicants stated that in 1915 there was a rate of two cents to Garneau Junction, and that for one cent extra they could get to Grand' Mere and Shawinigan Falls, on the Canadian Northern. The Board's records do not show a 2-cent rate from Grandes Piles to Garneau Junction. The rate shown is 3 cents.

Complaint is made regarding the rate to Montreal. The applicants state that they formerly had a rate of 5 cents to Montreal. This rate is now, and has been since August 1, 1913, 5½ cents.

To Shawinigan Falls and Grand' Mere the Canadian Pacific mileages are 51 and 57 miles respectively, but it is only 6.6 miles to Garneau Junction, where connection is made with the Canadian Northern, and the latter's distance thence to Shawinigan Falls and Grand' Mere being under four miles, the situation falls within the scope of the General Interswitching Order.

At the hearing Mr. Macdonell, for the Canadian Pacific, admitted this as the explanation of the joint 4-cent rate. But in this computation he includes the full interswitching toll of 1 cent, whereas it should only be half a cent. Consequently any shipments which have been charged 4 cents have been overcharged ½ cent, and adjustment should be made accordingly.

As indicated, there is a mileage scale on brick and other building materials. This is the scale which is charged in respect of the destination points referred to by the applicants, excepting Montreal. To Montreal the scale rate would be 8 cents. The rate actually charged of 5½ cents is, therefore, 2¼ cents below scale. A reduction is made in order to allow the longer distance points to compete in the larger consuming markets. This is to the advantage of the producers located at the longer distance.

Reference is made by the applicants to the fact that there are shipments from competing plants at St. Tite, on the Canadian Northern, to Shawinigan Falls, Grand' Mere, and Montreal, and that these shipments are made on the rates they desire to obtain from the Canadian Pacific. The rate from St. Tite to Montreal is 5 cents. This is a one-line Canadian Northern haul, and the rate of 5 cents is a special rate for the distance of 106 miles. The rate to Shawinigan Falls and Grand' Mere, viz., 3½ cents, is the single line rate for the distance involved, 11 and 18 miles respectively.

Aside from the lower rate basis to Montreal, the reason for which has been explained, the brick movements in the province of Quebec are looked after generally on the special mileage scale, no lower rates being given to other shippers than the scale rates. A departure from the general rate basis would, therefore, be a preference in favour of the applicants and discrimination against their competitors. The application cannot be allowed.



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The facts are fully set out in the judgment of Mr. Commissioner McLean, dated July 26, 1916, concurred in by Assistant Chief Commissioner Scott and Deputy Chief Commissioner Nantel.

*Re* COMPLAINT OF F. L. GETZLER, MONTREAL, QUE., *re* RATES ON PIG IRON IN CARLOADS.

In this complaint there was involved the question whether a movement under a combination of a class and commodity rate which gave a lower total than the through rate between the points in question governed; that is to say, what was involved was a question of refund.

The Board points out in its judgment that the through rate between the points in question was legally in force. The Board has no power to direct a refund, and the only redress it could give was to direct for the future, on application, and a proper establishment of the unreasonableness of the through rate, a reduction of the through rate to the combination of the rates as referred to. No such application was made to the Board.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated July 14, 1916, concurred in by Assistant Chief Commissioner Scott and Deputy Chief Commissioner Nantel.

*Re* COMPLAINT OF MESSRS. GRAHAM CO., LTD., BELLEVILLE, ONT., *re* FREIGHT RATES ON DESICCATED VEGETABLES.

The applicants in shipping from their Michigan factories pay the fourth-class rate under the official classification, which appears to be 31.9 cents from Mayville and 24.8 cents from Casnovia to Montreal. They are asking that the same goods moving from a point in Canada to a Canadian port, under the official classification, should be given a lower classification than when moving from a point in the United States to the same port.

As has been pointed out, the railways are under no statutory obligation to use the official classification on export business from Canadian points to Canadian ports. When it is used, as has been pointed out, it, in general, gives a lower combination than is given under the combination of the domestic tariff and classification. That is to say, there is extended to Canadian business the advantage of a rate worked out on the greater volume of business offering in the United States and the effect of competition in reducing the rates to the United States ports. The use of the official classification in Canadian territory thus gives the advantage of maintaining a parity of ports irrespective of volume of tonnage offering.

The remedy asked for by the applicants by way of putting their commodities into the 5th class of the official classification cannot, therefore, for reasons given, be granted.

The combination of the fifth-class rate of the Canadian classification and the domestic tariff from Belleville to Montreal, plus the terminal charge of 2½ cents, gives a rate of 21½ cents. This is the same as the fourth-class export rate under the official classification. The fifth-class rate of the official classification, for which the applicants are asking, would be 18 cents. The fifth-class domestic rate, plus the terminal charge of 2 cents, would give a rate from Belleville to St. John of 31 cents. The fourth-class export rate on which the commodity is moving is 25.8 cents. The Applicants are asking for a fifth-class official rate of 22.1 cents. To Halifax, the combination of the domestic rate and terminal is 32 cents. The fourth-class export basis which the applicants enjoy is 25.8 cents. They are asking for a fifth-class rate of the official classification of 23.1 cents.

At Montreal, the terminal services consist of:—(a) The Harbour Commissioners' switching charge of \$2.50 per car, regardless of weight. On the basis of the minimum weight required for evaporated vegetables by the official classification, namely, 30,000 pounds, this charge is equivalent to 16.67 cents per ton.

(b) Unloading from car to steamship sheds, estimated at 30-35 cents per ton; but this charge may be disregarded, since the fourth and fifth-class rates include handling by the railway company.

(c) Wharfage, 20 cents per ton, of which the railway company pays a half.

(d) Port Warden's fee, 2 cents per ton.

While there is a terminal charge, by tariff, in the case of Montreal of  $2\frac{3}{4}$  cents per 100 pounds, the situation is that the railway absorbs the Harbour Commissioners' switching charge and one-half of the wharfage charge. There remains then as the amount which should properly be set out in the tariff as the sum payable by the shipper as terminal charge 12 cents a ton, Port Warden's fee and half wharfage. There should, therefore, be a correction in the tariffs to the basis of six-tenth cents per 100 pounds, so far as Montreal is concerned.

The question whether port terminals should not be entirely absorbed in the domestic rates has not been spoken to. It is a matter which may be listed for hearing.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated June 23, 1916, concurred in by Assistant Chief Commissioner Scott and Deputy Chief Commissioner Nantel.

CITY OF MOOSEJAW, CANADIAN PACIFIC AND GRAND TRUNK PACIFIC RAILWAY COMPANIES.

The city applied for an Order directing interchange facilities between these two companies in Moosejaw. The Grand Trunk Pacific asked that the transfer be made by constructing the transfer and storage track connecting its branch to the elevator with the Outlook Subdivision of the C.P.R. at a point between Twelfth and Eleventh avenues. The C.P.R. objected to this location on the ground that there was a 1 per cent grade at its Outlook branch; that this connection involved a long haul up its grade, and that as senior to the G.T.P. its interest should be first considered. It suggested a construction and connection nearer the Government elevator. It developed after the hearing that the connection proposed by the C.P.R. involved a 2 per cent grade.

Held, Chief Commissioner in judgment dated July 21, 1916, concurred in by Commissioner Goodeve, that the transfer must be built on the Outlook subdivision of the C.P.R. as applied for by the G.T.P. unless the C.P.R. could modify the grades at the connecting point on the interchange track suggested by it so as to give the G.T.P. a grade, exclusive of curvature, not greater than 1 per cent. In this event the G.T.P. to contribute the sum of \$2,500 towards the cost. If the Outlook branch transfer was made, the G.T.P. to be at the entire cost of the construction.

GREAT WEST COAL COMPANY AND G.T.P.

The Great West Coal Company applied for an Order, under section 226 of the Railway Act, directing the G.T.P. to rebate or refund to the applicant company the sum of \$31,189.30, being the aggregate amount paid by the applicant company for the construction and completion of the spur constructed under Order No. 15253, by way of rebate out of the tolls.

The spur in question was built under an agreement between the parties.

The Chief Commissioner in an oral judgment delivered at the close of the hearing on June 15, 1916, distinguished between the case of a spur constructed under section 222 of the Railway Act and those built under section 226, where the construction is forced upon the company. Section 226 expressly provides for a rebate, and when the amount is refunded the spur becomes the property of the company. In summing up the Chief Commissioner said:—

“The two cases are entirely different. The provisions of section 226 cannot be applied to section 222. Section 222 stands on agreement; section 226 stands on statutory rights which alone give the right of refund.

“The application is dismissed.”

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CANADIAN WESTERN LUMBER COMPANY, LIMITED, AND GREAT NORTHERN RAILWAY COMPANY.  
FILE NO. 19475-24.

The lumber company applied for a direction as to the correct charges to be made and collected by the Great Northern on a shipment of fir and a ruling as to whether the minimum weight required on a car can also be the maximum capacity of the car. The car in question was a 32-foot flat car with a marked capacity of 40,000 pounds. According to the tariff this car would take a 40,000-pound minimum if the same is a 40-foot car with a capacity up to 100,000. The minimum in the case complained of was also the maximum that could be loaded on the car. The tariff of the Great Northern covering the movement of fir and other lighter woods contained an exception to the ordinary minimum of lumber loading of 40,000 pounds by providing that in cars 36 feet in length, when loaded to the "full visible capacity," the minimum would be the actual weight, but not less than 30,000. The argument of the company's representative proceeded on the assumption that the provision as to the "full visible capacity" applied to the car in question.

Held, Chief Commissioner in his interim judgment dated June 1, 1916, concurred in by Commissioner McLean, that the rule as to "visible capacity" could not be applied to a flat car unless the tariff itself supplied information as to the floor area to be occupied and the height to which the loading was to be carried. The tariff in question contained no such provision. The minimum must be left at 40,000 pounds, the marked capacity of this flat car.

*Re* LAKE ERIE AND NORTHERN RAILWAY COMPANY AND CITY OF BRANTFORD. FILE NO. 18034.60.

The railway company apply for approval of location of its station at the corner of Colborne and Water streets in Brantford. The approval of the site necessitated the use of a triangular strip of Water street having a width at the junction of Colborne street of 16 feet 3 inches, and extending along Water street for a distance of fifty-two feet. The railway company had purchased a triangular strip of land on the east side of Water street with a frontage on Colborne of 10 feet, making an opening on to Water street at the angle and on the Colborne street line of thirty-seven feet and at a right angle of thirty-three feet.

The city objects to the approval of the site on the grounds amongst others that the freight traffic for both the applicant company and the Brantford and Hamilton Radial is down Water street and passes the proposed railway station from Colborne street on a down grade of about 7 per cent; that the Brantford and Hamilton Radial Company proposes to pass over the street by a level crossing; that Water street leading from Colborne is on an acute angle, the apex around which the bulk of the freight from Colborne street would have to pass to get to the proposed station; that with the industries already located and those proposed to be located on Water street, the traffic would be too much congested; and, further, that the proposed station does not comply in height with the city's by-law which requires the front of the station to be 30 feet in height from the curb.

The city agrees to the Order on condition that the Canadian Pacific Railway acquire an additional triangular strip of land, shown as "C" on the plan, to the east of that already acquired by it, having a frontage on Colborne street of 22 feet and an extreme depth to Water street, on the east, of 39 feet.

The Board's Engineer recommends that if the company were compelled to take the portion marked "C" and deed it to the city for highway purposes, the city in exchange give to the company the land marked "A" and "B" as shown on the plan.

Held, Chief Commissioner, June 6, 1916, that an Order go approving the location of the station subject to the condition that the company obtains block "C" shown on the city's plan and deeds it to the city for highway purposes; the city to deed to the company blocks "A" and "B" in exchange.

*Re* CAR SERVICE RULES.

Car service charges for the time over the free time allowed by the Car Service Rules are independent of the tariff under which the shipment moved on the railway, and consequently the car involved in the application in question was liable to the Car Service Rules charged in force at the time of its arrival at destination.

The contention of the application that it was the lower car service charge in force at the time the bill of lading was issued was not upheld.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated May 22, 1916, concurred in by Chief Commissioner Drayton.

## CITY OF WINDSOR V. THE CANADIAN PACIFIC RAILWAY.

The city applied for an Order directing the railway company to provide and construct a suitable bridge over the company's railway at its intersection with London street.

In support of the application it was submitted that because of the increase in traffic on London street the present width of the bridge was insufficient and inadequate for traffic passing over it; that the municipality's intention was to pave the street at its intersection with the railway company's line, and before doing so desired that the bridge be repaired and widened; and that the double tracking the Sandwich, Windsor, and Amherstburg Railway proposed putting down on London street of itself necessitated a wider bridge. The company in opposing the application contended that there was no necessity for widening, and as the municipality desired a wider structure it should pay for it; and, also, that there was no power in the Board to order the widening of this bridge unless a case was made out on the ground of public safety.

The Board found as a fact that there was not sufficient traffic to warrant the widening of the bridge.

On the legal issue the Chief Commissioner in his reasons for judgment, dated May 9, 1916, expressed the view that it was similar to that considered in *Hamilton v. T. H. & B. Railway* (Board's file No. 24499) and referred also to *C. P. R. v. G. T. R.*, 49 S. C. R. 525, and *London v. London Street Railway* (Board's file No. 7264) and held, therefore, that the objections raised by counsel for the railway company could not prevail.

The company's responsibility was to maintain the bridge to meet present traffic requirements. The double tracking of the S. W. & A. Ry. Co. necessitated the widening of the bridge. An Order should, therefore, go authorizing the widening, and as the responsibility for maintenance was on the railway company, and as sooner or later the bridge, as a bridge, would have to be replaced, 65 per cent of the cost to be borne by the Canadian Pacific Railway and 35 per cent by the municipality or the S. W. & A. Ry. Co.

The street railway company was not a party to the application, and it was directed, therefore, that an opportunity be given that company to make what submissions, if any, it desired, on the question of costs.

## LONDON AND PORT STANLEY RAILWAY VS. THE CITY OF LONDON.

By Order No. 23753, dated May 22, 1915, leave was given the London Railway Commission, operating the London and Port Stanley Railway, to take possession of, use, and occupy certain lands in the city of London belonging to the Grand Trunk Railway Company, and particularly described in the Order.

The Order was not acted upon, but at the hearing of the application to determine the compensation to be paid therefor, the Board suggested a temporary solution for the consideration of the parties. A modified plan submitted by the London Railway Commission carrying out the Board's suggestion was, upon the report of its Engineer, approved.

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On the question of compensation, the Chief Commissioner, in his judgment dated May 9, 1916, concurred in by Commissioner McLean, expressed the view that it was quite possible this point need never be considered. The London Railway Commission obtained no permanent rights in the lands of the Grand Trunk which were not required by it at the time for railway purposes, and which in all probability would not be required until such time as the work of elevation contemplated would be undertaken. The work of construction to be done by the London Railway Commission at their own expense.

MARITIME TELEGRAPH AND TELEPHONE COMPANY AND DOMINION ATLANTIC RAILWAY COMPANY  
AND BAIRD AND CANADIAN PACIFIC RAILWAY COMPANY.

The Maritime Telegraph and Telephone Company applied for approval of plan and agreement showing the crossing of the Dominion Atlantic with overhead telephone wires, at the first highway crossing west of Port William Station from Halifax, N.S., and H. W. Baird, of Nakusp, B.C., applied for leave to cross under the tracks of the Nakusp and Slocan Subdivision of the C.P.R. with a four-inch stave water pipe at a point four miles from Nakusp.

Upon the general issue whether compensation should be allowed railways for use of their property or not, and the jurisdiction of the Board, the Chief Commissioner, on May 4, 1916, after referring to the pertinent sections of the Act, namely, 246 and 250, under which the applications were made, says in part:—

“The usual rule is, of course, that property shall not be taken or used under any enabling statute without payment of proper and sufficient compensation, unless the Act itself in clearest terms provides to the contrary.

“The Act does not provide for the confiscation of the property of railways or of others. Indeed, the matter of terms and conditions expressly left as they are to the determination of the Board, are quite sufficient to cover any question of compensation that the railway is entitled to.

“Regard, however, must be had to the actual conditions usually applying to applications of this kind.”

and points out, further, that railways stretching, as they do generally speaking, over the whole country, must of necessity be crossed by telephone wires and to a lesser extent by wires of power and light companies, and their tracks must also be crossed underground by sewer, water, and gas pipes. Railway companies, in application of the kind, do not obtain compensation for the use of their property. The issue usually is whether the crossing could properly and safely be made under the circumstances of the particular cases and whether the railway's use of its property was thereby lessened or endangered. The necessity for these crossings is recognized by the railways. It is difficult to determine the compensation, if any, the company should be allowed where wires are erected at such a height over its right of way as not to interfere with the railway's use and occupation.

The Chief Commissioner:—

“The practice of the Board has been to allow such crossings without compensation. The railway is not in any way injured by them. The Order merely creates an easement which can be cancelled or varied should occasion from time to time require it.

“In case of any real or appreciable injury or damage to the railway, or its property, the ordinary rule requiring compensation would, of course, apply.”

*Re* CANADIAN PACIFIC RAILWAY AND NEW YORK CENTRAL AND SUBURBAN TRAIN SERVICE  
BETWEEN MONTREAL AND HIGHLANDS, QUEBEC.

By an Order of the Board, No. 24921, dated April 20, 1916, these railway companies were directed to stop their trains at Highlands as set forth in the Order.

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Complaints were made that as a result of this Order the New York Central was prevented from putting into effect its spring time-table. Order No. 24921 merely fixed the minimum service that Highlands should receive. It did not assume to cover traffic to other points, and there was nothing to prevent the company from augmenting the service if it so desired.

Held, Chief Commissioner Drayton, May 4, 1916, concurred in by Commissioner Goodeve, that the company should continue for the convenience of the public using its line, a service similar to that given during other summer seasons.

LONDON STREET RAILWAY AND GRAND TRUNK RAILWAY CROSSING AT LONDON.

The city of London applied for an Order directing the London Street Railway Company to lay and maintain a double track across the tracks of the Grand Trunk Railway at Richmond street in the city of London. In support of the application it was urged that a double track was necessary to protect the travelling public. The jurisdiction of the Board to make the Order was questioned, it being contended that under section 8 of the Railway Act, the Board only had to do with the connection of crossings from the standpoint of safety so far as the steam railway and its patrons were concerned, that the safety of the public travelling on the cars of the street railway was a question outside the jurisdiction of the Board.

Held, Chief Commissioner Drayton, in his considered judgment dated April 7, 1916, that under the provisions of the Railway Act the Board had jurisdiction to make the Order, and referred to sections 8, 227, 237, and 238.

It was found upon inspection that both south-bound and north-bound street cars were delayed an unusually long time as a result of the slow operation caused by the single track. Held, therefore, that a double track should be ordered.

Upon the question of costs which in view of the street railway company's financial position, the possibility of grade separation, and the relief obtained by the Order it was thought should be dealt with in a special way. The Grand Trunk Railway being senior, there was no suggestion that it should be called upon to contribute. Held, that the new diamonds required be supplied by the city; that the street railway be at the cost of double tracking its track to the rails of the Grand Trunk Railway, and pay the city the sum equivalent to 7 per cent on the expense the city is put to, so long as it operates over the Grand Trunk Railway tracks and uses the diamonds. The ownership of the diamonds to remain in the city.

IN *RE* RAILWAY CROSSING SIGN POSTS AT RAILWAY CROSSINGS AT GRADE.

This was an application by the Brotherhood of Locomotive Firemen and Engineers for an order directing the railway companies subject to the Board's jurisdiction to erect railway crossing sign posts (mile whistle boards) at railway crossings at grade.

After hearing representatives of the men and the railway companies, the Board held that it should not interfere in the matter but should leave the railway companies free to maintain or discontinue the whistle boards if they saw fit, and the application was accordingly dismissed.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated April 6, 1916, concurred in by Deputy Chief Commissioner Nantel and Mr. Commissioner McLean.

APPLICATION OF CANADIAN PACIFIC RAILWAY CO. TO AMEND BOARD'S GENERAL ORDER NO 65.

This was an application made by the Canadian Pacific Railway Company to amend the Board's General Order No. 65 by adding to clause (c) of paragraph 8 of said Order a proviso that the provisions of the clause should not apply to structures adjacent to any side track, spur or siding on the opposite side of which there is a lateral clearance of at least six feet from the gauge-side of the nearest rail, or to structures

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adjacent to any side track, spur or siding on the opposite side of which there is a parallel track situate at a distance therefrom of at least thirteen feet from centre to centre of track.

The effect of this amendment would be to limit the protection of the train crew to one side of the train only, and it was pointed out that many cases would undoubtedly arise where operating signals could not be given from the side upon which the protecting space was provided.

The Board after giving the matter careful consideration decided that the Order should stand, and that the application should be dismissed.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated April 7, 1916, concurred in by the Deputy Chief Commissioner and Mr. Commissioner McLean.

## TAYLOR COMPANY AND THE CANADIAN FLOUR MILLS COMPANY V. PERE MARQUETTE RAILWAY COMPANY.

Wheat was shipped from Goderich and Port McNicoll into Chatham where it was milled in complainants' mills and forwarded at the through rate plus the eastern charge of two cents per 100 pounds for milling-in-transit. Besides the through rate and the milling-in-transit charge the complainants had been subjected to a further charge by the Père Marquette for switching service from and to the transfer track and the complainants' mills. The complainants claimed that this switching charge should be absorbed by the Canadian Pacific Railway and contended that in any event the two charges were illegal and discriminatory against them and in favour of the mills situated on the Canadian Pacific Railway Company's tracks.

Judgment, Chief Commissioner, March 31, 1916, concurred in by Assistant Chief Commissioner Scott, and Commissioner Goodeve, was to the effect that there was no difference in principle between this case and the case of the Anchor Elevator and Northern Elevator Company against the Canadian Northern Railway (File No. 9816) in which the view is expressed that the Interswitching Order was not intended to apply and did not apply to terminals, and that it did not include milling in transit privileges; and that the carrier should not be required to absorb a portion of a switching charge; and that the one cent was a reasonable charge for the stop-over privileges there allowed.

Held, therefore, that transfer stop-over privileges and the work and expense incidental thereto do not include interswitching charges entailed by taking the traffic from the line of another railway company, and that the application must be dismissed.

*Re* MONTREAL & SOUTHERN COUNTIES TRAIN SERVICE TO EAST GREENFIELD PARK.

This was a complaint by the residents of East Greenfield Park, a village some distance south of the St. Lawrence river and approximately ten miles from the city of Montreal, for an improved service on the line of the Montreal & Southern Counties Ry. between their village and the city of Montreal.

Held that it was unreasonable for the company to have no trains stop at East Greenfield Park to bring people into the city between the hours of 8.16 a.m. and 3.18 p.m., and the Board directed that an Order should go that Train No. 131 should stop on flag at East Greenfield Park.

The Board also decided that in order that it might be able to determine whether the stop would be of much service, the company should be required to keep a record of the stops made during the first three months and report to the Board at the end of that time so that it might be able to determine whether the service should be continued.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated March 29, 1917, concurred in by Mr. Commissioner McLean.

IN *re* TELEGRAPH TOLLS.

This was a complaint that the rates into and out of Winnipeg were excessive. The matter devolved into a general investigation of the level of telegraph rates west of the Great Lakes. The decision as rendered, after dealing with the costs of construction as submitted and consideration of the allegation of discrimination as between the section east of the lakes and that west held that statutory obligations held down the rates east of the lakes and further held that there should be revisions of the existing rate schedule. The existing 25-cent rate within any given zone was recognized as being of general acceptance and was continued.

It is the practice of the companies in the case of points located practically on the boundary lines of the sections to provide that these points shall be in both the sections divided by the boundary line, according as the rate is lower. Examples of this have been given in earlier connections. The same arrangement should be continued in the readjustment of the rate areas as directed.

As incidental to the handling of messages, the evidence is that the telegraph companies have provided for free delivery limits in practically all the cities of Canada. Rule 49 of the Canadian Pacific Tariff Book provides that "telegrams will be delivered free within what are considered the corporate limits of towns or villages. Beyond the free delivery limits only the actual cost of delivery service must be collected." The same regulation is to be found in Rule 73 of the Great North Western Tariff Book, and in Rule 61 of the Grand Trunk Pacific. The question to what extent delivery limits may be established is one which must be dealt with by the company, subject to its actions not being discriminatory.

Within sections 1, 2 and 3, there is a provision for a rate of 15 cents, day or night, applying within a distance of 12 miles. It is suggested that this arrangement be made general. The evidence is that this rate is not made use of and that it is in fact a paper rate. A paper rate is not a measure of unjust discrimination, and the question of whether the rate may be justifiably extended to other sections which show no evidence as to a traffic demand for it is a question of traffic expediency for the company to deal with; for the establishment of experimental rates to develop business is a matter which falls within the company's discretion. *British Columbia News Co. v. Express Traffic Ass'n*, 13 *Can. Ry. Cas.*, 177.

In section A and section 1, the excess word rate is 1 cent; in all other sections it is 2 cents per word. The excess word rate in each section should be 1 cent.

As already set out, the rates in the territory embraced in Grand Trunk Pacific sections 4 to 11 are to be the same as those in the adjoining sections 4 to 11 of the Canadian Pacific territory, and the same excess word rates will therefore apply. In the case of messages from sections 2 or 3 into this territory and vice versa, and in similar movements as between sections 15 to 18, inclusive, and this territory, the excess word rates appropriate to the day rates provided for in the Grand Trunk Pacific tariffs may apply as maxima.

Where there is a movement between exclusive offices involving the carriage of a message over two lines, it is recognized that there are costs additional to those pertaining to a message handled by a single company between two points on its own system. At the same time, it is not reasonable that the sum of the full locals should be charged. The companies should, therefore, provide in their tariffs to cover such a movement over two lines, or more than two lines if in such case there be through rates substantially less than the sum of the locals.

The section system is modified as to the transition from one section to another by the 100-mile rule. As provided for in the Canadian Pacific tariffs, this is that a higher rate than 25 and 2 — i.e., 2 cents per excess word — will not be charged between offices that are not more than 100 miles apart by wire mileage, no matter in what different sections these may be. This does not apply in the case of offices east of section 1. A similar arrangement is in existence in the case of the Great North



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Western, although it is not properly provided for by tariff. The Grand Trunk Pacific Telegraph tariffs carry the notation: "A higher rate than 25 and 2 will not be charged between offices that are not more than 100 miles apart (by wire)."

It is suggested that this distance should be increased to 250 miles. The 100-mile distance is something added to the rate section in order to ease the sharp transition from one section to another. It is a concession compared with what is done in freight rate practice; for while there in the case of rates grouped on producing points the attempt is made to have the group rates break between producing points, none the less there is the sharp transition from group to group which is inseparable from the difference in rate. The same thing is presented in any freight tariff where there is a mileage grouping basis, the rate advancing by groups of miles. The 100-mile rule is a reasonable concession to meet this situation in telegraphic transmission, and an addition to it at present is not justified. The arrangement as at present provided for is reasonable and should be continued.

Night rates cover telegrams filed before midnight to be transmitted some time during the night at the convenience of the telegraph company, and delivered in the morning.

The deferred message service thus carried on has a lower basis than that of the day message, but is related to it.

While there is a convenience to the sender because of the lower rate basis, there are also advantages to the company. There tends to be an additional volume of business attracted by the rates so offered; and in addition it enables a more economical utilization of the company's operating staff since it is able to distribute the burden during both day and night.

It was stated by Mr. Camp, in evidence, that the practice of having night rates had existed, so far as his company was concerned, ever since the Canadian Pacific Telegraph department had been in existence.

The Canadian Pacific gives detail for rate groups advancing by 5, 10 and 15-cent steps. For purposes of summary presentation the 25, 30, 40, 50, 60, 75 cents and \$1 rate may be taken. To this may be added a \$1.25 rate to cover the extreme range within Canada of the Grand Trunk Pacific telegraphs. The rates for night rates and for night lettergrams are as follows:—

Where day rate is.	Night rate is.	Night lettergram is	
		First 50 words.	Each additional 10 words or less.
25—1	25—1	25	.05
25—2	25—1		
30—2	25—1		
40—3	30—2	40	.08
50—3	30—2	50	.10
60—4	50—3	60	.12
75—5	60—4	75	.15
1.00—7	75—5	1.00	.20
1.25—8	1.00—7	1.25	.25

In the case of the Canadian Pacific, the Great North Western and the Grand Trunk Pacific each company has night rates applicable between offices on its respective system. The Great North Western has night rates between all its offices and those of the Western Union. In general, the night rate message has the same word basis as the day rate message, viz., 10 words. Attention was drawn to the fact that in section 1 and in the Maritime Provinces 25 words can be sent at night for the day rate, while in the other sections 10 words can be sent. As, however, as pointed out in the next paragraph, there are in these other sections, as in the sections in question, night lettergram arrangements whereby 50 words may be sent for the day rate, it does not appear necessary to follow this phase of the matter further.

There has come into existence of recent years the night lettergram arrangement whereby a deferred message service of greater volume, catering especially to business

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needs, is available. The Canadian Pacific tariff books provide that night lettergrams may be accepted for all checked direct offices in Canada and the United States, i.e., all Canadian Pacific offices in Canada and all Postal Telegraph Offices in the United States. The Great North Western will accept night lettergrams for points on its own lines and for points on the lines of the Western Union. It also accepts such messages for "other line" offices. From a check, it appears that this covers practically all "other line" points in Canada. The Grand Trunk Pacific has night lettergram rates between all offices on its system.

It does not appear that there is any such condition existing as to require at present any specific direction being made.

The facts are fully set out in the judgment of Mr. Commissioner McLean, dated March 28, 1916, concurred in by Assistant Chief Commissioner Scott and Mr. Commissioner Goodeve, and in concurring judgment of Chief Commissioner Drayton, dated March 29, 1916, in which *inter alia* he agrees that the route and financial conditions disclosed do not justify the Board in adopting the size of the section in question as the standard for the whole rate structure.

#### SEPARATION OF GRADES AT BELLEVILLE ROAD CROSSING, C.N.R., NAPANEE, ONT.

Held that the condition of the highway crossing would not warrant the separation of grades at this point; that while the subway would add materially to the safety of the traffic on the highway, the cost of the same would be excessive, and the Board would not be justified, under the circumstances, in placing a substantial part of the cost on the town of Napanee, and as there is no other available source of revenue to defray the cost of the work, the Board decided that under existing conditions the crossing should remain as it is at least for the present.

The facts are all fully set out in the judgment of Assistant Chief Commissioner Scott, dated March 26, 1917, concurred in by Mr. Commissioner McLean.

#### Re INTERCHANGE TRACKS AT BELLEVILLE, ONT.

The Board had already decided in a previous case that there must be interchange of traffic at Belleville between the G.T.R., C.P.R., and C.N.R. companies, and the matter of suitable interchange facilities between each of these companies as the result thereof came up for consideration.

The Board directed that an Order should go for the approval of the interchange tracks as shown on the plan filed with it by the C.P.R. Company, the work to be completed by May 1, 1917, and that the Order should contain a clause setting out that where traffic is between Belleville and a shipping point or destination common to the railway companies concerned, or any two of them, where interswitching facilities are provided, the company upon whose line, including private sidings tributary thereto, the traffic is loaded, should be entitled to the line haul and the privilege of effecting the required delivery on the line of the other company by means of interswitching at destination, provided that the said company can afford facilities and privileges equal to those of the competing carrier at no greater charge.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated March 26, 1917, concurred in by Mr. Commissioner McLean.

#### INCREASE OF EXPRESS DELIVERY LIMITS IN TORONTO.

It appeared that the express companies doing business in Toronto voluntarily established the practice of free delivery of express parcels in that city many years before the Railway Board was established, and that the original limits had been from time to time extended either by the express companies of their own motion, or by Order of the Board.

It also appeared that the present delivery limits did not follow the municipal boundaries, and were not based on any principle of mileage from a central distributing

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office, nor were they arranged on density of population, and that at present sections of the city were without a service and were unjustly discriminated against.

The Board directed that an Order should go defining the free service and the toll service areas and stating that the new arrangements would become effective on May 1, 1917.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated March 23, 1917, concurred in by Chief Commissioner Drayton and Mr. Commissioner McLean.

*Re* DEMURRAGE CHARGES ON PRIVATELY OWNED CARS ON PRIVATE SIDINGS.

This was an application of the Nichols Chemical Co., Ltd., Toronto, who owned a number of private cars specially constructed for the transportation of acids. Rule 12 of the Canadian Car Service Rules cited as follows: "When both cars and tracks are owned by the same private party, no car service tolls shall be charged."

It appeared that the cars in question were not owned by the consignee, and, therefore, were not exempt, under this rule, from the usual demurrage charges, and it was directed that the parties be informed that Rule 12 did not exempt the consignees of the Chemical Co. from the payment of demurrage.

The facts are fully set out in the judgment of Assistant Chief Commissioner Scott, dated March 10, 1916, concurred in by Deputy Chief Commissioner Nantel and Mr. Commissioner Goodeve.

## APPENDIX "B."

## REPORT OF CHIEF TRAFFIC OFFICER, J. HARDWELL.

SIR,—I have the honour to submit, for the Twelfth Annual Report of the Board, a memorandum of the freight, passenger, express, telephone, telegraph and sleeping and parlour car schedules filed with the Board from November 1, 1904, when, by order of the Board, under the authority of section 311 of the Railway Act, 1903, the railway companies commenced filing their tariffs, to March 31, 1916; and from April 1, 1916, to March 31, 1917, inclusive; also, of the more important orders relating to traffic issued by the Board to March 31, 1917:—

SCHEDULES received from November 1, 1904, to and including March, 31, 1916:—

Freight—			
Local tariffs.. . . . .	9,666		
Supplements.. . . . .	21,202		
		30,868	
Joint tariffs.. . . . .	21,524		
Supplements.. . . . .	62,454		
		83,978	
International tariffs.. . . . .	91,337		
Supplements.. . . . .	274,163		
		365,500	
			480,346
Passenger—			
Local tariffs.. . . . .	9,345		
Supplements.. . . . .	11,052		
		20,397	
Joint tariffs.. . . . .	6,147		
Supplements.. . . . .	10,641		
		16,788	
International tariffs.. . . . .	15,056		
Supplements.. . . . .	26,553		
		41,609	
			78,794
Express—			
Local tariffs.. . . . .	4,923		
Supplements.. . . . .	52,132		
		57,055	
Joint tariffs.. . . . .	3,660		
Supplements.. . . . .	12,036		
		15,696	
International tariffs.. . . . .	1,768		
Supplements.. . . . .	961		
		2,729	
			75,480
Telephone—			
Local tariffs.. . . . .	968		
Supplements.. . . . .	1,048		
		2,016	
Joint tariffs.. . . . .	2,251		
Supplements.. . . . .	6,310		
		8,561	
International tariffs.. . . . .	428		
Supplements.. . . . .	6,630		
		7,058	
			17,635
Sleeping and Parlor Car—			
Local tariffs.. . . . .	65		
Supplements.. . . . .	75		
		140	
Joint tariffs.. . . . .	36		
Supplements.. . . . .	73		
		109	
International tariffs.. . . . .	61		
Supplements.. . . . .	193		
		254	
			503
Telegraph—			
Tariffs.. . . . .	102		
Supplements.. . . . .	112		
		214	
			214
Combined totals, all schedules.. . . . .			652,972

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SCHEDULES received from April 1, 1916, to and including March 31, 1917:—

Freight—			
Local tariffs.. . . . .	1,021		
Supplements.. . . . .	2,002		
	<hr/>	3,023	
Joint tariffs.. . . . .	3,860		
Supplements.. . . . .	7,183		
	<hr/>	11,043	
International tariffs.. . . . .	11,718		
Supplements.. . . . .	24,696		
	<hr/>	36,414	
			50,480
Passenger—			
Local tariffs.. . . . .	1,283		
Supplements.. . . . .	1,791		
	<hr/>	3,074	
Joint tariffs.. . . . .	1,147		
Supplements.. . . . .	1,915		
	<hr/>	3,062	
International tariffs.. . . . .	1,661		
Supplements.. . . . .	4,552		
	<hr/>	6,213	
			12,349
Express—			
Local tariffs.. . . . .	123		
Supplements.. . . . .	615		
	<hr/>	738	
Joint tariffs.. . . . .	330		
Supplements.. . . . .	522		
	<hr/>	852	
International tariffs.. . . . .	405		
Supplements.. . . . .	237		
	<hr/>	642	
			2,232
Telephone—			
Local tariffs.. . . . .	79		
Supplements.. . . . .	55		
	<hr/>	134	
Joint tariffs.. . . . .	25		
Supplements.. . . . .	836		
	<hr/>	861	
International tariffs.. . . . .	1		
Supplements.. . . . .	1,274		
	<hr/>	1,275	
			2,270
Sleeping and Parlor Car—			
Local tariffs.. . . . .	16		
Supplements.. . . . .	27		
	<hr/>	43	
Joint tariffs.. . . . .	9		
Supplements.. . . . .	24		
	<hr/>	33	
International tariffs.. . . . .	49		
Supplements.. . . . .	108		
	<hr/>	157	
			233
Telegraph—			
Tariffs.. . . . .	32		
Supplements.. . . . .	32		
	<hr/>	64	
			64
Combined totals, all schedules.. . . . .			67,628
Grand total.. . . . .			720,600

SUMMARY OF TRAFFIC ORDERS OF GENERAL INTEREST ISSUED  
DURING THE YEAR ENDED MARCH 31, 1917.

No. 24862, April 4, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and La Compagnie de Téléphone St. Ours. Limitee, operating in the counties of Richelieu, St. Hyacinthe and Verchères, province of Quebec.

No. 24865, April 4, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Malahide and Bayham Telephone Association, Limited, operating in the counties of Elgin and Oxford, province of Ontario.

No. 24767, April 11, 1916.—Approves a form of release and power of attorney to be signed by physicians and others who desire, for special reasons, to travel on the freight trains and in the baggage cars of the Toronto, Hamilton and Buffalo Railway Company.

No. 24909, April 18, 1916.—Empowers the London and Lake Erie Railway and Transportation Company to sell its passenger tickets to points on or via the Michigan Central Railroad.

No. 24917, April 22, 1916.—Approves a form of release and power of attorney to be signed by physicians and others who desire, for special reasons, to travel on the freight trains and in the baggage cars of the Grand Trunk Railway Company of Canada.

No. 24922, April 26, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the corporation of the township of Dawn, operating in the counties of Lambton and Kent, province of Ontario.

No. 24938, April 25, 1916.—Amends order No. 19570, dated June 13, 1913, by making an allowance of 500 pounds in weight when slats are furnished by shippers in refrigerator cars not equipped with false floors for the carriage of earload shipments of fruit.

No. 24948, May 6, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Kemble-Sarawak Telephone Company, Limited, operating in the county of Grey, province of Ontario.

No. 24976, May 15, 1916.—Prescribes regulations for the handling of fruit from Jordan, Ontario, by the Canadian Express Company.

No. 24977, May 15, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Palace Road Telephone Company, Limited, operating in the county of Lennox and Addington, province of Ontario.

No. 24994, May 22, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and La Cie de Telephone Local de Wotton, operating in the county of Wolfe, province of Quebec.

No. 25025, May 31, 1916.—Approves a form of release and power of attorney to be signed by physicians and others who desire, for special reasons, to travel on the freight trains and in the baggage cars of the Grand Trunk Pacific Railway Company.

No. 25050, June 10, 1916.—Requires the Grand Trunk Railway Company to inter-switch cars between its team tracks and the London and Port Stanley Railway at London, Ont., under an agreement made between the companies in 1870.

No. 25055, June 12, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Dunsford Telephone, Light and Power Co-operative Association, Limited, operating in the county of Victoria, province of Ontario.

No. 25056, June 12, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Cameron Telephone Union, operating in the county of Victoria, in the province of Ontario.

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No. 25057, June 12, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Highland Telephone Company, Limited, operating in the counties of Simcoe and Dufferin, province of Ontario.

No. 25058, June 12, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the corporation of the township of MacDonald and Meredith, operating in the district of Algoma, province of Ontario.

No. 25059, June 12, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the corporation of the village of Coldwater, operating in the county of Simcoe, province of Ontario.

No. 25060, June 12, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Pleasant Valley Telephone Association, operating in the county of Lennox and Addington, province of Ontario.

No. 25061, June 12, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the corporation of the township of Goderich, operating in the county of Huron, province of Ontario.

No. 25074, June 9, 1916.—Requires the Canadian Pacific Railway to accept live stock from the Canadian Northern Railway and to switch same to the east end cattle market, Montreal, at a charge of \$5 per car.

No. 25087, June 19, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Hawley Telephone Association, operating in the county of Lennox and Addington, province of Ontario.

No. 25088, June 20, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the corporation of the township of Mersea, operating in the county of Essex, province of Ontario.

No. 25089, June 19, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Hopetown Telephone Company, Limited, operating in the county of Lanark, province of Ontario.

No. 25098, June 23, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Mink Lake Rural Telephone Company, Limited, operating in the county of Renfrew, province of Ontario.

No. 25106, June 26, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Rosedale and Rural Telephone Company, operating in the county of Frontenac, province of Ontario.

No. 25124, July 3, 1916.—Approves Standard Maximum Mileage Freight Tariff C.R.C. No. 20 of the Edmonton, Dunvegan and British Columbia Railway Company.

General Order No. 167, July 3, 1916.—Permits the railway companies, owing to increased operating expenses, to make certain increases in their freight rates in Eastern Canada.

No. 25205, July 26, 1916.—Prescribes a minimum load of 30,000 pounds for lumber loaded in cars of a capacity of 2,050 cubic feet or less, from Pacific Coast and Interior mills to points east.

No. 25226, July 31, 1916.— Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the South Crosby Rural Telephone Company, Limited, operating in the county of Leeds, province of Ontario.

No. 25230, August 1, 1916.—Permits railway companies in Western Canada to make certain increases in their distributing freight rates from Winnipeg, Portage la Prairie, and Brandon, so as to conform to the basis laid down in the Judgment of the Board in the Western Rates Case, dated April 6, 1914.

No. 25232, July 31, 1916.—Requires the Great North Western Telegraph Company to restore the telegraph tolls charged prior to July 1, 1916, from Le Pas, Man.

No. 25248, August 2, 1916.—Approves Supplement No. 8 to Express Classification for Canada No. 3.

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No. 25261, August 11, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Bethesda and Stouffville Telephone Company, Limited, operating in the counties of York and Ontario, in the province of Ontario.

No. 25279, August 14, 1916.—Amends the Express Classification so as to provide for the carriage of fruit in leno-covered baskets.

No. 25285, August 18, 1916.—Authorizing the Grand Trunk and Canadian Pacific Railways to charge special tolls for detention to through cars containing western lumber and forest products at Sarnia, Ont., and Cartier, Ont.

No. 25298, August 19, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Rydal Bank Telephone System operating in the district of Algoma, province of Ontario.

No. 25306, August 21, 1916.— Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Halton Telephone Company, Limited, operating in the county of Halton, province of Ontario.

No. 25311, August 21, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Blind Line Telephone Company, Limited, operating in the county of Grey, province of Ontario.

No. 25343, September 1, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Westport Rural Telephone Company, Limited, operating in the counties of Leeds, Frontenac and Lanark, province of Ontario.

No. 25344, September 1, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Corporation of the township of Monek, operating in the district of Muskoka, province of Ontario.

No. 25345, September 1, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Corporation of the township of Watt, operating in the district of Muskoka, province of Ontario.

No. 25348, September 1, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Leeds and Frontenac Rural Telephone Company, Limited, operating in the counties of Leeds and Frontenac, province of Ontario.

No. 25437, September 20, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Pleasant View Telephone Company, Limited, operating in the county of Grey, province of Ontario.

No. 25447, September 19, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Zion Line Telephone Association, Limited, operating in the county of Renfrew, province of Ontario.

No. 25448, September 19, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Omeme Telephone Company, Limited, operating in the counties of Victoria and Durham, province of Ontario.

No. 25457, September 22, 1916.—Approves standard Maximum Mileage Freight Tariff C.R.C. No. 1113 of the Toronto, Hamilton and Buffalo Railway Company.

No. 25464, September 25, 1916.—Prescribes a joint rate of 47 cents per ton on coal from the Niagara frontier to Thorold and St. Catharines over the Michigan Central Railroad and Niagara, St. Catharines and Toronto Railway.

No. 25496, October 3, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Mount Horeb Telephone Association, operating in the county of Grey, province of Ontario.

No. 25506, October 3, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Jackson Telephone Association, operating in the county of Grey, province of Ontario.



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No. 25507, October 6, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Clavering Telephone Association, operating in the counties of Grey and Bruce, province of Ontario.

No. 25551, October 20, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Union Telephone Company, Limited, operating in the county of Wellington, province of Ontario.

No. 25561, October 20, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Shamrock and Renfrew Telephone Association, operating in the county of Renfrew, province of Ontario.

No. 25563, October 25, 1916.—Approves Standard Maximum Mileage Freight Tariff C. R. C. 1244 between stations on the lines of the Great Northern Railway in British Columbia.

General Order No. 173, October 26, 1916 (Corrected).—Prescribes tolls for the use of heated refrigerator cars between Eastern and Western Canada.

No. 25570, October 27, 1916.—Authorizes the construction of an interchange track by the Lake Erie and Northern Railway for the forwarding and delivering of traffic between its railway and the Toronto, Hamilton, and Buffalo and Grand Trunk Railways at Brantford, Ontario.

No. 25575, October 27, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Massey Station Telephone Company, Limited, operating in the district of Algoma, province of Ontario.

No. 25576, October 27, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Millbrook Rural Telephone Company, Limited, operating in the counties of Durham and Northumberland, province of Ontario.

No. 25577, October 27, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Ardrea Telephone Association, operating in the county of Simcoe, province of Ontario.

No. 25578, October 27, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Department of Lands, Forests and Mines for province of Ontario, operating from the village of Kearney to several points in Algonquin Provincial park, district of Nipissing, province of Ontario.

No. 25582, October 30, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Wilberforce Rural Telephone Company, Limited, operating in the county of Renfrew, province of Ontario.

No. 25584, October 25, 1916.—Approves Standard Maximum Mileage Freight Tariff C. R. C. No. 1251, between stations on the lines of the Great Northern Railway in British Columbia.

No. 25619, November 11, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the North Cavan Rural Telephone Company, Limited, operating in the county of Durham, province of Ontario.

No. 25630, November 15, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Wolford Rural Telephone Company, Limited, operating in the counties of Grenville and Lanark, province of Ontario.

No. 25636, November 16, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Dore Bay Telephone Company, Limited, operating in the county of Renfrew, province of Ontario.

No. 25656, November 23, 1916.—Requires the Grand Trunk, Canadian Pacific and Canadian Northern Railways to publish joint merchandise tariffs in the territory between Toronto and Montreal on the basis of 2 cents per 100 pounds, first class freight over the former cancelled rates.

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No. 25662, November 24, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Canadian Explosives, Limited, operating in its factory of Nobel, with lines extending to its different departments, in the district of Parry Sound, province of Ontario.

No. 25664, November 24, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Parkhill Rural Telephone Company, Limited, operating in the county of Middlesex, province of Ontario.

No. 25667, November 27, 1916.—Requires the Grand Trunk, Canadian Pacific and Canadian Northern Railways to publish special commodity rates on white lead, in carloads, from Montreal to points in Eastern Canada where paint is manufactured.

No. 25681, November 28, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Mallorytown Telephone Company, Limited, operating in the county of Leeds, province of Ontario.

No. 25687, November 28, 1916.—Approves Supplement No. 8 to Canadian Freight Classification No. 16.

No. 25698, December 4, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Sandwich West Co-operative Telephone Association, operating in the county of Essex, province of Ontario.

No. 25699, December 4, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the East Middlesex Telephone Company, Limited, operating in the counties of Middlesex, Oxford, and Perth, province of Ontario.

No. 25704, December 7, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Mississippi Telephone Company, Limited, operating in the county of Lanark, province of Ontario.

No. 25735, December 18, 1916.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the South McNaughton Telephone Company, Limited, operating for the county of Renfrew, province of Ontario.

No. 25737, December 20, 1916.—Approves Standard Maximum Mileage Freight Tariff C.R.C. No. 23, of the Moncton and Buctouche Railway.

No. 25749, December 21, 1916.—Prescribe telephone tolls for subscribers on Toronto Island during the summer season.

General Order No. 174, December 23, 1916.—Permits increased demurrage tolls by railways in Canada between January 1 and April 30, 1917, with the object of lessening general traffic congestion.

General Order No. 175, December 26, 1916.—Permits increased tolls for demurrage and track storage on grain and lumber held in transit at Cartier, Sarnia, Capreol and North Bay, Ont., for the period from January 1, 1917, to April 30, 1917.

General Order No. 176, December 26, 1916.—Requires railway companies, from October 15 to March 31 in every year, to furnish all available cars for coal shipments, and where the movement is over more than one railway the car to be furnished by the company obtaining the long haul, or if such company is unable to do so, the company obtaining the short haul to supply the car, and to receive a special per diem compensation of \$1.25 per car.

No. 25754, December 27, 1916.—Refuses an application of the Great North Western Telegraph Company for an increase in the charge per word for messages of over ten words in eastern Canada, pending decision by the Supreme Court as to the effect of Acts relating to the Montreal Telegraph Company.

No. 25761, December 28, 1916.—Requires the Canadian Pacific Railway to continue in effect on its western lines special mileage rates on forest products for distances over 500 miles.

No. 25780, January 3, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Fallis Line Telephone Company, Limited, operating in the county of Durham, province of Ontario.

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No. 25797, January 10, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Corporation of the township of Hay, operating in the county of Huron, province of Ontario.

General Order No. 177, January 10, 1917.—Requires tariffs of freight rates from points in the United States to points in Canada to provide that the rates, unless specifically indicated as being competitive, will apply to intermediate points in Canada not mentioned therein by name.

No. 25816, January 23, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Back Line Telephone Association, operating in the county of Dufferin, province of Ontario.

No. 25817, January 23, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Dereham Telephone Company, Limited, operating in the counties of Oxford and Elgin, province of Ontario.

No. 25818, January 23, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Corporation of the township of Medonte, operating in the county of Simcoe, province of Ontario.

No. 25819, January 23, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Norfolk and Tillsburg Telephone Company, Limited, operating in the counties of Norfolk and Elgin, province of Ontario.

No. 25826, January 24, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Falkirk Telephone Company, Limited, operating in the county of Middlesex, province of Ontario.

No. 25827, January 23, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Corporation of the township of Tay (operating the North River Municipal Telephone System), in the county of Simcoe, province of Ontario.

No. 25828, January 24, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the corporation of the township of Harvey, operating in the county of Peterborough, province of Ontario.

General Order No. 180, January 30, 1917.—Approves Supplement No. 10 to Express Classification for Canada No. 3.

No. 25846, February 2, 1917.—Requires the Canadian Pacific to publish a tariff putting into effect a rate of \$3.04 per net ton on feldspar from Maberley, Ont., to East Liverpool, Ohio.

No. 25859, February 6, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Cavan Rural Telephone Company, Limited, operating in the county of Durham, province of Ontario.

No. 25861, February 10, 1917.—Enjoins the Grand Trunk Railway Company from charging a greater rate on lumber from Midland, Ont., to Cleveland, Ohio, than it concurrently charges from Penetang, Ont., to the same destination.

No. 25864, February 12, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Beckwith and Montague Rural Telephone Company, operating in the county of Lanark, province of Ontario.

No. 25877, February 16, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the E. J. Graham private telephone line, owned and controlled by the Riordan Pulp and Paper Company, Limited, operating in the county of Terrebonne, province of Quebec.

No. 25879, February 19, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Sangeen Rural Telephone Company, Limited, operating in the county of Bruce, province of Ontario.

No. 25891, February 15, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the East Luther Telephone Company, Limited, operating in the county of Dufferin, province of Ontario.

General Order No. 183, February 24, 1917.—Extends to express companies the provisions of General Order No. 14 (Order No. 5117), dated July 30, 1908, permitting the filing of certain tariffs by joint agents under power of attorney.

No. 25903, February 26, 1917.—Approves Standard Maximum Mileage Freight Tariff C.R.C. No. 361 of the Essex Terminal Railway Company.

No. 25924, March 6, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Silver Creek Telephone Association, operating in the county of Bruce, province of Ontario.

No. 25925, March 6, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Snake River Telephone Association, operating in the county of Renfrew, province of Ontario.

No. 25926, March 6, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Metcalfe Rural Telephone Company, Limited, operating in the county of Carleton, province of Ontario.

No. 25941, March 16, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the South Diagonal Telephone Association, operating in the county of Grey, province of Ontario.

No. 25942, March 16, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Upper Admaston Telephone Company, Limited, operating in the county of Renfrew, province of Ontario.

No. 25943, March 16, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Udney Telephone Company, Limited, operating in the county of Ontario, province of Ontario.

No. 25944, March 16, 1917.—Approves Standard Maximum Passenger Fare of four cents per mile on Canadian Northern Brazeau Subdivision west of Tannis, Alta.

No. 25954, March 22, 1917.—Prescribes express delivery limits in the city of Trail, B.C.

No. 25956, March 22, 1917.—Permits railway companies to charge \$3 per car for lining cars for the carriage of flaxseed in bulk.

General Order No. 184, March 22, 1917 (amending Order No. 8860).—Requires railway companies to make the following allowances for grain doors at and west of Fort William: Lower car door, \$1.50, upper car door, 75 cents.

No. 25960, March 23, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Corporation of the Township of Flos, operating in the county of Simcoe, province of Ontario.

No. 25968, March 26, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Evergreen Telephone Company, Limited, operating in the county of Renfrew, province of Ontario.

No. 25973, March 27, 1917.—Approves Standard Maximum Passenger Fare of four cents per mile on the Canadian Northern Railway Company's branch lines in British Columbia.

General Order No. 185, March 30, 1917.—Reduces the Freight Classification ratings for carload shipments of veneers.

No. 25976, March 30, 1917.—Approves an agreement for the interchange of telephone services between the Bell Telephone Company and the Eastern Townships Telephone Company, Limited, operating in the counties of Richmond, Compton, Stanstead, Shefford, Drummond and Arthabaska, province of Quebec.

No. 25980, March 30, 1917.—Requires the construction of an interchange track between the Grand Trunk, Canadian Pacific and Canadian Northern Railways at Belleville, Ont.

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## APPENDIX "C."

## REPORT OF CHIEF OPERATING OFFICER, GEO. SPENCER.

OTTAWA, June 16, 1917.

DEAR SIR,—I have the honour to submit herewith, for the Board's 12th Annual Report, a synopsis of the work performed by its Operating Department during the year ending March 31, 1917.

THE REPORTING AND INVESTIGATING OF ACCIDENTS ATTENDED BY PERSONAL INJURY OR LOSS OF LIFE.

During the year, accidents to the number of 1,718, covering 383 persons killed and 1,693 persons injured, were reported to the Board by the various railway companies under its jurisdiction. For particulars, the reader's attention is directed to statements Nos. 1, 3, and 4.

Out of the total of 1,718 accidents reported, as above referred to, accidents to the number of 694, covering 228 persons killed and 628 persons injured, were inquired into.

It will be observed that out of a total of 383 persons killed and 1,693 injured, there were "trespassers" to the number of 129 killed and 79 injured. In this connection, reference is made to statement No. 12.

A perusal of statements Nos. 2, 5, and 6, which are comparative statements of the killed and injured, as between passengers, employees, and others, class of accident and railways, reveals an increase of 46 persons killed and 568 persons injured over the preceding year.

The matter of highway crossing accidents during the past year is set out in detail in statements Nos. 3, 4, and 7.

As to the protection provided at highway crossings during the year, reference is made to statements Nos. 8 and 9.

Attention is directed to statements Nos. 10 and 11, setting out in detail the situation as regards highway-crossing accidents during the past five years. It will be observed therefrom that there has been a total of 556 accidents, covering 252 persons killed and 477 persons injured. There have been 151 accidents at protected crossings, covering 66 persons killed and 122 persons injured. At unprotected crossings there have been 415 accidents, covering 186 persons killed and 355 persons injured. It is pointed out that the number of accidents at highway crossings, wherein automobiles are concerned, is on the increase. A close perusal of statement No. 11 will show that, during the past five years, there have been 83 such accidents, 5 in 1913, 17 in 1914, 13 in 1915, 15 in 1916, and 36 in 1917.

INSPECTION OF SAFETY APPLIANCES ON FREIGHT CARS, AND LOCOMOTIVES.

The work coming under this heading is carried on under the provisions of section 264 of the Railway Act, and the Board's General Order No. 102. Details of the year's work are to be found in the subjoined statements Nos. 15, 16, and 17-A and B. It is obvious that the inspection of some 58,000 cars, with the discovering of defects

totalling 3,495, entails considerable effort both as regards field work and the resultant filing, checking, and recording of the numerous reports, in addition to correspondence necessary in taking up the various defects with the several railway companies.

INSPECTION OF MOTIVE POWER.

This division of the work embraces the entire locomotive and tender and all parts and appurtenances thereof, and is carried on under sections 264-266 and 267 of the Railway Act, and the Board's General Orders Nos. 12, 31, 66, 78, 102, 107, 131, and 171.

Special mention might, perhaps, be made regarding General Order No. 78, commonly known as the Boiler Inspection order. Under the said order, report forms, comprising the result of monthly and annual inspections of locomotive boilers and their appurtenances, to the number of approximately 60,000 have been filed during the year. The checking and reporting of the said reports and transmitting to the railway companies defective or improper conditions reported by our Inspectors, and in addition the correspondence relative thereto, naturally creates an extensive line of work, both as regards field and office.

During the year, locomotives to the number of 6,890 were inspected, out of which 1,210 were found defective, representing 17.56 per cent. In the majority of cases the defects were promptly remedied on attention being called to them, which indicates that, with a few exceptions, the responsible officials are diligent in their efforts to comply with the requirements of the law.

The number of applications for extending of time for removal of flues, as provided for in rule 5 of General Order No. 78, have been very limited, amounting to, perhaps, a dozen or more. The applications were granted in nearly every case as the examinations on the part of our inspectors substantiated the material as filed by the companies with their applications.

Attention is now directed to the fifth, on page 2, and last headings of statement No. 4. These headings reveal the fact that 7 employees were killed and 120 employees injured during the year. The number of investigations made into accidents under the said headings numbered 39, covering 4 killed and 35 injured. It will be observed that quite a number of accidents of this character were not investigated for the reason that they were more or less trivial and due to lack of prudence on the part of the employees concerned.

The number of personal casualties resulting from the failure of locomotive boilers and their appurtenances were, it is gratifying to state, very limited, totalling 1 killed and 9 injured as indicated by the following summary:—

	Injured.	Killed.
<i>Canadian Northern—</i>		
July 19th, engine 2165, Wash out plug. . . . .	1	
Oct. 14th, " 1386, Squirt hose. . . . .	1	
Oct. 18th, " 2120, Water glass. . . . .	1	
Nov. 15th, " 2082, Tube burst. . . . .	1	
Dec. 23rd, " 2436, Water glass. . . . .	1	
<i>Grand Trunk—</i>		
Aug. 20th, engine 2023, Squirt hose. . . . .	1	
<i>Michigan Central—</i>		
Sept. 6th, engine 7565, Tube burst. . . . .	1	
<i>Père Marquette—</i>		
July 28th, engine 605, Tube burst. . . . .	..	1
<i>Canadian Pacific—</i>		
Jan. 19th, engine 3837, Crown sheet. . . . .	1	
Feb. 17th, " 871, Crown sheet. . . . .	1	
Total. . . . .	9	1

It is pointed out that the two crown sheet failures were the result of low water, no contributing causes being found.

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A perusal of the last heading on page 3 of statement No. 4 and the first heading on page 4 of the same statement show that one employe was killed and thirteen injured account falling off of tender while taking coal and water. In this connection reference is made to general orders Nos. 171 and 172 which require locomotives to be equipped with hand railings and foot rests, and the tenders to be equipped with hand railing.

## INSPECTION OF PASSENGER EQUIPMENT, STATION BUILDINGS AND PREMISES.

The work under this heading is carried on by the inspectors while en route taking up various other matters, and has to do with the features of safety, cleanliness, accommodation, etc. Numerous matters have been brought to the attention of the proper officers with good results.

APPLICATIONS AND COMPLAINTS *re* TRAIN AND STATION SERVICE.

A large part of the work of the department is the inquiring into applications and complaints in the matter of train and station service. These number several hundred, and will be found enumerated in an appendix prepared by the Secretary's Department.

It might not be amiss to point out that a great deal of work which would come under this heading was done in connection with the movement of the Western Grain Crop, and also in connection with the fuel situation in Eastern Canada. Difficulties in transportation were brought about very materially by extremely cold and stormy weather.

The time of the Operating Department's staff was taken up with both these subjects more or less continuously from November till March.

In conclusion, it might be stated that in order to accomplish the work briefly outlined above, it has necessitated the travelling of approximately 350,000 miles by the staff of the department.

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STATEMENT No. 1.—Showing the number of Passengers, Employees and other Persons Killed and Injured on the various railways in Canada, under the Board's jurisdiction, for the year ending March 31, 1917.

Name of Railway.	Passengers.		Employees.		Others.		Total.	
	K.	I.	K.	I.	K.	I.	K.	I.
Grand Trunk.....	4	53	42	396	68	100	114	549
Canadian Pacific.....	11	162	73	91	77	72	161	325
Canadian Northern.....		26	15	262	20	30	35	318
Michigan Central.....		6	9	200	8	7	17	213
Grand Trunk Pacific.....		23	8	26	4	3	12	52
Niagara, St. Catharines and Toronto.....			2	1	5		7	1
Pere Marquette.....		2	3	29	2		5	31
Toronto, Hamilton and Buffalo.....				54	5	5	5	59
Quebec, Montreal and Southern.....				6		1		7
Dominion Atlantic.....			1	4	2		3	4
Winnipeg Joint Terminals.....				1	2		2	1
Esquimalt and Nanaimo.....				1		1		2
Montreal and Southern Counties.....		2	1	3	1		2	5
Temiscouata.....				1				1
Algoma Central and Hudson Bay.....		2		1	1	1	1	4
Midland.....				1				1
Hamilton Radial Electric.....						1		1
Algoma Eastern.....					1		1	
Red Mountain.....						1		1
Lake Erie and Northern.....				6		2		8
Quebec Light and Power.....					1		1	
London and Port Stanley.....					1		1	
New York Central.....		1		5	2	3	2	9
Vancouver and Lulu Island.....					1		1	
Ottawa and New York.....				1				1
London and Lake Erie.....		1					1	
Vancouver, Victoria and Eastern.....		2		40	2	1	2	43
Boston and Maine.....			1	4	2	2	3	6
Halifax and Southwestern.....				12		1		13
Hull Electric.....					1	3	1	3
Wabash.....		1		29	6	5	6	35
	16	280	155	1,174	212	239	383	1,693

STATEMENT No. 2.—A comparative statement of Killed and Injured between years ending March 31, 1916 and 1917.

	Passengers.		Employed.		Others.		Total.	
	K.	I.	K.	I.	K.	I.	K.	I.
Year ending March 31, 1916.....	17	140	120	788	200	197	337	1,125
Year ending March 31, 1917.....	16	280	155	1,174	212	239	383	1,693
Increase over 1916.....		140	35	386	12	42	46	568
Decrease over 1916.....	1							



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STATEMENT No. 3.—Showing separately the number of Passengers, Employees, and others Killed and Injured, and the nature of the accidents, for the year ending March 31, 1917.

Character of Accidents.	Passengers.		Employed.		Others.		Total.	
	K.	I.	K.	I.	K.	I.	K.	I.
Derailment.....	1	175	8	58	1	1	10	234
Collision head-on.....		19	2	20	4	6	6	45
Collision rear-end.....	5	14	11	28			16	42
Collision in yard.....			3	12		1	3	13
Collision with cars standing foul of main track.....			2	5			2	5
Collision with cars account open switch.....		10		5				15
Collision at level crossing.....		9		5	2	8	2	22
Public highway crossing protected by gates.....			1	1	9	14	10	15
Public highway crossing protected by bell.....			1	1	3	9	4	10
Public highway crossing protected by watchman.....				1	1	12	1	13
Public highway crossing unprotected.....			2	7	43	91	45	98
Private crossing.....								
Trespassing.....			2	4	127	75	129	79
Working on or under engine.....			7	118			7	118
Unclassified.....	1	18	9	252	6	2	16	272
Adjusting couplers, coupling and uncoupling.....			5	53			5	53
Working on track or bridge.....			3	92			3	92
Falling off hand car, motor or velocipede.....			3	32	1		4	32
Hand car, motor or velocipede struck by train.....			6	7			6	7
Crawling under cars.....				1				1
Crawling through cars over couplers.....				7				7
Caught while passing through cars between couplers.....					1		1	
Cars standing foul.....				4		2		6
Struck by switch stand, water spout, mail crane, etc.....			1	19			1	19
Crushed between cars, buildings, lumber piles, platforms, etc.....			1	17			1	17
Explosion of locomotive boiler.....				2				2
Falling off passenger trains.....	2	11	2	2			4	13
Falling off tender while handling coal.....				6				6
Falling off tender while taking water.....			1	7			1	7
Working in shop.....			1	116			1	116
Riding on pilot of engine.....			1	3			1	3
Overhead bridge.....				2				2
Repairing cars on repair track when moved by engine.....				3				3
Falling off top of cars while walking over train.....			4	21			4	21
Falling between cars going over top.....			2	4			2	4
Train parting and colliding.....		2	1	7	1		2	9
Jumping off train in motion.....	5	18	1	28	6	7	12	53
Attempt to board train in motion.....	1	3	2	26	1	1	4	30
Washout.....			2	1			2	1
Bridge gave way or burnt.....								
Electrocuted.....								
Run down by switch or other engine or moving cars.....	1	1	59	46	3	9	63	56
Passing too close around end of string of cars.....			1				1	
Caught in frog, guard-rail or switch rod.....			2	3			2	3
Caught while throwing switch.....				2				2
Falling off cars while climbing up or coming down side or end ladders.....			2	15			2	15
Falling off cars while working hand brake.....			1	7			1	7
Asphyxiated in tunnel.....								
Handling freight.....			1	50	3		4	50
Loading and unloading O.C.S. material.....				38		1		39
Building and repairing.....				10				10
Working in coal chute.....			3	16			3	16
Cars moved while loading or unloading.....				7				7
Drawbridge open.....								
Repairing cars on running track when moved by engine.....			2	3			2	3
Locomotive dropping crown sheet of fire-box.....				2				2
	16	280	155	1,174	212	239	383	1,693

STATEMENT No. 4.—Showing the character of Accidents sustained by the Persons Killed and Injured on the various railways under the jurisdiction of the Board for the year ending March 31, 1917—*Con*

Name of Railway.	Derailment.		Collision head-on.		Collision rear-end.		Collision in yard.		Collision with cars standing foul of main line.		Collision with cars account open switch.		Collision at level crossing.		Public highway crossing protected by gates.		Public highway crossing protected by bell.	
	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.
Grand Trunk	6	19	3	9	5	9		9	1	2		13	2	16	8	12	2	4
Canadian Pacific	3	137	3	36	8	14	2	1	1	1				2	1	1	2	3
Canadian Northern	1	34			3	13	1	1		2								
Michigan Central		6					1	1						4	2			3
Grand Trunk Pacific		25																
Niagara, St. C. and Toronto																		
Pere Marquette						1		1								2		
Toronto, Hamilton and Buffalo																		
Quebec, Montreal and Southern																		
Dominion Atlantic		3																
Winnipeg Joint Terminals																		
Esquimaux and Nanaimo																		
Montreal and Southern Counties		4																
Temiscouata																		
Algoma Central and Hudson Bay						3												
Midland																		
Hamilton Radial Electric																		
Algoma Eastern																		
Red Mountain																		
Lake Erie and Northern																		
Quebec Light and Power																		
London and Port Stanley																		
New York Central																		
Vancouver and Lulu Islands																		
Ottawa and New York																		
London and Lake Erie																		
Vancouver, Victoria and Eastern						2												
Boston and Maine																		
Halifax and Southwestern																		
Hull Electric																		
Wabush		6																
	10	234	6	45	16	42	3	13	2	5		15	2	22	10	15	4	10

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STATEMENT No. 4.—Showing the character of Accidents sustained by the Persons Killed and Injured on the various railways under the jurisdiction of the Board for the year ending March 31, 1917.—*Con.*

Name of Railway.	Public highway crossing protected by watchman.		Public highway crossing unprotected.		Private crossing.		Trespassing.		Working on or under engine.		Unclassified.		Adjusting couplers, coupling and uncoupling.		Working on track or bridge.		Falling off hand car, motor or velocipede.		Hand car motor, velocipede struck by train.	
	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.
Grand Trunk.....		11	13	27			36	31	2	36	5	83	1	21	1	16	2	3	1	1
Canadian Pacific.....		1	15	39			56	23	3	1	4	10	2	5	2	3	2	3	2	2
Canadian Northern.....			2				11	12	1	20	3	54	1	15		28		19		2
Michigan Central.....			4	1			4	2		2		61		5		23		4		1
Grand Trunk Pacific.....			2	2			4	1		2		7	1	2		3		2		3
Niagara, St. C. and Toronto.....			3	1			4													
Pere Marquette.....									1	5	2	9		2						
Toronto, Hamilton and Buffalo.....		1	2				3	2		11	17		1		7					
Quebec, Montreal and Southern.....			1						2											
Dominion Atlantic.....									2											
Winnipeg Joint Terminals.....									2											
Esquimaux and Nainaimo.....																				
Montreal and Southern Counties.....											1				1					
Temiscouata.....																				
Algoma Central and Hudson Bay.....									1	1										
Midland.....																				
Hamilton Radial Electric.....																				
Algonia Eastern.....																				
Red Mountain.....																				
Lake Erie and Northern.....																				
Quebec Light and Power.....			1																	1
London and Port Stanley.....																				
New York Central.....			2	3						3		1								
Vancouver and Lulu Island.....																				
Ottawa and New York.....																				
London and Lake Erie.....																				
Vancouver, Victoria and Eastern.....			1							2	19				10					
Boston and Maine.....																				1
Halifax and Southwestern.....																				
Hull Electric.....		1	4	1																
Wabash.....																				
	1	13	45	98			129	79	7	118	16	272	5	53	3	92	4	32	6	7

STATEMENT No. 4.—Showing the character of Accidents sustained by the Persons Killed and Injured on the various railways under the jurisdiction of the Board for the year ending March 31, 1917—*Con.*

Name of Railway.	Crawling under cars.		Crawling through cars over couplers.		Caught while passing through cars between couplers.		Cars standing foul.		Struck by switchstand, water spout, mail train, etc.		Crushed between cars, buildings, lumber piles, etc.		Explosion of locomotive boiler.		Falling off passenger train.		Falling off tender while handling coal.	
	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.
Grand Trunk.....				5		1		2										4
Canadian Pacific.....									13			6						
Canadian Northern.....				1					1			2						5
Michigan Central.....				1				1	2			7						3
Grand Trunk Pacific.....									3			2						
Niagara, St. C. and Toronto.....																		
Pere Marquette.....	1																	
Toronto, Hamilton and Buffalo.....																		
Quebec, Montreal and Southern.....																		
Dominion Atlantic.....																		
Winnipeg Joint Terminals.....																		
Esquimaux and Nauyasoo.....																		
Montreal and Southern Counties.....																		
Teniscouata.....																		
Algoma Central and Hudson Bay.....																		
Midland.....																		
Hamilton Radial Electric.....																		
Algoma Eastern.....																		
Red Mountain.....																		
Lake Erie and Northern.....																		
Quebec Light and Power.....																		
London and Port Stanley.....																		
New York Central.....																	1	
Vancouver and Gulf Islands.....																		
Ottawa and New York.....																		
London and Lake Erie.....																		
Vancouver, Victoria and Eastern.....																		
Boston and Maine.....																		
Halifax and Southwestern.....								1										
Hull Electric.....								2										1
Wabash.....																		
	1		7	1			6	1	19	1	17			4	13			6

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STATEMENT No. 4.—Showing the character of Accidents sustained by the Persons Killed and Injured on the various railways under the jurisdiction of the Board for the year ending March 31, 1917.—*Con.*

Name of Railway.	Falling off/ender while taking water.		Working in shop.		Riding on pilot engine.		Overhead bridge.		Repairing cars on repair track when moved by engine.		Falling off top of car while walking over train.		Falling between cars going over top.		Train parting and colliding.		Jumping off train in motion.		Attempt to board train in motion.	
	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.
Grand Trunk.....	2	48	1	31	2	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Canadian Pacific.....	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Canadian Northern.....	2	16	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Michigan Central.....	1	30	1	1	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Trunk Pacific.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Niagara, St. Catharines and Toronto.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pere Marquette.....	1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Toronto, Hamilton and Buffalo.....	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Quebec, Montreal and Southern.....	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dominion Atlantic.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Winnipeg Joint Terminals.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Esquimaux and Nainaimo.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Montreal and Southern Counties.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tennessee.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Algoma Central and Hudson Bay.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Midland.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hamilton Radial Electric.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Algoma Eastern.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Red Mountain.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lake Erie and Northern.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Quebec Light and Power.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
London and Port Stanley.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
New York Central.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Vancouver and Lady Island.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ottawa and New York.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
London and Lake Erie.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Vancouver, Victoria and Eastern.....	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boston and Maine.....	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hull and Southwestern.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hull Electric.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wabash.....	1	7	1	116	1	3	2	1	3	4	21	2	4	2	9	12	53	4	30	1





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STATEMENT No. 5.—Comparative statement in totals of Killed and Injured between years ending March 31, 1916, and March 31, 1917, separately for each and every accident.

Character of Accidents.	1916.		1917.		1917.			
	K.	I.	K.	I.	Increase.		Decrease.	
					K.	I.	K.	I.
Derailment.....	6	55	10	234	4	179		
Collision head-on.....	4	5	6	45	2	40		
Collision rear-end.....	11	76	16	42	5			34
Collision in yard.....	26	31	3	13			23	18
Collision with cars standing foul of main track.....	1		2	5	1	5		
Collision with cars account open switch.....		3		15		12		
Collision at level crossing.....		1	2	22	2	21		
Public highway crossing protected by gates.....	3	4	10	15	7	11		
Public highway crossing protected by bell.....	9	8	4	10		2	5	
Public highway crossing protected by watchman.....	2	5	1	13		8	1	
Public highway crossing unprotected.....	31	57	45	98	14	41		
Private crossing.....	3	2					3	2
Trespassing.....	143	102	129	79			14	23
Working on or under engine.....	1	50	7	118	6	68		
Unclassified.....	14	212	16	272	2	60		
Adjusting couplers, coupling and uncoupling.....	5	39	5	53		14		
Working on track or bridge.....	1	58	3	92	2	34		
Falling off hand car, motor or velocipede.....		21	4	32	4	11		
Hand car, motor or velocipede struck by train.....	5	3	6	7	1	4		
Crawling under cars.....		1		1				
Crawling through cars over couplers.....	1			7		7	1	
Caught while passing through cars between couplers.....	3	4	1				2	4
Cars standing foul.....	1	3		6		3	1	
Struck by switch stand, water spout, mail crane, etc.....	2	6	1	19		13	1	
Crushed between cars, lumber piles, platforms, etc.....	2	8	1	17		9	1	
Explosion of locomotive boiler.....								
Falling off passenger trains.....	1	12	4	13	3	1		
Falling off tender while handling coal.....		1		6		5		
Falling off tender while taking water.....		4	1	7	1	3		
Working in shop.....	3	99	1	116		17	2	
Riding on pilot of engine.....	2	2	1	3		1	1	
Overhead bridge.....		1		2		1		
Repairing cars on repair track when moved by engine.....				3		3		
Falling off top of cars while walking over train.....	5	22	4	21			1	1
Falling between cars going over top.....		3	2	4	2	1		
Train parting and colliding.....		7	2	9	2	2		
Jumping off train in motion.....	11	38	12	53	1	15		
Attempt to board train in motion.....	8	22	4	30		8	4	
Washout.....			2	1	2	1		
Bridge gave way or burnt.....	1						1	
Electrocuted.....	1						1	
Run down by switch or other engine, or moving cars.....	27	42	63	56	36	14		
Passing too close around end of string of cars.....		1		1	1			
Caught in frog, guard-rail or switch rod.....		3	2	3	2	2		
Caught while throwing switch.....				2				
Falling off cars while climbing up or coming down side or end ladders.....	2	8	2	15		7		
Falling off cars while working hand brake.....		4	1	7	1	3		
Asphyxiated in tunnel.....								
Handling freight.....	2	40	4	50	2	10		
Loading and unloading O.C.S. material.....		40		39				1
Building and repairing.....		6		10		4		
Working in coal chute.....		10	3	16	3	6		
Cars moved while loading or unloading.....		5		7		2		
Drawbridge open.....								
Repairing cars on running track when moved by engine.....		2	2	3	2	1		
Locomotive dropping crown sheet of fire box.....				2		2		
	337	1,125	383	1,693	108	651	62	83
			337	1,125	62	83		
Increase.....			46	568	46	568		



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STATEMENT No. 6.—Comparative statement in totals of Killed and Injured between years ending March 31, 1916, and March 31, 1917, for each railway separately.

Name of Railway.	1916.		1917.		1917.			
					Decrease.		Increase.	
	K.	I.	K.	I.	K.	I.	K.	I.
Grand Trunk.....	122	296	114	549	8			253
Canadian Pacific.....	130	180	161	325			31	145
Canadian Northern.....	31	216	35	318			4	102
Michigan Central.....	11	211	17	213			6	2
Grand Trunk Pacific.....	4	28	12	52			8	24
Niagara, St. Catharines and Toronto.....	2	3	7	1		2	5	
Pere Marquette.....	2	15	5	31			3	16
Toronto, Hamilton and Buffalo.....	6	51	5	59	1			8
Quebec, Montreal and Southern.....		6		7				1
Dominion Atlantic.....	3		3	4				4
Winnipeg Joint Terminals.....	3	1	2	1	1			
Esquimalt and Nanaimo.....	1	3		2	1	1		
Montreal and Southern Counties.....	1	31	2	5		26	1	
Temiscouata.....	1			1	1			1
Algoma Central and Hudson Bay.....	3	2	1	4	2			2
Midland.....		1		1				
Hamilton Radial Electric.....				1				1
Algoma Eastern.....			1				1	
Red Mountain.....				1				1
Lake Erie and Northern.....				8				8
Quebec Light and Power.....			1				1	
London and Port Stanley.....	1	1	1			1		
New York Central.....		16	2	9		7	2	
Vancouver and Lulu Island.....			1				1	
Ottawa & New York.....	2	4		1	2	3		
London and Lake Erie.....			1				1	
Vancouver, Victoria and Eastern.....		31	2	43			2	12
Boston and Maine.....	1	2	3	6			2	4
Halifax and Southwestern.....	2	7		13	2			6
Hull Electric.....			1	3			1	3
Wabash.....	9	13	6	35	3			22
Maine Central.....	1	1			1	1		
Windsor, Essex and Lake Shore.....	1	1			1	1		
Morrissey, Fernie and Michel.....		2				2		
Central Vermont.....		1				1		
Quebec Oriental.....		1				1		
Great Northern.....		1				1		
	337	1,125	383	1,693	23	47	69	615
			337	1,125			23	47
Increase.....			46	568			46	568



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STATEMENT No. 8.—Showing Highway Crossings at which protection and nature of protection, during year ending March 31, 1917.

Location of Crossing.	Railway.	Nature of Protection.
Talbot Road, just east Courtland Station.....	G.T.R.....	Electric bell.
First crossing east of Coteau.....	G.T.R.....	Day watchman.
Desormeaux St., Tetreaultville.....	C.N.R.....	Electric bell.
Crossing 2 miles east of Lyn, Twp. Elizabeth, County Leeds.....	G.T.R.....	Electric bell.
Rankin St., Campbelltown Village.....	C.P.R.....	Electric bell.
Second public highway crossing two miles south of Brampton.....	C.P.R.....	Electric bell.
First highway crossing east of Mountain Station.....	C.P.R.....	Electric bell.
Waterloo Street crossing, London.....	G.T.R.....	Gates.
Colborne St. crossing, London.....	C.P.R.....	Gates.
Dorchester St., Quebec.....	C.P.R.....	Gates.
Crawford's Crossing at Mil. 13-55 between Westfield and Hillandale, N.B.....	C.P.R.....	Electric bell.
Pardy's Crossing at Mil. 13-55 between Westfield and Hillandale, N.B.....	C.P.R.....	Electric bell.
Lampson St., Twp. of Esquimalt, B.C.....	E. & N.....	Electric bell.
Twelfth St., New Westminster, B.C.....	C.P.R.....	Trains to stop before crossing street and to be flagged over crossing.
Drouillard road crossing, Ford City, Ont.....	G.T.R.....	Day and night watchman.
St. Antoine St., Rigaud, Que.....	C.P.R.....	Electric bell.
St. Francois St., Rigaud, Que.....	C.P.R.....	Electric bell.
Ottawa Ave., South River, Ont.....	G.T.R.....	Watchman between 9 a.m. and 9 p.m.
Sagwa and Lingley (highway crossing between, N.B.)	G.P.R.....	Diversion.
Bronson Ave., Ottawa.....	G.T.R.....	Gates.
Main St., Farnham, Que.....	C.P.R.....	Gates.
Lake road crossing, east of Grimsby, Ont.....	G.T.R.....	Electric bell.
Pembina highway crossing, Winnipeg, Man.....	C.N.R.....	Gates.
Laframboise St., St. Hyacinthe, Que.....	G.T.R.....	Day watchman between 7 a.m. and 7 p.m.
Crossing at Boulevard Gouin, Bordeaux, Mil. 9-91, Que.	C.P.R.....	Electric bell.
Crossing in Riverdale Park where foot bridge crosses Don river, Toronto.....	C.P.R., C.N.R. and G.R.T.....	Flagman between 10 a.m. and 8 p.m.
Crossing west of G.T.R. Co's station at Dorval, Que..	G.T.R.....	Watchman between 6 a.m. and 7 p.m.
Crossing west of C.P.R. Co's station at Dorval, Que..	C.P.R.....	Watchman between 6 a.m. and 7 p.m.
Crossing a short distance north of Mile Post 109, Island Pond and Richmond, Subdivisions, Township of Ascot, Que.....	G.T.R.....	Electric bell.
Crossing road allowance between Lot 22, Con. 1 and Lot 22, Broken Front Con., Twp. Darlington, Prov. Ont.....	C.P.R.....	Electric bell.
Crossing of Sherman Ave., Hamilton, Ont.....	G.T.R.....	Train movements to be flagged.
William St. crossing, Port Stanley, Ont.....	London and Pt. Stanley.....	Electric bell.
Church St., Weston, Ont.....	G.T. and C.P. Rys.....	Gates.
Duke St. crossing, Guelph, Ont.....	C.P.R.....	Electric bell.
Crossing at Mil. 37-94, Galt Subdivision, Campbellville Station.....	C.P.R.....	Electric bell.
Crossing at 39-91, Galt Subdivision.....	C.P.R.....	} Bush on private lands to be cut down.
Crossing at Mil. 38-58, Galt Subdivision.....	C.P.R.....	
Crossing at Mil. 38-88, Galt Subdivision.....	C.P.R.....	} Train movements to be flagged.
Crossing of Hamilton St. at Regina.....	C.P.R.....	
Crossing just east of Amigari Station, Ont.....	G.T.R.....	Watchman between 7 a.m. and 7 p.m.
Crossing at Bay Bridge Road, Belleville, Ont.....	C.P.R. and C. N.R.....	Gates.
Comstock Bridge Crossing, 1½ miles east of Lennoxville	B. & M.....	Electric bell.
Main St. crossing, Vegreville, Alta.....	C.N.R.....	Watchman between 8 a.m. and 7 p.m.
Third, west of Brookfield, Ont.....	M.C.R.....	Diversion.

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STATEMENT No. 9.—Showing the number of Highway Crossings at which protection has been ordered by the Board, and nature of protection set out by Provinces, for the year ending March 31, 1917.

Nature of Protection.	Nova Scotia.	New Brunswick.	Quebec	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
Gates.....			2	5	1				8
Bell.....		2	6	10				1	19
Watchman.....			4	4			1		
Diversion.....		1		1					
Trains to be flagged.....				1		1		1	
Removal of bush.....				3					
		3	12	24	1	1	1	2	44

STATEMENT No. 10.—Showing number of Persons Killed and Injured at Public Highway Crossings, separately for each year for five years ending March 31, 1917.

Year.	Gates.		Bell.		Watchman.		Unprotected.		Total.	
	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.
1913.....	6	6	4	5		3	29	48	39	62
1914.....	10	13	1	6	6	12	44	84	61	115
1915.....	6	10	2	7	2	5	37	68	47	90
1916.....	3	4	9	8	2	5	31	57	45	74
1917.....	10	15	4	10	1	13	45	98	60	136
	35	48	20	36	11	38	186	355	252	477

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STATEMENT No. 11.—Showing the number of Highway Crossing Accidents, the nature of same, for each and every year separately for the five years ending March 31, 1917.

	Gates.					Watchman.					Bell.					Unprotected.					Total.									
	1913	1914	1915	1916	1917	T <sup>1</sup> .	1913	1914	1915	1916	1917	T <sup>1</sup> .	1913	1914	1915	1916	1917	T <sup>1</sup> .	1913	1914	1915	1916	1917	T <sup>1</sup> .	1913	1914	1915	1916	1917	Total.
Automobile.....	1	2	2	.....	2	7	1	1	1	2	1	6	1	1	1	2	4	9	2	13	9	11	29	64	5	17	13	15	36	86
Horse and rig.....	2	5	2	1	2	12	3	3	2	1	4	13	5	5	3	7	27	43	43	54	59	49	45	250	53	67	66	58	302	
Pedestrian.....	8	14	11	6	12	51	1	7	1	3	1	13	1	3	2	4	13	16	23	20	17	25	101	26	47	35	28	42	178	
	11	21	15	7	16	70	5	11	4	6	6	32	7	9	7	11	49	61	90	88	77	99	415	84	131	114	101	136	566	

The total of 566 accidents covers 252 persons killed and 477 persons injured, as referred to in the preceding Statement.

STATEMENT No. 12.—Showing the number of Trespassers Killed and Injured by provinces and railways for the year ending March 31, 1917.

Name of Railway.	Ontario.		Quebec.		British Columbia.		Alberta.		Saskatchewan.		Manitoba.		New Brunswick.		Nova Scotia.		Total.	
	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.
	Grand Trunk.....	21	27	15	4													36
Canadian Pacific.....	29	12	12	2	5	1	1	1	1	1	1	5	1	1			56	23
Canadian Northern.....	6	7	2	2													11	12
Grand Trunk Pacific.....							2	1	1	1	1						4	1
Michigan Central.....	4	2															4	2
Niagara, St. Catharines and Toronto.....	4																4	
Toronto, Hamilton and Buffalo.....	3	2															3	2
Dominion Atlantic.....																2	2	
Winnipeg-Joint Terminals.....											2						2	
Algoma Central.....	1	1															1	1
Wabash.....	1	2															1	2
Lake Erie and Northern.....		1															1	1
London and Port Stanley.....	1																1	
Vancouver and Lulu Island.....						1											1	1
Vancouver, Victoria and E.....						1											1	1
Boston and Maine.....			1	1													1	1
Halifax and Southwestern.....																		1
Hull Electric.....			1	1													1	1
	70	54	31	10	7	2	2	3	10	2	5	5	1	1	3	2	129	79

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STATEMENT No. 13.—Showing the number of Persons Killed and Injured on the various railways under the jurisdiction of the Board from April 1, 1908, until March 31, 1917, classified under three headings and shown separately for each and every year.

Year.	Passengers.		Employees.		Others.		Total.	
	K.	I.	K.	I.	K.	I.	K.	I.
1908.....	64	326	246	806	219	177	529	1,309
1909.....	26	227	191	769	231	205	448	1,201
1910.....	51	211	194	745	211	167	456	1,123
1911.....	24	132	263	788	207	199	494	1,119
1912.....	28	292	230	1,381	231	238	489	1,911
1913.....	21	410	303	1,603	1,319	218	643	2,231
1914.....	31	339	249	1,250	314	310	594	1,899
1915.....	8	239	99	873	230	251	337	1,363
1916.....	17	140	120	788	200	197	337	1,125
1917.....	16	280	155	1,174	212	239	383	1,693
	286	2,596	2,050	10,177	2,374	2,201	4,710	14,974

STATEMENT No. 14.—Showing the number of Persons Killed and Injured in the more prominent accidents on the various railways under the jurisdiction of the Board; shown separately for each year for the five years ending March 31, 1917.

Nature of Accidents.	1913.		1914.		1915.		1916.		1917.		Total.	
	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.	K.	I.
Derailment.....	19	317	39	257	7	82	6	55	10	234	81	945
Collision.....	26	108	7	29	2	46	4	5	6	45	45	233
Collision, rear-end.....	16	90	14	23	7	49	11	76	16	42	64	280
Collision in yard.....	8	51	18	55	3	54	26	31	3	13	58	204
Collision with cars, open switch.....		15	5	1		4		3		15	5	54
Collision with cars, foul main track.....	2	1		8		2	1		2	5	5	16
Collision at level crossing.....			1	39	2	22		1	2	22	5	84
Highway crossing protected.....	10	14	17	31	10	22	14	17	15	38	66	122
Highway crossing unprotected.....	29	48	44	84	37	68	31	57	45	98	186	355
Adjusting couplers, uncoupling, etc.....	29	92	11	60	7	38	5	39	5	53	57	282
Trespassing.....	251	116	238	164	170	126	143	102	129	79	931	587
Hand car, motor, struck by train.....	16	16	10	13	5	9	5	3	6	7	42	48
Struck by switch stand, etc.....	1	21	4	21	1	8	2	6	1	19	9	75
Caught between cars and buildings.....	7	9	4	7		9	2	8	1	17	14	50
Falling off passenger train.....	10	13	6	17	3	11	1	12	4	13	24	66
Falling off car walking over train.....	10	43	4	41	4	22	5	22	4	21	27	149
Falling between cars walking over train.....	2	7	2	5	2	3		3	2	4	8	23
Getting off train in motion.....	12	53	7	55	3	45	11	38	12	53	45	244
Attempt to board train in motion.....	16	40	8	47	2	29	8	22	4	30	38	168
Run down by engine or cars.....	55	64	56	64	33	41	27	42	63	56	234	267
Locomotive dropped crown sheet.....	1	10	2	4		3				2	3	19
	520	1,128	497	1,041	298	693	302	542	330	866	1,947	4,270

STATEMENT No. 15.—Showing number of Cars Inspected for year ending March 31, 1917, together with defects noted.

Name of Railway.	Cars inspected.	Cars defective.	Per cent defective.	Grand total defects.	Couplers and parts.	Per cent defective.	Un-coupling mechanism.	Per cent defective.	Hand-holds.	Per cent defective.	Air brakes.	Per cent defective.
Canadian Pacific.....	26,222	1,284	4.90	1,446	37	2.55	242	16.74	83	5.74	827	57.19
Grand Trunk.....	17,562	773	4.40	917	39	4.25	135	14.72	48	5.23	540	58.88
Canadian Northern.....	6,455	385	5.96	478	9	1.88	92	19.25	57	11.92	215	44.98
Grand Trunk Pacific.....	1,778	133	7.48	143	4	2.80	20	13.99	41	28.67	44	30.77
Pere Marquette.....	1,120	60	5.36	68	2	2.94	9	13.24	7	10.00	49	72.06
Toronto, Hamilton and Buffalo.....	1,648	67	4.07	70	2	2.86	2	2.86	45	13.11	45	64.29
Dominion Atlantic.....	883	130	14.72	183	2	1.09	28	15.30	24	33.33	96	52.46
Cumberland Ry. and Coal.....	5	1	20.00	3	2	12.50	2	12.50	1	6.25	2	12.50
Great Northern.....	175	15	8.57	16	2	7.14	2	7.14	2	7.14	19	67.86
Michigan Central.....	1,255	27	2.15	28	.....	.....	.....	.....	.....	.....	.....	.....
London and Port Stanley.....	190	12	6.31	15	1	13.33	1	10.00	2	30.00	6	40.00
Quebec Ry. Light and Power.....	37	10	27.02	20	.....	.....	.....	.....	.....	.....	.....	.....
Quebec, Oriental and Atlantic, Quebec and Western.....	14	6	42.86	25	2	8.00	.....	.....	6	24.00	5	20.00
Algoma Central.....	470	25	5.32	41	.....	.....	6	14.64	10	24.39	16	39.02
Boston and Maine.....	148	5	3.38	5	.....	.....	.....	.....	1	20.00	3	60.00
Algoma Western.....	111	24	21.62	37	1	2.70	7	18.92	2	5.41	12	32.43
	58,073	2,957	5.09	3,495	100	2.86	548	15.68	291	8.33	1,887	53.99
Name of Railway.												
Canadian Pacific.....		36	2.49	.....	.....	.....	87	6.02	.....	.....	134	9.20
Grand Trunk.....		26	2.84	.....	.....	.....	26	2.84	2	0.22	101	11.01
Canadian Northern.....		15	3.13	.....	.....	.....	32	6.69	.....	.....	58	12.13
Grand Trunk Pacific.....		1	0.70	.....	.....	.....	9	6.29	.....	.....	24	16.78
Pere Marquette.....		1	1.47	.....	.....	.....	1	1.47	1	1.48	5	7.04
Toronto, Hamilton and Buffalo.....		1	1.43	.....	.....	.....	5	7.14	.....	.....	8	11.43
Dominion Atlantic.....		9	4.92	.....	.....	.....	9	4.37	.....	.....	15	8.20
Cumberland Railway and Coal.....		1	33.33	.....	.....	.....	1	33.33	.....	.....	.....	.....
Great Northern.....		1	3.57	.....	.....	.....	1	6.25	.....	.....	8	50.00
Michigan Central.....		1	13.33	.....	.....	.....	2	7.14	1	6.66	2	7.14
London and Port Stanley.....		2	.....	.....	.....	.....	.....	.....	.....	.....	3	20.00
Quebec Railway, Light and Power.....		.....	.....	.....	.....	.....	3	15.00	.....	.....	1	5.00
Quebec, Oriental and Atlantic, Quebec and Western.....		1	2.39	.....	.....	.....	5	12.20	.....	.....	3	12.00
Algoma Central.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boston and Maine.....		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Algoma Eastern.....		5	13.51	.....	.....	.....	4	11.81	.....	.....	6	18.22
		99	2.83	.....	.....	.....	195	5.58	4	0.11	371	10.61



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STATEMENT No. 16.—Showing Detective Safety Appliances on freight cars as reported by the Inspectors for year ending March 31, 1917.

COUPLERS AND PARTS.

Coupler body broken.....	3
Coupler body worn.....	2
Guard arm short.....	2
Knuckle broken.....	2
Knuckle missing.....	8
Knuckle pin broken.....	1
Knuckle pin wrong.....	8
Knuckle pin bent.....	1
Knuckle pin missing.....	8
Lock block broken.....	53
Lock block worn.....	1
Lock block wrong.....	
Lock block bent.....	
Lock block inoperative.....	
Lock block missing.....	10
Lock block key missing.....	1
Lock block trigger missing.....	
Total.....	<u>100</u>

UNCOUPLING MECHANISM.

Uncoupling lever broken.....	21
Uncoupling lever wrong.....	
Uncoupling lever bent.....	20
Uncoupling lever incorrectly applied.....	
Uncoupling lever missing.....	61
Uncoupling chain broken.....	329
Uncoupling chain too long.....	
Uncoupling chain too short.....	7
Uncoupling chain kinked.....	
Uncoupling chain missing.....	110
End casting broken.....	
End casting wrong.....	
End casting bent.....	
End casting loose.....	
End casting incorrectly applied.....	
End casting missing.....	
Keeper broken.....	
Keeper wrong.....	
Keeper bent.....	
Keeper loose.....	
Keeper incorrectly applied.....	
Keeper missing.....	
Angle clip loose.....	
Total.....	<u>548</u>

HANDHOLDS.

Handhold broken.....	19
Handhold bent.....	113
Handhold loose.....	8
Handhold incorrectly applied.....	
Handhold missing.....	151
Total.....	<u>291</u>

HEIGHT OF COUPLERS.

Coupler too high.....	
Coupler too low.....	3
Carrier iron loose.....	1
Total.....	<u>4</u>

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STATEMENT No. 16.—Showing Defective Safety Appliances on freight cars as reported by the Inspectors for year ending March 31, 1917—*Con.*

## AIR BRAKES.

Triple valve defective.....	
Triple valve missing.....	
Reservoir defective.....	
Reservoir loose.....	
Cylinder defective.....	19
Cylinder loose.....	114
Cylinder and triple valve not cleaned within 12 months.....	39
Cylinder and triple valve not stenciled with date of cleaning.....	
Cut out cock defective.....	41
Release cock defective.....	
Release cock missing.....	
Release rod broken.....	96
Release rod missing.....	54
Angle cock defective.....	117
Angle cock missing.....	11
Train pipe broken.....	43
Train pipe loose.....	32
Train pipe bracket missing.....	2
Cross-over pipe defective.....	12
Hose defective.....	22
Hose missing.....	75
Hose gasket missing.....	
Retaining valve defective.....	5
Retaining valve missing.....	
Retain pipe defective.....	117
Retaining pipe missing.....	3
Brake rigging defective.....	
Brake cut out.....	1,040
Brake cut out, card old.....	1
No brakes of any kind.....	42
Pump missing.....	
Total.....	1,887

## LADDERS.

Ladder round broken.....	17
Ladder round bent.....	68
Ladder round loose.....	6
Ladder round missing.....	7
Ladder loose.....	1
Ladder incorrectly applied.....	
Total.....	99

## SILL STEPS.

Sill step broken.....	22
Sill step bent.....	118
Sill step loose.....	22
Sill step incorrectly applied.....	1
Sill step missing.....	32
Total.....	195

## MISCELLANEOUS.

Total.....	371
Grand total.....	3,495

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STATEMENT No. 17 "A"—Statement of Defects on freight cars shown separately for each year for five years ending March 31, 1917.

	1913.	1914.	1915.	1916.	1917.	Total.
Couplers and parts.....	493	336	166	100	100	1,195
Uncoupling mechanism.....	2,632	1,606	886	551	548	6,223
Handholds.....	560	241	182	340	291	1,614
Air brakes.....	7,946	5,935	4,181	3,127	1,887	23,076
Ladders.....	801	647	417	151	99	2,115
Sill steps.....	613	485	301	213	195	1,807
Height of couplers.....	31	21		4	4	60
Miscellaneous.....	1,110	1,511	876	565	371	4,433
Grand total.....	14,186	10,782	7,009	5,051	3,495	40,523

STATEMENT No. 17 "B"—Statement of Cars Inspected and defective shown separately for each year for five years ending March 31, 1917.

	1913.	1914.	1914.	1916.	1917.	Total.
Cars inspected.....	137,054	110,407	105,486	77,491	58,073	488,511
Cars defective.....	13,110	9,989	6,578	4,541	2,957	37,175
Percentage defective.....	9.56	9.05	6.24	5.86	5.09	7.61

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## APPENDIX "D."

## REPORT OF THE CHIEF FIRE INSPECTOR, CLYDE LEAVITT.

OTTAWA, March 31, 1917.

A. D. Cartwright, Esq.,  
Secretary, Board of Railway Commissioners,  
Ottawa, Ontario.

SIR,—Herewith I beg to submit for the twelfth annual report of the Board, the report of the Fire Inspection Department for the year ending March 31, 1917.

Approximately 82 per cent of the railway mileage of Canada is under the jurisdiction of the Board, and hence is more or less affected by the work of this Department.

## ORGANIZATION.

The co-operative arrangement between this department and the respective Dominion and provincial forest fire-protective organizations, for the enforcement of General Order No. 107 and the provisions of section 297 of the Railway Act, has continued in effect, with very satisfactory results. During the year, seventy-three officials of the following organizations have acted as local officers of the department:—

British Columbia Forest Branch.. . . . .	31 men.
Dominion Parks Branch.. . . . .	4 "
Dominion Forestry Branch.. . . . .	7 "
Ontario Forestry Branch.. . . . .	13 "
Quebec Forest Protection Branch.. . . . .	11 "
New Brunswick, Crown Lands Department.. . . . .	2 "
Office of Chief Fire and Game Guardian of Alberta.. . . . .	3 "
Office of Fire Commissioner of Saskatchewan.. . . . .	2 "
Total.. . . . .	<hr/> 73 "

## RAILWAY FIRE PATROLS.

The requirements of regulation 10 of General Order No. 107, relative to fire patrols, have been administered along substantially the same lines as were described in detail in the annual report of this department for year ending March 31, 1916.

## INSTRUCTIONS TO RAILWAY EMPLOYEES.

Working instructions to railway employees relative to the reporting and extinguishing of fires have been issued by the respective railways, in accordance with regulation 13 of General Order No. 107.

## FIRE STATISTICS.

The weather conditions during the fire season of 1916 were, on the whole, generally favourable to fire protection. Periods of drought were of short duration and did not extend over any great part of the Dominion at one time. Generally, in all provinces, a wet spring was experienced, followed by favourable weather conditions, except in the province of New Brunswick, where extremely dry weather, accompanied by high winds, was experienced during the month of May, greatly increasing the fire hazard. During this period, six fires were reported beyond control, but none of these occurred along railway lines.

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In the province of Quebec, weather conditions were favourable during April, May, and June. During July and August, extremely dry periods were experienced, and considerable areas were burned over in the Lake St. John and Saguenay districts. In the Temiskaming and Abitibi districts conditions were perhaps worse, and much timber and property were destroyed. None of these fires were caused by railways under the jurisdiction of the Board.

In the province of Ontario a wet spring was experienced, followed by favourable conditions during May and June. During July and the greater portion of August, the weather was extremely hot, with high winds. The disastrous fire of July 29 and following days, in the clay belt of Northern Ontario, did not extend south as far as the line of the Canadian Northern railway or any other line subject to the jurisdiction of the Board.

In the Prairie provinces and British Columbia, weather conditions were generally favourable, and never at any time during the fire season was the hazard very serious.

A total of 558 fires, from all causes, were reported as originating within 300 feet of railway lines in forest sections, subject to the Board's jurisdiction; this is 128 less fires than were reported in 1915. For purposes of classification, fires have been divided into two classes: Class A fires are those which burn over an area less than one-fourth of one acre; class B fires are those which burn over an area of one-fourth of an acre or more. Of the grand total of 558 fires reported, 156 were class A fires, which did no damage. Of class B fires, there were 402, which burned over 16,481 acres, valued at \$39,471; this is 20,782 acres less than the area burned in 1915, and represents a reduction of \$34,785 in the value of property destroyed. Further details are shown in the following table:—

SUMMARY of Reports on Fires in Forest Sections originating within 300 feet of track on Railway Lines subject to the jurisdiction of the Board of Railway Commissioners for Canada, Season of 1916.

BY RAILWAYS.

	Canadian Pacific (Western Lines). (a)	Canadian Northern (Western Lines). (b)	Grand Trunk Pacific. (c)	Great Northern. (c)	Kettle Valley.	Edmonton, Dunvegan and British Columbia.	Canadian Pacific (Eastern Lines). (d)	Canadian Northern (Eastern Lines). (d)	Grand Trunk System.	Algonquin Central and Hudson Bay.	Dominion Atlantic.	Miscellaneous. (e)	Totals.
<b>A. RAILWAY FIRES.</b>													
1. Number by Causes—													
(a) Locomotives, Class A fires.	15	8	7	15	4	15	12	7	8			2	93
(b) Locomotives, Class B fires.	27	3	5	14	41	34	38	59	13	1	2	5	250
(c) Employees, Class A fires.	2	11	2	7	4	13	7	8	7		1		37
(d) Total of Class A fires.	15	4	7	15	4	19	13	7	8			2	101
(e) Employees, Class B fires.	29	15	7	14	41	47	45	67	13	1	3	5	287
(f) Total of Class B fires.	44	26	14	29	45	66	58	74	21	1	3	7	388
(g) Total of all railway fires.													
2. Areas Burned (Acres)—													
(a) Young forest growth.	24	2	2		24	544	277	861	26				1,761
(b) Timber land.	44				25	3,260	129	546					4,004
(c) Slashings or old burn.	46	100	6		22	381	540	882	164	5		12	2,158
(d) Other classes of land.	27	20	5	67	432	2,595	109	55	50			2	3,362
(e) Total.	141	122	13	67	503	6,780	1,055	2,344	240	5	1	14	11,285
3. Value of Property Destroyed—													
(a) Young forest growth.	\$ 38	\$ 11	\$ 7		\$ 61	\$ 1,633	\$ 326	\$ 719	\$ 41		\$ 5		\$ 2,841
(b) Standing timber.	3				150	16,298	552	722					17,725
(c) Forest products.			96	146				18					260
(d) Other property.	108	96		156	420	150	138	857	5			3	14,733
(e) Total.	\$ 149	\$ 107	\$ 103	\$ 302	\$ 631	\$ 18,081	\$ 1,016	\$ 2,316	\$ 46		\$ 12,800	\$ 3	\$ 35,559
<b>B. KNOWN CAUSES OTHER THAN RAILWAY FIRES.</b>													
1. Number by Causes—													
(a) Campers and travellers, Class A fires.		2		1		6	2					1	12
(b) Campers and travellers, Class B fires.	5	4	1			7	3			1			24
(c) Settlers, Class A fires.		9				1	2						12
(d) Settlers, Class B fires.	7	22				2	2			1			34
(e) Other known causes, Class A fires.	1	1	1	1	1	1	2					1	8
(f) Other known causes, Class B fires.	2		3				1	2				1	9

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(d) Total of Class A fires.....	1	12	2	8	6	1	2	2	2	2	2	2	2	2	32
Total of Class B fires.....	14	26	4	9	5	5	1	5	1	5	1	2	1	1	67
Total of all known causes.....	15	38	5	17	11	5	1	5	1	5	1	2	1	3	99
2. Areas Burned (Acres)—															
(a) Young forest growth.....	20		5	200	8	100								10	338
(b) Timber land.....	30	300	5	3	3	3									341
(c) Slashing or old burn.....	223	810	5	495	3	953					25				2,514
(d) Other classes of land.....	5	278	14	590	5						1				893
(e) Total.....	278	1,388	24	1,288	16	1,056					26			10	4,086
3. Value of Property Destroyed—															
(a) Young forest growth.....	\$ 50			\$ 600	\$ 8	\$ 100								\$ 10	\$ 768
(b) Standing timber.....		1,500		15		65									1,580
(c) Forests products.....					50										50
(d) Other property.....	320	155		10										150	635
(e) Total.....	\$ 370	\$ 1,655		\$ 625	\$ 58	\$ 165								\$ 160	\$ 3,033
C. FIRES OF UNKNOWN ORIGIN.															
1. Number—															
(a) Total of Class A fires.....	5	3	2		5	6	1								23
(b) Total of Class B fires.....	2	7	10		17	11									48
(c) Total of all unknown fires.....	7	10	12		22	17									71
2. Areas Burned (Acres)—															
(a) Young forest growth.....			45		22	42									109
(b) Timber land.....					11										11
(c) Slashing or old burn.....	25	181	61		365	56									688
(d) Other classes of land.....		109	101		77	15									302
(e) Total.....	25	290	207		475	113									1,110
3. Value of Property Destroyed—															
(a) Young forest growth.....			135		\$ 25	\$ 23									\$ 183
(b) Standing timber.....					20										20
(c) Forest products.....		15	150			94									259
(d) Other property.....					10	407									417
(e) Total.....		\$ 15	\$ 285		\$ 55	\$ 524									\$ 879
D. GRAND TOTALS FOR ALL CAUSES.															
1. Number—															
(a) Total of all Class A fires.....	21	26	10	4	27	24	13	9							4
(b) Total of all Class B fires.....	45	48	21	41	56	67	83	14				3			6
(c) Total of all fires reported.....	66	74	31	45	83	91	96	23				3			10

\*\$12,800 other property; fire set by railway employees which escaped control and burned private property consisting of buildings and machinery.

SUMMARY of Reports on Fires in Forest Sections originating within 300 feet of track on Railway Lines subject to the jurisdiction of the Board of Railway Commissioners for Canada, Season of 1916—*Con.*

BY RAILWAYS.

	Canadian Pacific (Western Lines). (a)	Canadian Northern (Western Lines). (b)	Grand Trunk Pacific. (c)	Great Northern. (c)	Kettle Valley. (c)	Edmonton, Dunvegan and British Columbia. (d)	Canadian Pacific (Eastern Lines). (d)	Canadian Northern (Eastern Lines). (d)	Grand Trunk System.	Algoma Central and Hudson Bay.	Dominion Atlantic.	Miscellaneous. (c)	Totals.
D, GRAND TOTALS FOR ALL CAUSES— <i>Con.</i>													
2. Areas Burned (Acres)—													
(a) Young forest growth.....	44	2	47		24	744	307	1,003	26		1	10	2,208
(b) Timber land.....	74	300	5		25	3,263	140	549					4,356
(c) Slashing or old burn.....	294	1,091	72		22	876	908	1,891	164	30			5,360
(d) Other classes of land.....	32	407	120	67	432	3,185	191	70	50	1		2	4,557
(e) Total.....	444	1,800	244	67	503	8,068	1,546	3,513	240	31	1	24	16,481
3. Value of Property Destroyed—													
(a) Young forest growth.....	\$ 88	\$ 11	\$ 142	\$	\$ 61	\$ 2,233	\$ 359	\$ 842	\$ 41	\$	\$ 5	\$ 10	\$ 3,792
(b) Standing timber.....	3	1,500		146	150	16,313	572	787					19,325
(c) Forest products.....		15	246	156	420	160	148	1,264	5		12,800	153	15,785
(d) Other property.....	428	251	388	302	631	18,706	1,129	3,005	46		\$ 12,805	\$ 163	\$ 39,471
(e) Total.....	\$ 519	\$ 1,777	\$ 888	\$ 302	\$ 631	\$ 18,706	\$ 1,129	\$ 3,005	\$ 46	\$	\$ 12,805	\$ 163	\$ 39,471

(a) Includes Esquimalt and Nanaimo Railway.  
 (b) Canadian Northern Pacific not included account not yet subject to Board's jurisdiction.  
 (c) Includes Victoria and Sydney.  
 (d) Includes Halifax and South Western.  
 (e) Includes following lines: Boston and Maine, Cumberland Railway and Coal Company, Elgin and Havelock, White Pass and Yukon.

NOTE.—No fires were reported during 1916 as originating within 300 feet of track along the following lines: Algoma Eastern, Maine Central, Moncton and Bouché, Ottawa and New York, Quebec, Montreal and Southern, Quebec Oriental, Atlantic, Quebec and Western, St. Martins, Temiscouata, Western Canada Power.  
 Class A fires are those which cover an area of less than one-fourth acre.  
 Class B fires are those which cover an area of one-fourth acre or more.



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The following table shows, for the past five years, the number of fires reported as having originated within 300 feet of the track in forest sections, on lines subject to the Board, the areas burned over, and the estimate of damage done. It should be noted that these include fires due to all causes, of which railways form only a part. The statistics for 1912 cover only the West, the work of this department not then having been organized in the East. The figures for 1913 are only partially complete as to the East, the work not yet being fully organized, especially in Ontario. Previous to 1916, the information available as to incipient fires is very incomplete.

Year.	Number of Fires All Causes.	Areas Burned over (Acres).	Value of Property Destroyed.
1912.. . . . .	200	25,148	\$ 88,480
1913.. . . . .	732	21,528	40,778
1914.. . . . .	1,346	191,770	433,442
1915.. . . . .	686	37,263	74,256
1916.. . . . .	558	16,481	39,471
Totals for 5 years.. . . .	3,522	292,196	\$676,427

The following table shows percentage comparisons of the statistics contained in the foregoing tables for the past three years:—

Year.	Number of Fires, All Causes.		Areas Burned over		Value of Property destroyed.	
	No.	Per cent decrease.	Acres.	Per cent decrease.	Amount	Per cent decrease.
1914.. . . . .	1,346	....	191,770	....	\$433,442	....
1915.. . . . .	686	49.0	37,263	80.6	74,256	83.0
1916.. . . . .	558	58.5	16,481	91.4	39,471	91.0

During the past year, 388 fires were reported as being directly attributable to railway causes; this represents 69.53 per cent of the total of all fires reported. Of these, 101 were class A or incipient fires, which did no damage; while 287 were class B fires, which burned over 11,285 acres, valued at \$35,559. Of the total of 388 fires, attributed to railway agencies, sparks from smokestacks and fire from ashpan of locomotives started 93 class A fires and 250 class B fires. Railway employees caused 8 class A fires and 37 class B fires.

Campers, travellers, settlers, and other known causes contributed 32 class A fires and 67 class B fires, a total of 99 fires, or 17.7 per cent of the total of all fires reported. The 67 class B fires burned over 4,086 acres, valued at \$3,033.

Fires of unknown origin are credited with 23 class A fires and 48 class B fires, a total of 71, or 12.7 per cent of the total of all fires reported. The 48 class B fires burned over 1,110 acres, valued at \$879.

The following statement shows percentage of areas burned, and value of property destroyed by the various causes responsible for the setting of fire, during 1916:—

Cause.	Area in Acres.	Per cent of Total area Burned.	Value.	Per cent of Total Value of Property Destroyed.
Railways.. . . . .	11,285	68.45	\$35,559	90.1
Known causes other than rail- ways.. . . . .	4,086	24.80	3,033	7.7
Unknown causes.. . . . .	1,110	6.75	879	2.2
Totals.. . . . .	16,481	100.00	\$39,471	100.0

The following summary shows cause, class, number, and percentage of fires reported during 1916 as having originated in forest sections, within 300 feet of track on railway lines subject to the Board:—

Cause.	Class of Fires.	Total			Total Per cent.
		No. of Fires.	Class A and B Fires.	Per cent.	
<b>A. Railway Fires—</b>					
Locomotives.. . . . .	A	93		16.66	
	B	250	343	44.80	61.46
Employees.. . . . .	A	8		1.44	
	B	37	45	6.63	8.07
Total Railway Fires. . .	A	101	....	18.10	
	B	287	388	51.43	69.53

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Cause.	Class of Fires.	Total		Per cent.	Total Per cent.
		No. of Fires.	Class A and B Fires.		
<i>A. Railway Fires—</i>					
<i>B. Known causes other than Railways—</i>					
Campers and travellers. . . . .	A	12	....	2.15	6.45
	B	24	36	4.30	
Settlers. . . . .	A	12	....	2.15	8.25
	B	34	46	6.10	
Other known causes. . . . .	A	8	....	1.44	3.05
	B	9	17	1.61	
Totals. . . . .	A	32	....	5.74	17.75
	B	67	99	12.01	
<i>C. Unknown causes. . . . .</i>	A	23	....	4.12	12.72
	B	48	71	8.60	

The following table shows relative percentages of decrease and increase, in number of fires according to causes, for 1915 and 1916:—

Cause.	1915.		1916.		Decrease, Per cent.	Increase, Per cent.
	No.	Per cent.	No.	Per cent.		
Locomotives. . . . .	232	33.9	343	61.5	....	27.6
Railway employees. . . . .	65	9.5	45	8.1	1.4	
Campers and travellers. . . . .	78	11.4	36	6.5	4.9	
Settlers. . . . .	86	12.5	46	8.2	4.3	
Other known causes. . . . .	27	3.9	17	3.0	.9	
Unknown. . . . .	198	28.8	71	12.7	16.1	
Totals. . . . .	686	100.0	558	100.0	18.7	27.6

It will be noted that while there has been a general decrease in the number of fires due to causes other than railways and to unknown causes, the number of fires set by railway causes in 1916 was 27.6 per cent greater than in 1915. Allowance should, however, be made for the inclusion in the 1916 statistics of 101 class A or incipient fires, this class being only partially reported in 1915.

The importance of clearing rights of way of inflammable débris, thus reducing the fire hazard, is well illustrated by the reduction in the number and size of fires reported along those portions of railway rights of way where such work had been carried out. If this work, which the railways are required to perform under section 297 of the Railway Act, is to be made fully effective, some provision should be made by the respective Dominion and Provincial agencies for the disposal of inflammable débris immediately adjacent to railway rights of way. As a rule, this is in the form of slash resulting from logging operations, settlers clearing land, or the construction of colonization wagon roads.

#### RIGHT OF WAY CLEARING.

Taking into consideration the disturbed condition of the financial and labour markets, most of the railway companies have made a fairly satisfactory showing, and great credit is due them.

During the past year further progress was made by the Grand Trunk Railway in co-operation with the Department of Lands, Forests, and Mines of Ontario, in cleaning up the inflammable débris on the right of way through Algonquin park, and an additional narrow strip immediately adjacent thereto, notwithstanding that some difficulty was experienced in obtaining necessary labour. Very satisfactory progress was also made in cleaning up accumulations of inflammable débris on the rights of way of the Moncton and Buctouche, Salisbury and Albert, Quebec Oriental, Atlantic, Quebec and Western, and Grand Trunk Pacific Railways.

Right-of-way clearing operations were started on the Kettle Valley, Elgin and Havelock, Saint Martins and Halifax and South Western railways, but relatively little progress was made, mostly on account of shortage of labour.

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In Ontario, a start was also made along the line of the recently constructed Canadian Northern railway. Difficulty was experienced, however, in securing labour, and only a small percentage of the work to be done was carried out.

## COMPLAINTS RE RIGHT OF WAY.

Aside from reports submitted by the Board's inspectors, only two specific complaints were received during the year, as to right of way conditions. These were as follows:—

Complaint against Grand Trunk and Canadian Pacific Railway Companies *re* noxious weeds growing on rights of way in Durham county, Ontario.

Complaint against Canadian Pacific Railway *re* noxious weeds growing on right of way of the Smiths Falls subdivision, Ontario.

## FIRE PROTECTIVE APPLIANCES ON LOCOMOTIVES.

During the past fire season extending from April 1 to November 1, officers of the Fire Inspection Department inspected the fire protective appliances on 1,389 locomotives operating through forested territory; of this number, 14.3 per cent were found defective.

Eight inspectors of this department were instructed in this work during 1916, in addition to those instructed during previous years.

## LOCOMOTIVE FUEL.

There has been no change in the oil fuel situation since last report.

Nine samples of coal were taken and submitted to the Fire Inspection Department, of which 4 samples were submitted to the Fuel-Testing Branch of the Department of Mines for analysis.

## FIRE-GUARD REQUIREMENTS.

The fire-guard requirements for 1916 were identical with those prescribed for 1915, and were issued to the Canadian Pacific, Canadian Northern, Grand Trunk Pacific, Great Northern, and Edmonton, Dunvegan and British Columbia Railways.

## FIRE-GUARD STATISTICS.

During the past year there were 13,929.39 miles of track subject to the Board's jurisdiction in the three Prairie Provinces. This represents an increase of 485.63 miles over 1915. Since fire-guards are required to be constructed on both sides of the track, the total to be accounted for is equivalent to double this figure, or 27,858.78 fire-guard miles.

Great difficulty was experienced by the railway companies in securing the necessary labour for the construction of fire-guards, due to the labour shortage occasioned by the war. However, the following statistical summary shows that 11,398.60 miles of fire-guards were constructed or maintained during the past year, while 16,460.18 miles were not constructed. Of this, 7,588.94 miles were exempted by this department, and 6,339.30 miles were not constructed for the several specific reasons indicated in the table and accepted as relieving the railway companies of responsibility for the construction of fire-guards. This leaves 2,531.94 miles not definitely accounted for, upon much of which fire-guards should presumably have been constructed under our requirements.

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## SUMMARY of Fire-Guard Construction and Maintenance by Railways in the Provinces of Alberta, Saskatchewan, and Manitoba, 1916.

	Edmonton Dunvegan and British Columbia. ‡	Great Northern.	Grand Trunk Pacific.	Canadian Northern.	Canadian Pacific.	Totals.
Length in track miles.....	130.00	162.38	2,052.00	5,210.21	6,374.80	13,929.39
Length in fire-guard miles <sup>1</sup> .....	260.00	324.76	4,104.00	10,420.42	12,749.60	27,858.78
Fire-guards constructed (shown in fire-guard miles)—						
<i>a</i> Grain stubble lands } Fireguarded	8.23	86.75	132.00	960.50	2,426.22	3,613.70
<i>b</i> Cultivated hay lands } by owner.	0.68	171.00	0.60	170.90	106.43	449.61
<i>c</i> Fenced grazing lands.....	14.10	19.00	361.90	398.60	1,833.58	2,627.18
<i>d</i> Wild lands.....	12.31	0.50	1,008.40	1,350.55	2,336.35	4,708.11
Total miles of fire guards constructed	35.32	277.25	1,502.90	2,880.55	6,702.58	11,398.60
Fireguards not constructed (shown in fire guard miles)—						
Exemptions <sup>2</sup> .....	210.34	36.00	1,303.30	3,535.47	2,503.83	7,588.94
Owner refuses to allow construction <sup>3</sup> .....		1.75	3.80	42.10	18.32	65.97
Unnecessary: land already plowed <sup>4</sup> .....	6.88	2.00	415.50	770.60	1,199.55	2,394.53
<i>a</i> Grain stubble lands } (Not fire-	3.62		741.10	1,464.40	1,212.70	3,421.82
<i>b</i> Cultivated hay lands } guarded by			14.10	313.50	129.38	456.98
Miscellaneous other reasons.....	3.84	7.76	123.30	1,413.80	983.24	2,531.94
Total miles of fire guards not constructed	224.68	47.51	2,601.10	7,539.87	6,047.02	16,460.18

<sup>1</sup> Fireguard mileage is double the track mileage, since the construction of fire guards is required on both sides of the track.

<sup>2</sup> Company exempted from fireguard construction, as to portions of line where showing made that such construction is unnecessary or impracticable.

<sup>3</sup> Employees of railway company refused permission, by owner, to enter upon land for purpose of constructing fire guards.

<sup>4</sup> Fireguarding unnecessary, because fields already ploughed.

<sup>5</sup> Fireguarding in grain stubble and in cultivated hay lands required only where the land owner or occupant would undertake to plough guard at the reasonable price specified by the Board.

‡ Under construction.

## COMPLAINTS RE FIRE-GUARDS.

Only three specific complaints *re* failure to construct fire-guards were received during 1916, as follows:—

Failure to plough or maintain guards (G.T.P. Ry.).....	1
Fire-guards not established in accordance with fire-guard requirements (C.P.R.).....	1
Damage to hay crop by burning (C.P.R.).....	1
Fences cut and destroyed when ploughing fire-guards (C.P.R.).....	1
Report by railway company that owner refuses to permit ploughing of guards (G.T.P. Ry.).....	1

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## APPENDIX "E."

## RECORD ROOM.

List of Cases appealed to the Supreme Court of Canada, February 1, 1904, to  
March 31, 1917.

File No.	Subject.	Decision.
1114	Montreal Terminal Railway vs. Montreal Street Railway. Pius IX Avenue Crossing, Montreal, Que. Question of jurisdiction.....	Allowed.
1492	James Bay Railway vs. Grand Trunk Railway Crossing, Belt Line Spur. Question of law.....	Dismissed.
383	Ottawa Electric Railway and City of Ottawa vs. Canada Atlantic Railway, re Bank Street Subway, Ottawa. Question of law....	Dismissed.
598	Re Toronto Union Station. A. R. Williams expropriation. Question of jurisdiction.....	Dismissed.
1604 C. 1309	Robinson vs. Grand Trunk Railway, two cents rate. Question of law.....	Dismissed.
689	Canadian Pacific Railway vs. Grand Trunk Railway, re branch line, London, Ont. Question of jurisdiction.....	Dismissed.
C. 1680	Essex Terminal and Windsor, Essex and Lake Shore Railroad, crossing in Township of Sandwich, Ont. Question of law.....	Dismissed.
1497	T. D. Robinson vs. Canadian Northern Railway spur at Winnipeg. Question of jurisdiction.....	Dismissed.
9527	Montreal Street Railway re rates Mount Royal Ward. Question of jurisdiction.....	Allowed.
C. 4719	Department of Agriculture, Province of Ontario, vs. Grand Trunk Railway, station at Vineland. Question of jurisdiction.....	Dismissed.
C. 3322	Re Toronto Viaduct. Appeal by the Canadian Pacific Railway Company. Question of law.....	Dismissed.
C. 4897	Re fencing and cattleguards. Order No. 7473. Appeal by the Canadian Northern Railway Co. Question of jurisdiction.....	Allowed in part.
C. 4492	City of Toronto vs. Grand Trunk and Canadian Pacific Railway Companies. Question of law.....	Referred back to Board.
C. 2545	City of Ottawa and County of Carleton, re Richmond Road Viaduct. Question of jurisdiction.....	Dismissed.
13079	Grand Trunk Railway vs. Canadian Northern Ontario Railway. Spur in Township of Scarboro. Question of jurisdiction.....	Dismissed.
C. 3269	Grand Trunk Railway vs. British American Oil Companies. Oil rates. Question of law.....	Dismissed.
1519	Grand Trunk Pacific Railway vs. City of Fort William. Re location. Question of jurisdiction.....	Dismissed.
11965	Niagara, St. Catharines and Toronto Railway vs. Davy. Question of jurisdiction.....	Allowed.
9527	Montreal Street Railway (Montreal, Park and Island Railway) re rates, Mount Royal Ward. Question of jurisdiction.....	Allowed.

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List of Cases appealed to the Supreme Court of Canada, February 1, 1904, to March 31, 1917—*Concluded*.

File No.	Subject.	Decision.
C. 15580	Clover Bar Coal Company, Limited, and Wm. Humberstone vs. Grand Trunk Pacific Railway Company and the Clover Bar Sand and Gravel Company.....	Allowed.
12682	Regina Rates Case.....	Dismissed.
17963	Grand Trunk Pacific Railway vs. A. E. Purcell of Saskatoon, Sask.	Dismissed.
C. 3269	Canadian Pacific Railway Company vs. British American Oil Companies. Question of jurisdiction.....	Dismissed.
15330 15330-1	Grand Trunk and Canadian Pacific Railway Companies vs. Canadian Oil Company. Question of jurisdiction.....	Dismissed.
20062	British Columbia Electric Railway Co., Vancouver, Victoria and Eastern Ry. Co. vs. City of Vancouver. Question of jurisdiction.....	Dismissed.
1487	H. B. Chambers and W. B. G. Phair vs. Canadian Pacific Railway Company. Question of jurisdiction.....	Allowed.
18578	Canadian Northern Railway Company vs. William A. Taylor. Question of jurisdiction.....	Dismissed.
19435	Grand Trunk Pacific Railway vs. City of Edmonton. Question of law.....	Dismissed.
1750-34	Canadian Pacific Railway Company vs. Grand Trunk Company. Appeal by C.P.R. Question of law.....	Dismissed.
14329-9	Montreal Tramway and Montreal, Park and Island Railway vs. Lachine, Jacques Cartier and Maisonneuve Railway. Question of jurisdiction.....	Allowed.
23009	City of Hamilton vs. Toronto, Hamilton and Buffalo Railway. Appeal by T.H. & B. Ry. Question of jurisdiction.....	Allowed.
21428	Grand Trunk Railway vs. Hepworth Silica Pressed Brick Co. Question of law.....	Dismissed.
12021-70	Toronto Railway Company and the City of Toronto and the Canadian Pacific Railway. Questions of law and jurisdiction.....	Dismissed.
C. 3935	City of Edmonton vs. Calgary and Edmonton Railway. Question of law.....	Dismissed.
16171	Ingersoll Telephone Company (and other Independent Telephone Companies) vs. Bell Telephone Company. Question of law....	Dismissed.

## SUMMARY.

Appeals dismissed.....	25
Appeals allowed.....	10
Appeals heard.....	35

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List of Appeals to the Governor in Council from February 1, 1904, to March 31, 1917.

File No.	Subject.	Decision.
399	Bay of Quinte Railway crossing C.P.R. at Tweed, Ont.....	Dismissed.
1455	James Bay Railway vs. Grand Trunk Railway crossing near Beaverton.....	Dismissed.
1781	Grand Trunk Railway Company vs. City of Chatham, Ont. Street Crossings.....	Dismissed.
12992	Maniwaki Branch of the Canadian Pacific Railway, train service from Ottawa.....	Judgment not rendered. Matter referred back to Board.
2030	Re Tariffs of certain Yukon Railway.....	Dismissed.
17716	Canadian Pacific Railway Longue Pointe spur through Town of Maisonneuve, Que.....	Dismissed.
18787	South Hazelton Townsite vs. Grand Trunk Pacific Railway.....	Allowed.
3452-30	J. Y. Rochester re Cameron Bay vs. Grand Trunk Pacific Railway	Dismissed.
12912	Park Avenue Subway, Town of St. Louis, Que., vs. Canadian Pacific Railway.....	Dismissed.
17040	Lambton to Weston Spur and Canadian Pacific Railway.....	No formal order made.
C. 3322	Toronto Viaduct Case.....	Dismissed.
12021-70	City of Toronto, re North Toronto Grade Separation.....	Dismissed.
16177	Canadian Pacific Railway vs. Mountain Lumber Manufacturers Association, re lumber rates.....	Withdrawn.
19024	Charles Miller of Toronto vs. Grand Trunk Pacific Railway, re station at Prince George, B.C.....	Dismissed.
17716-10	Canadian Pacific Railway vs. Town of Maisonneuve, Que., re Highway Crossings.....	Dismissed.
22681-25	City of Montreal vs. Canadian Northern Railway, siding across Stadacona and Marlboro Streets, Montreal, Que.....	Pending.
21418	City of Prince George, B.C., re location of Grand Trunk Pacific Railway station between Oak and Ash Streets, Prince George, B.C.....	Dismissed.
21660	Canadian Northern Ontario Railway vs. the Township of Loughboro, Ont.....	Dismissed.
26169	Canadian Pacific Railway and Canadian Northern Railway Companies, re interswitching at Eastern Public Cattle Market, Montreal, Que.....	Pending.
17040	Appeal of the Canadian Pacific Railway Company re Lambton to Weston Spur (2nd appeal).....	Dismissed.

SUMMARY.

Number of appeals dismissed.....	14
Number of appeals allowed.....	1
Number of appeals withdrawn.....	3
Number of appeals pending.....	2
Total number of appeals.....	20

## APPENDIX "F."

## GENERAL ORDERS AND CIRCULARS.

OTTAWA, January 29, 1917.

## CIRCULAR No. 150.

*File No. 20847—Protection to workmen while engaged under or about cars on regular repair tracks.*

It is the opinion of the Board that in addition to the blue flag by day and the blue light by night, displayed as required by rule 26 of the general train and interlocking rules, further protection should be adopted by having all switches leading to regular repair tracks locked with special locks and the keys carried by the foreman in charge of the car-repair work, or other responsible party, whose duty it should be to see that employees are warned and are clear from cars before any switching movement is made on such track, and to see that switches are re-locked after switching movement is completed.

Railway companies will please acknowledge receipt.

By order of the Board,

A. D. CARTWRIGHT,  
*Secretary.*

## GENERAL ORDER No. 170.

*In the matter of the General Order of the Board No. 148, dated September 1, 1915, authorizing all railway companies within the legislative control of the Parliament of Canada and operating in the provinces of Alberta and Saskatchewan, to endorse upon the bills of lading, approved under Order No. 7562, dated July 15, 1909, the amount of advances for seed grain, fodder for animals and other goods furnished to persons in the said provinces, and the interest agreed to be paid, authorized by chapter 20 of the Acts, 1915, and as provided under Order in Council of July 23, 1915.*

Upon the report of the Governor in Council by Order in Council dated July 31, 1916, terminating on the 1st September, 1916, the arrangement whereby the railway companies endorse indebtedness on bills of lading,—

*It is ordered:* That the said General Order No 148, dated September 1, 1915, be, and it is hereby, rescinded on and after the 1st day of September, 1916.

D'ARCY SCOTT, -  
*Assistant Chief Commissioner.*

OTTAWA, August 5, 1916

## GENERAL ORDER No. 171.

*In the matter of the question of hand rails and small foot rests on the outside of cabs of locomotives; and a railing on the tender to prevent men from slipping off when they are passing over the tender or when the locomotive is taking coal or water.*

File No. 22223.

Upon hearing the matter at the sittings of the Board held in Ottawa, May 4, 1915, in the presence of representatives of the Brotherhood of Locomotive Engineers,



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the Brotherhood of Firemen and Enginemen, the Grand Trunk, Canadian Pacific, and Canadian Northern Railway Companies, and the New York Central & Rutland and the Michigan Central Railroad Companies, and what was alleged, and reading the replies of the railway companies interested to supplement No. 1 to Circular of the Board No. 142, dated July 6, 1915, and the report and recommendation of the Chief Operating Officer of the Board,—

*It is Ordered:*

1. That the railway companies subject to the jurisdiction of the Board be, and they are hereby, directed to equip all locomotives of 100,000 pounds or over with hand-rails on the sides of cabs above the windows, near the top of the cab, and running the entire length of the same; the rails to have a clearance of two inches between the inner side of the rail and the outside wall of the cab, and to be securely fastened at each end, with a support in the centre; and that, where the running boards do not project beyond the side of the cab, an additional piece be added, to project not less than one inch from the side of the cab and running the full length of same.

2. That the tender of all locomotives be equipped with a railing on both sides, on the top of the coping; such railing, if made of round bar iron, or of iron pipe, to be not less than one inch in diameter, supported by three columns, one at each end and one in the centre, standing eight inches from the top of the coping; the said rails to run the full length of the fuel storage well, or clear of the back coal wall, on the tender; that on the spaces back of the coal wall, where the water man-hole is located, the coping or railing project eight inches above the top of the tank and run around both sides and back of the tank not less than eight inches high, supported by columns to make it secure.

3. That plans showing the proposed foot rests and the railing on tenders be filed for the approval of the Board.

4. That the said railway companies be, and they are hereby, permitted to operate locomotives used in international traffic, and merely passing through Canadian territory, equipped in accordance with the regulations of the Interstate Commerce Commission.

5. That this permission shall not extend to locomotives operated from or entirely within Canadian territory.

D'ARCY SCOTT,

*Assistant Chief Commissioner.*

OTTAWA, August 1, 1916.

## GENERAL ORDER No. 173.

(CORRECTED).

*In the matter of the tariffs of the railway companies showing charges for the use of heated refrigerator cars; and the orders of the Boards Nos. 24680 and 24994, dated January 27, and May 22, 1916, respectively, suspending the said tariffs; also the order of the Board No. 25251, dated August 5, 1916, rescinding the said order No. 24994 in so far as it effected the tariffs for local movements between points west of lake Superior, subject to the provisions therein contained:*

File No. 18855-11.

Upon hearing the matter at the sittings of the Board held in Ottawa, Toronto, Winnipeg, Saskatoon, Edmonton, Calgary, Regina, and Winnipeg on the 8th February, 22nd February, 12th June, 14th June, 15th June, 10th July, 13th July, and 14th July, 1916, respectively, in the presence of representatives of the Boards of Trade of Montreal, Toronto, Hamilton, Winnipeg, and Saskatoon, the Calgary Brewing

8 GEORGE V, A. 1918

Company, the Canadian Manufacturers' Association, the Ontario Fruit Growers' Association, the Canadian Pacific, Canadian Northern, and Grand Trunk Pacific Railway Companies and the Michigan Central and New York Central Railroad Companies, and what was alleged at the hearings: and upon the reading of what has been filed, and the report of the Chief Traffic Officer of the Board.

*It is Ordered:*

(1) That the order of the Board No. 24680, dated January 27, 1916, in so far as it affects local movements between points east of and including Westfort, Ont., be, and it is hereby, rescinded provided: (a) that the clause in the tariffs thereby suspended restricting the number of destinations of less-than-carload shipments be omitted; and (b) that the clause requiring loading in cars in destination order by shippers be revised so as to apply to shipments handled through the carriers' freight warehouse also

(2) That the orders of the Board Nos. 24680 and 24994, dated January 27 and May 22, 1916, respectively, in so far as they affect through shipments from and to points east of Port Arthur to and from points west of Westfort, be, and they are hereby, rescinded: Provided that the following subdivision of the territory west of Westfort, and the following maximum tolls for heat in addition to the freight rates from or to the territory west of and including Montreal and Lachute, be substituted for those shown in the tariffs thereby suspended, and that the differences over these maximum tolls do not exceed from or to the territory south and east of Montreal and Lachute the differences expressed in the said suspended tariffs.

	Toll per car.
Group 1. West of Westfort to and including Kenora and Rainy River.	\$10
“ 2. West of Group 1 to and including Winnipeg and Emerson..	11
“ 3. Remainder of Manitoba.. . . . .	13
“ 4. West of Group 3 to and including Viceroy, Moosejaw, Saskatoon, and Prince Albert.. . . . .	15
“ 5. Province of Saskatchewan west of Group 4.. . . . .	16
“ 6. West of Group 5 to and including the Canadian Pacific Railway Company's Macleod-Calgary-Edmonton Line..	18
“ 7. North of Edmonton and west of Group 6 to Penticton, Kamloops, and Prince George.. . . . .	22
“ 8. West of Group 7 to Vancouver and Prince Rupert.. . . .	25

(3) That the general order of the Board No. 152, dated November 2, 1915, authorizing certain tolls for the use of refrigerator cars for the carriage of vegetables in carloads, be, and it is hereby, rescinded.

H. L. DRAYTON,  
*Chief Commissioner.*

OTTAWA, October 26, 1916.

#### GENERAL ORDER No. 174.

*In the matter of the application of the Canadian Pacific, Grand Trunk, and Toronto, Hamilton and Buffalo Railway Companies and the Michigan Central Railroad Company, on behalf of themselves and other railway companies in Canada subject to the jurisdiction of the Board, for an order amending General Order No. 1, known as "The Canadian Car Service Rules," so as to provide that the demurrage charge for each twenty-four hours, as provided in Rule No. 1, be increased from \$1 to \$4; and also that the additional free time beyond forty-eight hours, authorized by exception (a) to rule 2, be cancelled.*

File No. 1700.140.

Upon hearing the application at the sittings of the Board held in Toronto, December 12, 1916, the Canadian Pacific, Grand Trunk, Hamilton and Buffalo, and the Canadian Northern Railway Companies, the Michigan Central Railroad Com-

## SESSIONAL PAPER No. 20c

pany, the Canadian Manufacturers' Association, the Canadian Freight Association, the Boards of Trade of Toronto, Montreal, Brantford, and Hamilton, the city of Toronto, the Canadian Lumbermen's Association, the Canadian Pulp and Paper Association, the New Brunswick Potato Exchange, the Department of Public Works for the province of Ontario, the Retail Coal Dealers' Association, the Retail Association (Coal Section), the Stone Supply Section, the International Harvester Company, the Massey-Harris Company, Limited, the Ontario Hay Shippers' Association, the Imperial Oil Company, the Steel Company of Canada, the Anglo-Canadian Leather Company, the Ontario Lime Company, J. B. Smith & Sons, Limited, and the Dominion Millers' Association being represented at the hearing, and what was alleged; and upon reading the further written submissions filed, and the report of the Chief Traffic Officer of the Board,—

*It is ordered:* That the said General Order No. 1, known as "The Canadian Car Service Rules," be, and it is hereby amended as follows, namely:—

Rules 1, 2, 6 and 15 of the Canadian Car Service Rules are suspended in their entirety from January 1, 1917, to April 30, 1917, both inclusive, and the following Rules, bearing the same numbers, are hereby substituted. Rule 11 is also suspended for the same period:—

*Rule 1.*—When cars are held under load, or awaiting loads, beyond the free time allowed by Rule 2, for any reason for which the consignee or shipper is responsible, the following tolls for each day of twenty-four hours, or any part thereof, shall be charged to and paid by the shipper, consignee, or other party responsible therefor, in addition to all other tolls paid or payable in respect of the goods carried, or to be carried, in or on each such car, namely:—

For the first day.....	One dollar.
For the second day.....	One dollar.
For the third day.....	Three dollars.
For the fourth and each succeeding day.....	Five dollars.

*Rule 2.*—(a) After notice of arrival of a car at its destination, or in the outside break-up or sorting yard if such be used for the purpose, all consignees shall be allowed twenty-four hours within which to pay the tolls or charges (if any), to give order for special placing or delivery if such orders be necessary, and for customs entry of freight in bond. If more than twenty-four hours be used for these purposes the excess time shall be deducted from the succeeding unloading period, except as provided in rule 15.

(b) Forty-eight hours free time shall be allowed for loading or unloading all commodities, computed from seven a.m. of the day following the day on which actual or constructive (see rule 13) placement has been effected: Provided that any portion of such placement day may be utilized by the shipper or consignee, in addition to the said forty-eight hours, without charge.

*Exceptions.*—(a) Five days free time shall be allowed at Montreal and at tide-water ports for unloading lumber and hay for export.

(b) In the portion of Canada in which the Canada Grain Act prescribes a specified time for loading grain, the said Act shall apply.

(c) If the destination is not a port of entry, forty-eight hours shall be allowed for clearance of customs at the outside port of entry.

*Rule 6.*—If wet or inclement weather, according to local conditions, renders loading or unloading impracticable during business hours, or exposes the goods to damage, the time allowance shall be extended so as to give the full free time of suitable weather. But if the parties neglect or fail to avail themselves of the herein authorized free time of suitable weather, they shall not be allowed additional free time by reason of such neglect.

## GENERAL ORDER No. 178.

*In the matter of the Rules and Instructions for the Inspection and Testing of Locomotive Boilers and their Appurtenances, as set out in General Order No. 78, dated the 14th day of July, 1911, and Circular No. 140, dated the 22nd day of January, 1915; and*

*In the matter of the application of the Canadian Pacific Railway Company for an extension of time for the external inspection of locomotive boilers.*

File No. 16513.

Upon reading what is filed in support of the application, and the report of the Chief Operating Officer of the Board; and its appearing desirable to consolidate the supplemental regulations in the above-mentioned matter issued since the issue of the said General Order No. 78,—

*It is ordered:* That, in the case of locomotives which are out of service in good condition for one or more full months, the time for making the following inspections and tests, namely,—(a) removal of flues and interior inspection of boiler, (b) removal of lagging and exterior inspection of boiler, (c) hydrostatic test, and (d) removal of caps and inspection of flexible staybolts, as provided by paragraphs 5, 11, 12, and 18 of General Order No. 78, may be extended by the railway companies, without making application therefor, for a number of months equivalent to the number of continuous months during which any such locomotive shall be out of service; provided that such inspections and tests shall in no case be performed less frequently than as hereinafter set forth:—

(a) Removal of flues and inspection of interior of boiler once at least in every forty-eight consecutive months.

(b) Removal of jacket and lagging and inspection of exterior of boiler once at least in every sixty-nine consecutive months.

(c) Hydrostatic tests once at least in every twenty-four consecutive months.

(d) Removal of caps and inspection of flexible stay-bolts once at least in every thirty consecutive months.

*And it is further ordered:* That the time during which any such locomotive is out of service be properly covered by "out of service" reports and a notation made on the back of inspection reports and cab cards showing the months out of service on account of which time has been extended.

*And it is further ordered:* That no extension of time be permitted for any period less than a full month.

*And it is further ordered:* That if a locomotive be out of service when any of the above inspections and tests become due, such inspection and test need not be performed until just prior to the time when such locomotive shall be returned to service.

H. L. DRAYTON,

*Chief Commissioner.*

OTTAWA, January 23, 1917.

SESSIONAL PAPER No. 20c

## GENERAL ORDER No. 180.

*In the matter of the application of the Express Traffic Association of Canada, on behalf of the express companies subject to the jurisdiction of the Board, for approval of revised Supplement No. 10 to the Express Classification for Canada, C.R.C. No. 3 (first submitted as No. 8); also including therein Supplement No. 11 (first submitted as No. 10), omitting the proposed conditions of carriage relating to Carload Wagon Service and pick-up and Delivery Service, and Supplement No. 12 (first submitted as No. 11), omitting the items relating to cigars, cigarettes, and tobacco.*

Files Nos. 4397.25, 4397.29 and 4397.30.

Upon its appearing that objections to certain of the proposed changes in rules and ratings were, by consent of the parties represented at the hearings in Winnipeg, June 12, 1916, Saskatoon, June 14, 1916, and Edmonton, June 15, 1916, left to be settled between the interested parties in Eastern Canada, and those affected by the proposed changes, as they now appear in the said revised Supplement No. 10, having notified the Board of their consent thereto,—

*It is ordered:* That the said revised Supplement No. 10 to the Express Classification for Canada C.R.C. No. 3, submitted to the Board by C. N. Ham, secretary of the Express Traffic Association of Canada, with his letter of January 16, 1917, attached hereto and marked "A", be, and the same is hereby, approved.

H. L. DRAYTON,  
*Chief Commissioner.*

OTTAWA, January 30, 1917.

## GENERAL ORDER No. 182.

*In the matter of the movement of bituminous coal from the United States into Canada.*

File No. 19323-9.

Upon it being represented to the Board that the movement of bituminous coal from points in the United States to points in Canada is delayed at the frontier for custom clearance, and that such delay can be obviated by said coal being entered for duty at interior ports of entry or outports, and upon reading what has been filed by the Commissioner of Customs stating that no objection exists to such obviation, although the coal may be billed for customs clearance at the frontier,—

*It is ordered:* That railway companies within the legislative authority of the Parliament of Canada be, and they are hereby, permitted to forward bituminous coal from the United States, billed for clearance of customs at the frontier, to its destination in Canada if the destination be a customs port or outport, and if not, then to the customs port or outport nearest to but short of its destination, for customs clearance thereat, instead of at the frontier, the carriage from the frontier to the interior point of clearance to be in bond under customs manifest prepared by the railway company and signed by a customs officer.

H. L. DRAYTON,  
*Chief Commissioner.*

OTTAWA, February 16, 1917.

## GENERAL ORDER No. 183.

*In the matter of the General Order of the Board No. 14 (Order No. 5117), dated July 30, 1908, and the application of the Express Traffic Association of Canada for an Order providing that the same arrangement be accorded to the express companies.*

File No. 8071

Upon reading what is filed by the Express Traffic Association of Canada, on behalf of express companies subject to the jurisdiction of the Board, and the report and recommendation of the Chief Traffic Officer of the Board,—

*It is ordered:* That the arrangement whereby certain tariffs of freight or passenger tolls may be filed with the Board by agents, other than officials of the companies, acting jointly for two or more railway companies subject to the legislative authority of the Parliament of Canada, provided that the said joint agents be duly authorized to act for the several companies by power of attorney, as set forth in the said General Order No. 14 (Order No. 5117), dated July 30, 1908, be, and it is hereby, extended to express companies subject to the jurisdiction of the Board.

H. L. DRAYTON,  
*Chief Commissioner.*

OTTAWA, February 24, 1917.

## GENERAL ORDER No. 184.

*In the matter of the application of D. D. Campbell, of Winnipeg, Manitoba, for an Order increasing the allowance for grain doors supplied by shippers to \$1.50 for the lower door and 75 cents for the upper part; also, that the bill therefor, when certified to by the railway company's agent, be accepted by him and credited on account of freight charges.*

File No. 4106.

Upon hearing the application at the sittings of the Board held in Winnipeg, March 16, 1917, the Northwest Grain Growers' Association and the Canadian Pacific, Canadian Northern, and Grand Trunk Pacific Railway companies being represented at the hearing, the applicant appearing in person, and what was alleged,—

*It is ordered:* That the Order of the Board No. 8860, dated December 10, 1909, requiring 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 therefor to such shippers be made upon the following basis:—

- (a) At and west of Fort William, lower car door, \$1; upper car door, 50 cents.
- (b) East of Fort William, upper or lower car door, each, 50 cents.

be, and it is hereby, amended to provide that the said allowance for grain doors be increased from \$1 to \$1.50 for the lower door, and from 50 cents to 75 cents for the upper door, in all \$4.50 a car, the said allowance to be made at and west of Port Arthur, Ont.

D'ARCY SCOTT,  
*Assistant Chief Commissioner.*

OTTAWA, March 22, 1917.

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# TELEPHONE STATISTICS

OF THE

DOMINION OF CANADA

FOR THE

YEAR ENDED JUNE 30

1917

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA  
J. DE LABROQUERIE TACHÉ,  
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY,

1918

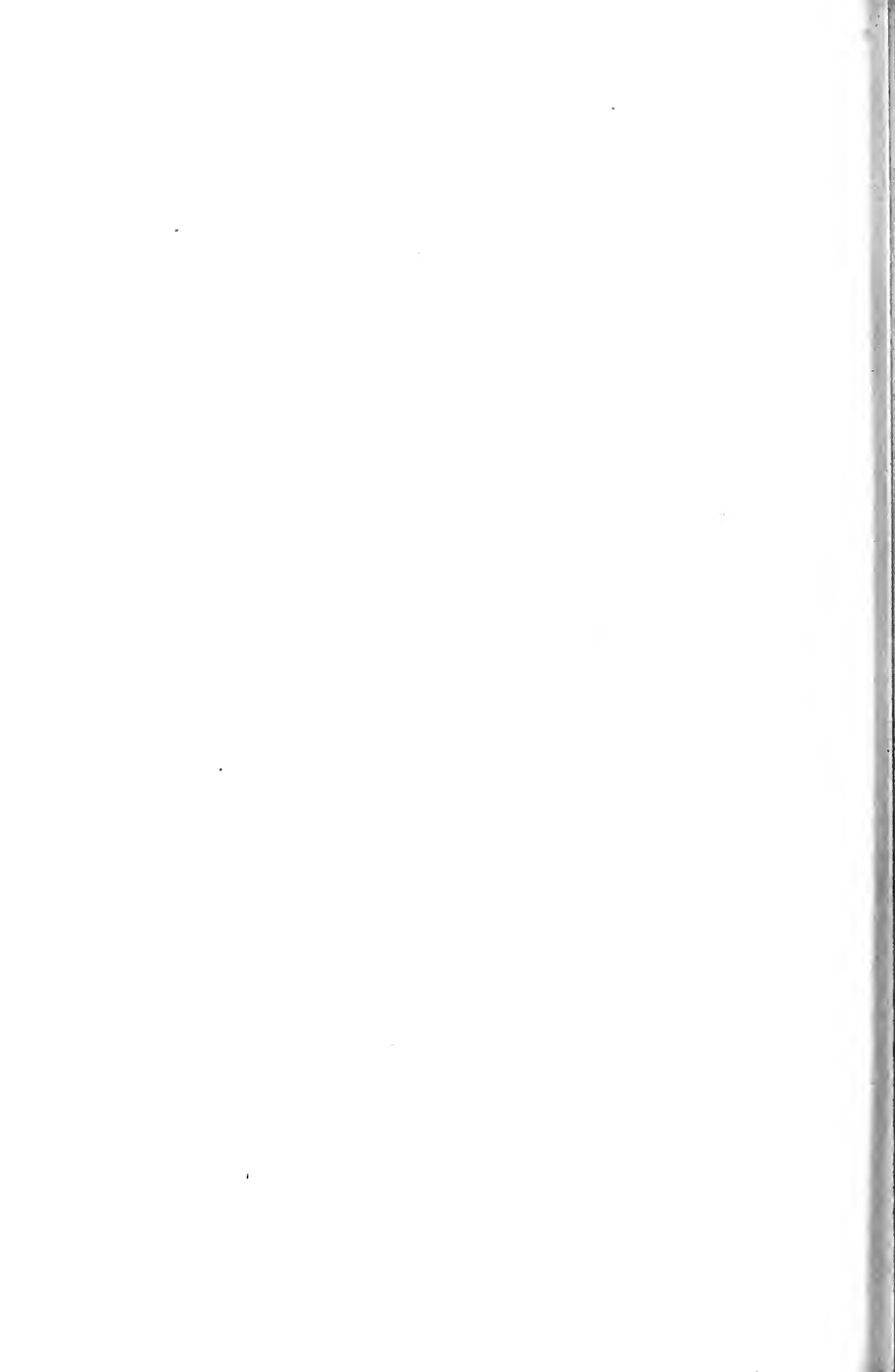


*To His Excellency the Duke of Devonshire, K.G., P.C., G.C.M.G., G.C.V.O., etc.,  
etc., Governor General and Commander in Chief of the Dominion of Canada.*

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Comptroller of Statistics in relation to the telephone interests of the Dominion of Canada for the year ended June 30, 1917.

J. D. REID,  
*Minister of Railways and Canals.*



To the Hon. J. D. REID.

Minister of Railways and Canals.

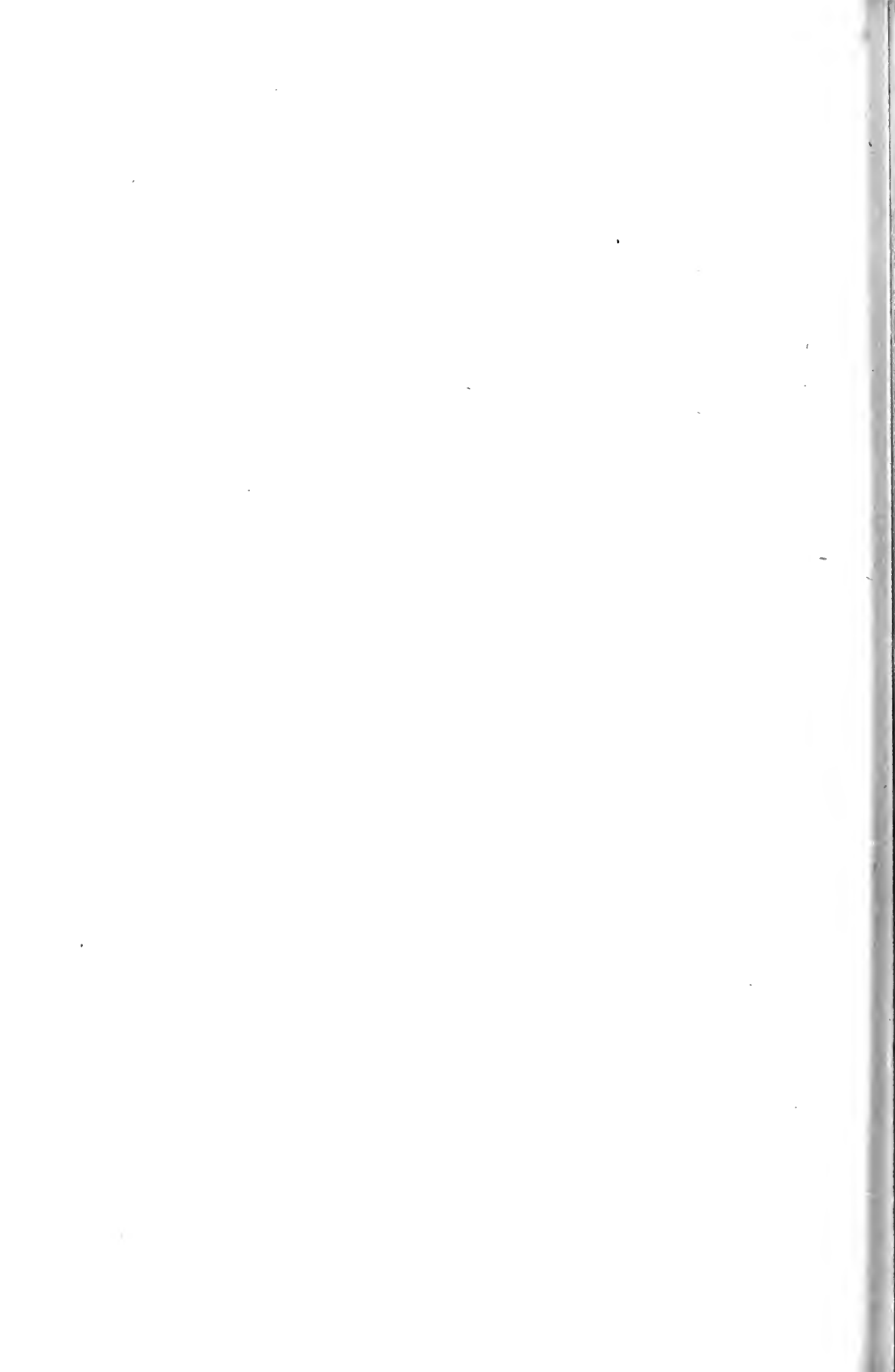
SIR,—I have the honour to submit the report of the Comptroller of Statistics in relation to the telephone interests of the Dominion of Canada for the year ended June 30, 1917.

I have the honour to be, sir,

Your obedient servant,

A. W. CAMPBELL,

*Deputy Minister of Railways and Canals.*



OFFICE OF THE COMPTROLLER OF STATISTICS,  
OTTAWA, January 24, 1918.

A. W. CAMPBELL, Esq., C.E.,  
Deputy Minister of Railways and Canals.

SIR.—I have the honour to submit to you herewith Telephone Statistics for the year ended June 30, 1917.

The various statistical tables reveal considerable further development of the telephone interests of the Dominion.

The information obtained is not absolutely complete, in the sense that reports were received from every unit in actual operation, but it may be taken as representing all that was practically available under existing conditions. The omissions relate wholly to minor organizations to the number of possibly one hundred.

The number of reports received increased from 1,592, in 1916, to 1,695 for 1917.

### ORGANIZATION.

Number and classification of reporting units:—

Province.	Government.	Municipal.	Stock.	Co-operative.	Partnership.	Private.	Total.
Nova Scotia.....			28	109	1	5	143
New Brunswick.....			19	8		4	31
Prince Edward Island.....			4	27		1	32
Quebec.....			82	55	2	34	173
Ontario.....	2	59	183	205	14	65	528
Manitoba.....	1	7	4	22		4	38
Saskatchewan.....	1	5	309	412			727
Alberta.....	1	1	4	2			8
British Columbia.....		1	11	1		1	14
Yukon.....			1				1
Total.....	5	73	645	841	17	114	1,695

Comparative statement of organizations:—

	1913.	1914.	1915.	1916.	1917.
Government.....	4	4	4	4	5
Municipal.....	52	58	62	67	73
Stock.....	543	611	584	622	645
Co-operative.....	262	297	601	765	841
Partnership.....	63	48	28	23	17
Private.....	151	118	117	111	114
Total.....	1,075	1,136	1,396	1,592	1,695

Reporting units by provinces:—

Province.	1911.	1912.	1913.	1914.	1915.	1916.	1917.
Nova Scotia.....	14	12	83	83	123	139	143
New Brunswick.....	16	17	25	24	26	29	31
Prince Edward Island.....	1	1	1	1	27	30	32
Quebec.....	32	62	101	127	145	162	173
Ontario.....	319	369	451	468	492	502	528
Manitoba.....	3	3	35	38	38	37	38
Saskatchewan.....	143	206	361	369	520	668	727
Alberta.....	4	3	3	9	10	10	8
British Columbia.....	5	10	15	16	14	14	14
Yukon.....	0	0	0	1	1	1	1
Total.....	537	683	1,075	1,136	1,396	1,592	1,695

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In the three western provinces of Manitoba, Alberta, and Saskatchewan, telephone interests are largely operated by the local governments. This is more specifically true of the two former. While the Government of Saskatchewan carries on operations in several of the principal centres of population, and at large capital cost, there are upwards of 700 independent organizations scattered over the province. These independent units are typical of the general class of organizations which is so effectively providing telephone service in the rural districts of the Dominion.

## CAPITALIZATION AND COST.

## Capitalization :—

	1912.		1913.		1914.		1915.		1916.		1917.	
	§	cts.	§	cts.	§	cts.	§	cts.	§	cts.	§	cts.
Stocks.....	21,533,605	09	26,590,501	39	28,644,340	00	28,947,122	02	29,416,956	28	29,476,367	54
Funded debt.....	24,743,246	65	33,256,503	44	41,647,544	15	45,337,861	49	47,503,358	09	49,645,334	80
Total.....	46,276,851	74	59,847,004	83	70,291,884	15	74,284,991	51	76,920,314	37	79,121,702	34

## Capitalization by provinces :—

Province.	Stocks 1917.		Funded Debt. 1917.		Total 1917.		Total 1916.		Total 1915.	
	§	cts.	§	cts.	§	cts.	§	cts.	§	cts.
Nova Scotia.....	1,926,019	00	1,503,390	00	3,429,409	00	3,431,598	56	3,427,218	37
New Brunswick.....	1,512,252	69	57,800	00	1,570,052	69	1,519,582	98	1,458,877	81
Prince Edward Island.....	155,805	31	51,100	00	206,905	31	163,362	31	160,496	31
Quebec.....	19,425,983	53	11,891,340	23	31,317,323	76	31,319,564	10	31,080,002	04
Ontario.....	2,179,729	38	2,278,837	19	4,458,566	57	4,102,622	99	3,698,693	32
Manitoba.....	26,130	29	11,106,941	87	11,133,072	16	11,126,203	25	10,750,994	50
Saskatchewan.....	831,339	00	8,994,681	68	9,826,020	68	8,047,805	60	6,944,670	02
Alberta.....	130,054	00	11,256,910	50	11,386,964	50	11,383,804	40	10,927,684	12
British Columbia.....	3,224,054	34	2,504,333	33	5,728,387	67	5,760,770	18	5,771,354	42
Yukon.....	65,000	00	.....	.....	65,000	00	65,000	00	65,000	00
Total.....	29,476,367	54	49,645,334	80	79,121,702	34	76,920,314	37	74,284,991	51

It should be understood that, while the Bell Telephone Company has its larger interests in Ontario, its headquarters are in Montreal. This fact causes the entire capitalization to be assigned to the province of Quebec.

## Cost of telephone interests :—

	1913.		1914.		1915.		1916.		1917.	
	§	cts.	§	cts.	§	cts.	§	cts.	§	cts.
Nova Scotia.....	3,323,901	72	3,505,155	94	3,362,778	72	3,727,335	93	4,008,660	83
New Brunswick.....	1,653,722	11	1,742,697	05	1,823,367	43	1,928,804	78	2,189,325	07
Prince Edward Island.....	150,000	00	179,095	06	220,332	35	254,982	46	265,505	52
Quebec.....	33,002,264	17	37,234,492	02	38,590,730	66	40,190,775	67	43,051,983	19
Ontario.....	4,250,730	45	4,747,077	76	5,197,066	52	5,503,712	17	5,790,178	21
Manitoba.....	9,607,506	91	10,560,084	26	10,758,230	08	11,137,814	84	11,142,604	34
Saskatchewan.....	5,143,663	03	6,100,463	41	6,886,793	62	7,984,303	60	9,792,579	68
Alberta.....	6,472,098	13	9,671,700	52	10,351,912	38	10,820,920	45	10,998,850	29
British Columbia.....	5,611,084	93	6,347,410	20	6,431,191	52	6,801,190	54	7,059,666	89
Yukon.....	.....	.....	170,179	78	170,179	78	170,179	78	170,179	78
Total.....	69,214,971	45	80,258,356	00	83,792,583	06	88,520,020	22	94,469,533	80

The foregoing cost would be equal to \$156.37 per telephone in service in 1917



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## EARNINGS AND OPERATING EXPENSES.

Comparison of 1916 and 1917 :—

Province.	1916.		1917.	
	Earnings.	Operating Expenses.	Earnings.	Operating Expenses.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Nova Scotia.....	756,165 88	509,601 25	802,757 93	587,486 74
New Brunswick.....	517,831 34	294,831 90	576,205 97	359,801 63
Prince Edward Island.....	81,501 39	50,332 34	65,434 99	53,017 95
Quebec.....	10,344,231 76	5,811,941 46	11,488,406 86	6,388,636 11
Ontario.....	1,042,729 36	681,725 92	1,134,026 87	723,386 61
Manitoba.....	1,903,446 54	1,353,984 46	1,915,261 73	1,459,558 52
Saskatchewan.....	1,108,867 60	648,952 90	1,204,057 62	711,829 37
Alberta.....	1,292,034 79	683,437 01	1,358,843 91	669,005 07
British Columbia.....	1,511,388 84	1,092,935 70	1,544,922 45	1,126,264 15
Yukon.....	36,070 35	19,457 92	32,363 29	16,439 67
Total.....	18,594,267 85	11,147,200 86	20,122,281 62	12,095,425 82

The difference between gross earnings and operating expenses was \$8,026,-855.80, as compared with \$7,447,066.99 in 1916. This difference does not, however, represent true net earnings.

## INCOME ACCOUNT.

From units capitalized at \$25,000 and over :—

Gross revenue.....	\$14,179,205 08	
Operating expenses.....	8,073,460 77	
Net operating revenue.....		\$6,105,744 31
Additions:		
Outside operations.....	\$ 27,877 30	
Rents.....	18,198 80	
From securities held.....	309,469 50	
Other income.....	106,870 49	
		462,416 09
Gross corporate income.....		\$ 6,568,160 40
Deductions:		
Taxes.....	\$ 411,945 62	
Interest on bonds.....	909,722 43	
Other deductions.....	70,559 86	
		1,392,227 91
Net corporate income.....		\$ 5,175,932 49
Disposal of net income:		
Dividends—common.....	\$ 1,774,430 65	
“ preferred.....	122,119 38	
Sinking funds.....	2,397,664 78	
Reserves.....	276,719 06	
		4,570,933 87
Balance.....		\$ 604,998 62

## EQUIPMENT.

Classification of telephones by provinces :—

Province.	Central energy.	Magneto.	Total 1917.	Total 1916.	Total 1915.	Total 1914.
Nova Scotia.....	16,102	9,162	25,264	23,249	21,225	20,239
New Brunswick.....	11,353	9,304	20,657	18,775	17,517	16,473
Prince Edward Island.....	1,360	1,127	2,487	2,351	2,244	1,574
Quebec.....	72,622	30,695	103,317	96,640	92,492	91,047
Ontario.....	149,854	123,643	273,497	248,980	239,607	232,456
Manitoba.....	31,110	18,737	49,847	47,903	47,279	49,146
Saskatchewan.....	11,383	32,274	43,657	30,220	29,892	26,023
Alberta.....	20,267	17,395	37,662	35,026	36,749	37,118
British Columbia.....	38,719	8,729	47,448	44,922	45,750	46,713
Yukon.....		300	300	355	355	355
Total.....	352,770	251,366	604,136	548,421	533,090	521,144

Wire mileage by classes :—

Classes of Wire.	1916.			1917.		
	Urban.	Rural.	Total.	Urban.	Rural.	Total.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Galvanized.....	29,419 12	406,620 67	436,039 79	32,940 95	434,174 72	467,115 67
Copper.....	17,836 71	63,379 14	81,215 85	19,409 69	80,663 90	100,073 59
Cable—overhead.....	395,042 27	4,013 50	399,055 77	413,670 52	5,663 92	419,334 44
underground.....	682,117 51	145 75	682,263 26	719,553 30	147 75	719,701 05
submarine.....	949 05	1,040 14	1,989 19	953 80	1,024 25	1,988 05
Total.....	1,125,364 66	475,199 20	1,600,563 86	1,186,528 26	521,677 54	1,708,202 80

Wire mileage by provinces :—

Province.	1916.			1917.		
	Urban.	Rural.	Total.	Urban.	Rural.	Total.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Nova Scotia.....	26,869 00	16,064 75	42,933 75	29,639 00	16,997 75	46,636 75
New Brunswick.....	19,330 22	9,922 44	29,252 66	20,090 93	11,057 67	31,148 60
Prince Edward Island.....	1,304 14	2,357 20	3,661 34	1,338 24	2,415 00	3,753 24
Quebec.....	245,921 90	59,693 30	305,615 20	252,118 50	59,791 95	311,910 45
Ontario.....	423,054 95	180,516 55	603,616 50	453,039 42	193,545 27	646,584 69
Manitoba.....	109,688 00	64,652 75	174,340 75	110,835 00	65,673 50	176,508 50
Saskatchewan.....	61,330 00	85,312 75	146,642 75	75,000 00	111,115 00	186,115 00
Alberta.....	102,905 85	45,070 46	147,976 31	104,270 00	48,607 50	152,877 50
British Columbia.....	134,728 50	11,197 00	145,925 50	139,965 17	12,103 90	152,069 07
Yukon.....	232 10	367 00	599 10	232 00	367 00	599 00
Total.....	1,125,364 66	475,199 20	1,600,563 86	1,186,528 26	521,674 54	1,708,202 80

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## EMPLOYEES.

Comparison of numbers and remuneration :—

Province.	1916.		1917.	
	Number.	Remunera- tion.	Number.	Remunera- tion.
		\$ cts.		\$ cts.
Nova Scotia.....	808	277,886 35	914	325,396 02
New Brunswick.....	531	176,738 00	508	219,585 70
Prince Edward Island.....	89	22,430 88	90	22,341 56
Quebec.....	3,681	1,780,005 19	3,988	2,103,876 21
Ontario.....	6,626	3,237,714 23	7,383	3,739,602 74
Manitoba.....	1,239	767,107 32	1,487	935,537 28
Saskatchewan.....	774	399,025 00	644	405,664 40
Alberta.....	597	512,636 78	530	462,276 80
British Columbia.....	913	666,166 15	939	658,387 55
Yukon.....	7	13,009 51	7	9,934 00
Total.....	15,247	7,852,719 41	16,490	8,882,593 26

## SUMMARY.

The following table will afford a concise view of facts relating to the telephone interests of Canada since statistical information was available :—

	1911.	1912.	1913.	1914.	1915.	1916.	1917.
	\$	\$	\$	\$	\$	\$	\$
Capitalization.....	40,043,982	46,276,851	59,847,005	70,291,884	74,284,991	76,920,314	79,121,702
Cost.....	34,737,530	56,887,799	69,214,971	80,258,356	83,792,583	88,520,020	94,469,534
Revenue.....	10,068,220	12,273,627	14,879,278	17,297,269	17,601,673	18,594,268	20,122,282
Operating Expenses.....	6,979,045	9,094,689	11,175,689	12,882,402	12,836,715	11,147,204	12,095,426
Remuneration.....	915,636	2,659,642	6,839,309	8,250,253	8,357,029	7,852,719	8,882,593
Telephone Companies.....	537	683	1,075	1,136	1,396	1,592	1,659
Wire Mileage.....	687,728	889,572	1,092,586	1,343,090	1,452,360	1,600,564	1,708,202
Telephones.....	302,759	370,884	463,671	521,144	533,090	548,421	604,136
Employees.....	10,425	12,783	12,867	16,799	15,072	15,247	16,490
Persons per telephone.....	23.8	19.3	16.2	15.5	15.1	14.6	13.4
Persons per mile of wire.....	10.4	8.1	6.8	6.0	5.6	5.0	4.7

The tables on succeeding pages will afford full information relating to the various reporting units.

I have the honour to be, sir,

Your obedient servant,

J. L. PAYNE,

*Comptroller of Statistics.*

TABLE I.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.

Name of Company.	Address.	Capital Stock.		Funded Debt.		Cost Property and Equipment.		Revenue.		Long Distance Receipts.		Operating Expenses.		Number of Telephones.		Employees and Remuneration.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	Central.	Magneto.	No.	Amount.
<i>Ontario.</i>																	
Ayr Line Tel. Co.	Harmony	180 00				735 00		252 50				252 50	23		21	137 00	
Aberdeen-Plummer Tel. Co.	Plummer	1,452 90		500 00		1,452 90		219 10	3 10		69 90	36		4	66 30		
Admaston Tel. Asso.	Admaston Station	1,353 90				1,200 00		200 00	15 00		200 00	29		21	75 00		
Admaston Tel. Co.	Admaston	14,700 00		23,000 00		11,100 00		2,522 70	2,416 30		2,416 30	175		1	1,211 61		
Algonquin Park Tel. Line	Toronto			2,985 24		2,985 24		61 82	61 82		61 82	13		1	700 00		
Aldborough Tel. Asso.	Rodney	2,270 00				4,200 00		1,898 60	1,000 00		1,437 60	177		21	216 86		
Alfa Tel. Asso.	Pembroke					6,500 00		725 00			710 00	93		3	375 00		
Alford Tel. Co.	Alford	9,000 00		20,000 00		10,000 00		300 68	163 00		395 50	180		21	2,094 90		
Algoma Central & H. B. Ry. Co.	Sault Ste. Marie	10,000 00		10,460 00		12,495 20		1,412 16	772 37		1,412 91	50		1	1,028 00		
Algoma Eastern Ry. Co.	Sault Ste. Marie	10,000 00				30,671 11		1,085 85	205 73		1,028 00	28		21	1,000 00		
Ammie Tel. Co.	Ammie Harbour	22,510 00		2,400 00		15,200 00		728 00	80 00		614 17	70		21	100 00		
Alice Tel. Co.	Pembroke					960 00		78 00			78 00	16		3	275 00		
Aldwick Tel. Co. Ltd.	Roseneath	5,000 00				1,050 00		410 00			308 97	110		3	5 00		
Annable Tel. System	Hepworth					643 76		80 00			80 00	20		1	140 00		
Anarath Tel. Asso.	Grand Valley	2,100 00		2,000 00		2,100 00		200 00			150 00	40		21	100 00		
Ansonia & Thessalon Tel. Co.	Bruce Mines	2,020 00				4,020 00		577 24			120 00	60		2	154 50		
Apsley Tel. Co.	Apsley	2,200 00				3,090 00		450 56			381 53	42		21	88 73		
Ardrea Tel. Asso.	Orillia	1,800 00				1,800 00		497 80	17 40		356 19	38		1	53 00		
Armstrong Tel. Co.	Earleton	900 00		1,500 00		3,150 50		246 30	31 00		243 30	70		1	20 00		
Arran No. 1 Tel. Co.	Para.					425 00		98 00			98 00	11		2	344 50		
Ashtroye Tel. System	Georgetown	6,460 00				8,275 57		2,341 00			2,018 00	155		2	111 95		
Ayr Tel. Co.	Ayr	650 00				850 00		369 85	11 20		347 61	23		2	3,350 00		
Ayton Tel. Asso.	Ayton					200 00		25 00			25 00	3		1	15 00		
*Bell Tel. Co. Ltd.	Montreal	450 00				950 00		188 00			148 57	45		1	30 00		
*B. Tel. Line.	Richards Landing	2,192 00				2,492 00		250 00			250 00	22		1	330 00		
Back Line Tel. Co.	Melatheton					4,500 00		340 00			340 00	125		1	25 00		
Bahelava Tel. Club	Balderson	840 00				1,400 00		173 92	17 10		110 71	26		1	125 00		
Balderson Tel. Asso.	Renfrew	3,100 00				3,700 00		700 00	60 00		700 00	306		21	52 00		
Balsam Hill Tel. Co.	Angus					850 00		75 00			70 00	6		1	805 00		
Barrie-Angus Tel. Line	Barrie Island	100 00				100 00		18 00			18 00	6		3	1,100 00		
Barrie Is. Tel. Co.	Port Rowan	9,200 00				12,626 30		2,945 80	281 10		2,067 40	138		9	1,350 00		
Barrett Tel. Asso.	Hamilton	360 00				350 00		2 00			2 00	13		2	147 33		
Barton & Binbrook Tel. Co., Ltd.	Woodville			24,086 62		24,086 62		5,850 00			1,350 00	135		9	2,308 11		
Beaver Line	Fairmount					11,000 00		1,255 00			1,255 00	41		6			
Beaver Valley Tel. System	Garden Hill	3,000 00				4,657 82		1,471 45	31 18		131 68	600		4			
Beatty Tel. Co.	Franktown	41,270 00				41,270 00		9,096 40			8,556 67	17					
Beckwith & Montague Tel. Co.	Beckton					1,400 00		192 44			151 00						
Beeton Tel. Co.	Beeton																
Bedmont Tel. System	Haydock	1,010 00															

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Company Name	2,580 00	4,800 00	3,448 12	300 00	2,700 00	285	4	1,500 00
Belmont								
Bellrock & Verona Tel. Co.	832 95	7,832 95	81 00	63 00	81 00	18	1	375 00
Bethany								
Bethesda Tel. Co.	650 00	7,500 00	160 00	78 74	85 00	17	1	78 74
Bethesda & Strouville Tel. Co.	450 00	4,500 00	10,345*60	713 35	8,780 17	850	12	4,687 11
Blenheim & S. Kent Tel. Co., Ltd.	700 00	7,000 00	125 00		85 00	28		
Blind Line	9,050 00	39,129 59	8,079 34		4,275 19	665	1	
Blythe Mun. Tel. Co.	650 00	177 85	177 85		158 57	13	1	9 25
Bobcaygeon Tel. Co.	39,696 00	42,815 38	6,344 07	237 23	1,982 94	501	5	1,462 69
Bolton Tel. Co., Ltd.	2,508 00	2,268 62	1,079 60	131 24	191 24	79	1	35 00
Bond Corners Tel. System	15,950 00	47,421 36	8,557 50	666 39	6,790 00	745	6	2,378 56
Bonsfield Private Line		305 72	99 75	13 70	113 45	13	1	5 00
Bowman Tel. System		880 00	82 00		82 00	16		
Bowman Tel. System	2,400 00	2,400 00	19 00		19 00	5		
Bowman Tel. System	2,400 00	2,400 00	240 00		55 00	24		
Braebridge & Muskoka Lakes Tel. Co.		14,707 00	2,770 64	420 00	1,284 00	160		
Braebridge								
Braden Tel. Asso.	9,700 00	25,000 00	3,600 00	400 00	1,050 46	49	3	1,000 00
Brighton Mun. Tel. System	22,200 00	12,000 00	2,200 00	40 00	1,100 00	320	2	300 00
Brighton Mun. Tel. System	24,500 00	27,000 00	5,838 50	290 00	3,495 50	190	2	400 00
Bromley Line Tel. Asso.		2,280 00	202 00	37 00	224 00	380	3	876 75
Brookdale Tel. Co.	2,150 88	2,200 00	229 10	18 70	220 40	42	2	224 00
Brooke Mun. Tel. System	9,819 00	55,000 00	108 00		110 00	14	1	15 00
Brougham & Grattan Tel. Co., Ltd.	2,100 00	2,700 00	9,899 50	270 00	4,500 00	867	4	2,430 00
Bruce Mun. Tel. System	95,943 95	95,943 95	277 13	129 00	146 00	16	1	20 50
Bussels, Morris & Grey Mun. Tel. Co.	33,973 83	59,118 41	10,814 88	318 88	5,605 00	1,067	6	4,903 00
Burgessville Tel. Co.	13,300 00	26,025 51	7,475 36	571 22	6,163 98	900	7	2,676 65
Burnt River Tel. Co.	4,050 00	7,000 00	1,104 47		5,875 12	585	5	3,974 70
Cavan Tel. Co., Ltd.	15,630 00	15,630 00	4,914 70	1,172 42	3,955 96	105	3	350 00
Carp River Tel. Club	1,750 00	1,700 00	86 00			25	6	3,120 42
Carleton Place Tel. Club	4,265 00	4,400 00	1,400 00		86 00	12		
Carleton Place Tel. Club	4,350 00	9,357 00	325 65		1,330 00	28	2	115 00
Carleton Place Tel. Club	10,000 00	16,400 00	1,791 00	163 80	289 37	240	2	25 75
Carleton Place Tel. Club	3,960 00	3,742 00	260 51	31 45	1,766 50	210	2	597 16
Carleton Place Tel. Club	250,000 00	346,139 10	15,874 18		14,074 65	600	3	230 50
Carleton Place Tel. Club	250 00	2,000 00	50 00		50 00	405	26	15,874 18
Carleton Place Tel. Club	150 00	370 00	54 00	12 00	40 00	4	1	12 00
Carleton Place Tel. Club	1,500 00	2,175 00	200 00		115 00	16	1	15 00
Carleton Place Tel. Club	1,250 00	1,250 00	269 91		130 00	31	2	65 00
Carleton Place Tel. Club		1,584 85	109 50		253 33	25	2	23 70
Carleton Place Tel. Club		1,944 81	366 37		98 00	17	2	98 00
Carleton Place Tel. Club		600 00	24 00		366 37	24	2	75 75
Carleton Place Tel. Club					24 00	15		

\*Figures relate to Ontario only.

‡Automatic.

TABLE 1.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—Continued.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.	Employees and Remuneration.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	Central, Magneto	No. Amount.
<i>Ontario—Con.</i>									
Chamberlain Private Line	Wheatley			5,962 00	2,518 00		1,478 00	177	
Champlain Point Tel. Asso.	Orillia			126 00	56 00		56 00	8	8 00
Chatsworth Tel. Co.	Chatsworth	5,640 00		5,640 00	1,510 90		841 96	109	375 00
Chelmsford Tel. Co.	Chelmsford	1,880 00		2,240 00	360 50		360 50	43	360 00
Chincoteaux Mun. Tel. Asso.	Cheltenham		30,000 00	35,000 00	8,654 26		5,067 80	555	1,000 00
Chippawa Hill Tel. Club	Southampton	1,622 27		1,622 27	279 46		279 46	24	59 00
Cochrane Tel. Co.	Cobalt	15,000 00		16,997 14	2,960 55		2,191 00	106	2,191 00
Coc Hill Tel. Co.	Coc Hill			6,850 00	396 00		225 40	42	
Colborne Mun. Tel. System	Goderich	8,000 00		8,000 00	1,007 55		1,001 57	147	390 00
Colchester N. Tel. System	Essex	11,892 00		15,193 43	1,144 00	108 00	720 00	292	469 51
Coldstream Tel. Asso.	Coldstream			13,800 00	2,150 00	120 00	860 00	254	460 00
Coldwater Tel. System	Coldwater	3,760 00		7,700 00	1,000 00	300 00	800 00	100	707 00
Conn Tel. Co. Ltd.	Conn	34,166 25		6,400 00	760 00	259 00	670 00	135	330 00
Consolidated Tel. Co.	Caledon	500 00		45,986 83	8,374 91	106 07	6,687 61	526	3,073 41
Condoya Mines Tel. Co.	Condoya Mines			650 00	50 00		50 00	10	
Coulson-Jarratt Tel. Asso.	Jarratt	2,700 00		3,600 00	600 00		550 00	49	70 00
Cramahe Mun. Tel. System	Castleton		30,000 00	30,000 00	2,700 00		300 00	263	
Crediton Tel. System	Castleton		30,000 00	6,500 00	2,170 00	25 00	1,243 00	190	600 00
Crews Tel. Co.	Trenton			520 00	65 00		59 30	8	
Crown Hill Tel. Co.	Barrie	3,800 00		3,650 00	605 00	2 50	530 00	76	51 30
Connaught Tel. Co.	Cobden	1,054 00		1,054 00	103 31		103 31	17	18 70
Dawn Mun. Tel. System	Dresden		14,465 00	19,800 00	2,102 00	230 00	1,942 00	340	1,270 00
Delphi Tel. Asso.	Camperdown			500 00	58 15		51 00	8	5 00
Derby Tel. Asso.	Owen Sound	6,000 00		6,229 61	1,883 82	17 40	1,100 51	106	263 52
Dereham Tel. Co.	Brownsville	13,200 00		13,934 30	4,136 36	684 44	3,986 59	300	1,423 22
Desbois Tel. System	Desboro			5,712 00	1,487 06		1,310 38	119	125 50
Dingwall Tel. Asso.	Woodstock			333 00	59 00		59 00	9	
Desmond Tel. Co., Ltd.	Moscow	770 00		773 50	77 00		77 00	14	20 00
Doane Tel. Co.	Newmarket	1,200 00		1,100 00	127 50		74 00	21	25 00
Dore Bay Tel. Co., Ltd	Golden Lake			1,500 00	217 22		216 53	30	
Dover Mun. Tel. System	Bear Line		28,097 90	27,300 00	4,210 15	140 10	4,210 15	416	2 475 00
Dresden Tel. System	Dresden			27,470 00	7,180 70	299 85	4,545 54	448	2,851 50
Drummond & Elmsley Tel. Co.	Perth	850 00		780 00	72 66		62 00	13	8 00
Drummond Centre Tel. Asso.	Perth	5,500 00		5,500 00	1,248 13	151 15	882 32	98	374 80
Dunville Consolidated Tel. Co.	Dunville	79,060 00		83,615 66	20,253 00	8,292 00	14,180 85	927	9,561 32
Dunstable Tel. Asso.	Dunstable	3,260 00		6,100 00	50 00		715 00	121	450 00
Dunweih & Dutton Tel. Asso.	Dutton	3,930 00		4,500 00	1,578 37	48 83	1,512 49	231	370 75
East, Darlington Tel. Co.	Bowmanville			140 00	64 00		60 00	8	







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Huntsville & Lake of Bays Tel. Co.,	4,430 00	46,778 50	6,132 10	1,235 15	1,235 15	6	580 87
Huron & Kinloss Mun. Tel. Co.			47,300 00	9,056 28	3,432 95	5	2,605 31
Huntsville & Portage Tel. Co.			5,925 00	1,020 49	827 00	32	218 45
Indian River Tel. Co.			490 00	47 00	47 00	21	
Ingersoll Tel. Co., Ltd.	36,200 00	35,000 00	119,240 45	20,579 19	526 39	21	9,361 55
Ingersoll Tel. Co.			750 00	182 49	69 53	15	6 50
Inverkip Tel. Co.	18,240 00		35,540 82	6,801 55	4,152 12	6	2,369 03
Innisfil Tel. Asso.	4,200 00		4,550 00	1,331 41	1,320 70	91	178 00
Islay Tel. Co.			1,675 00	85 00	80 00	3	80 00
Ivy-Thornion Tel. Co., Ltd.	3,685 00	2,050 00	8,775 00	2,070 35	1,806 37	4	654 40
Jackson Tel. Co., Ltd.	5,280 00	500 00	6,411 38	788 24	44 00	80	130 70
Jackson & Prandon Tel. Co.			300 00	37 00	14 00	2	
Johnston Private Line.		1,787 94				9	
Johnston Mun. Tel. System.	4,095 21		5,829 50	580 55	580 55	4	433 55
Kadalar & Northern Tel. Co.	1,300 00		1,300 00	245 00	135 00	15	75 00
Kembla-Saravak Tel. Co., Ltd.	4,500 00		4,500 00	90 00	90 00	86	45 00
Kenora Tel. System.	3,950 00	14,942 92	41,215 08	11,324 00	1,143 58	2	
Kenora Mun. Tel. System.		7,847 46	7,847 46	1,102 33	50 94	625	4,172 82
Kerr Tel. Asso.			1,300 00	438 58	1,102 11	190	1,102 00
Kerward Tel. Co.			1,000 00	186 00	85 00	40	150 00
King Tel. Co., Ltd.	5,030 00	1,300 00	10,500 00	3,435 30	145 00	16	
Kingston Road Tel. Asso.			300 00	89 65	86 65	240	1,067 00
Kitley Tel. Co., Ltd.	11,630 00	2,400 00	11,488 13	2,644 74	297 41	9	
Korah Central Tel. Asso.			700 00	101 70	101 70	261	1,032 40
Koshice-Sparrow Lake Tel. Line.			625 00	77 00	76 00	12	5 00
La Cloche Tel. Club.	1,041 13		1,041 13	311 13	129 05	10	18 00
Lake of Bays & Haliburton Tel. Co.	2,270 00		2,906 63	616 20	507 94	17	78 55
Lake Shore Tel. System.	1,400 00		1,400 00	146 75	1 20	4	245 00
Lake Simcoe Tel. Co.	500 00		980 00	165 00	125 50	1	20 00
Laird Mun. Tel. System.		1,806 20	6,890 00	837 33	658 00	16	25 00
Lambton Tel. Co., Ltd.	9,750 00		11,864 80	1,928 63	186 94	149	575 30
Lambeth Tel. Co.	2,400 00		2,601 24	409 17	51 08	3	965 75
Lanark & Carleton Tel. Co.	19,150 00		22,034 43	4,410 13	180 10	15	
Lanark & Rainsay Tel. Co.			3,000 00	236 00	70 00	327	2,114 15
Lansdowne Tel. Co., Ltd.	18,009 00	1,800 00	16,500 00	4,723 96	3,513 80	40	35 00
Laxvami-Dalhousie Tel. Asso.	2,280 00		3,600 00	673 60	650 78	3	1,925 00
Lee Valley Mun. Tel. Co.			8,872 11	1,895 84	51 55	65	88 40
Lee Valley Tel. Co.		8,872 11	1,510 00	148 43	1,038 34	127	593 86
Leeds & Frontenac Tel. Co., Ltd.	4,150 00	1,000 00	24,710 00	5,592 73	5,592 73	28	20 45
Leeds & Grenville Tel. Co.	19,250 00	2,600 00	31,737 20	6,964 20	4,801 00	508	1,850 00
Leith & Annap Tel. Club.	1,462 00		3,900 00	896 00	60 75	10	3,462 50
Lepasse Tel. Co.			80 28	6 69	6 69	82	196 48
Lemnox Tel. Co.	1,410 00		6,500 00	1,126 05	27 00	12	6 69
Lighting Tel. Asso.	1,251 00		4,600 00	100 00	100 00	1	300 00
Lindsay Tel. Co.			4,600 00	794 00	319 00	25	100 00
Little Britain Tel. Union.			300 00	818 00	788 00	82	242 00
Long Lake Tel. Co.			6,550 00	900 00	500 00	3	451 00
Lucknow & Kinloss Tel. Co.	1,100 00		1,100 00	100 00	40 00	11	250 00
Lyons Private Line.			1,050 00	349 00	160 00	24	
Lyndhurst Tel. Co.	8,300 00		10,300 00	1,800 00	1,075 00	198	625 00

TABLE I.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—Continued.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.
								Central.	Magneto.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.
<i>Ontario—Con.</i>										
Lyndock, Carholme & Walsingham Tel. Co.	Lyndock.	270 00	100 00	450 00	18 00		15 00	11		13 00
Maberley Tel. Co.	Maberley.	900 00		980 00	40 00		40 00	23		35 00
Madawaska Tel. Asso.	Burnstown.	1,365 00		1,880 00	700 97	91 90	500 31	3		200 00
Madsone Man. Tel. System.	Woodslce.		15,074 89	25,446 13	1,800 00	60 00	1,701 71	366		750 25
Malahide & Bayham Tel. Asso.	Stratfordville.	7,560 00		8,430 00	2,637 47	28 60	2,417 95	5		771 22
Madburytown Tel. Co.	Madburytown.	14,000 00		18,481 22	3,289 57	102 27	3,289 57	200		1,008 15
Manitowish & North Shore Tel. Co.	Little Current.	13,000 00	2,000 00	17,000 00	2,200 00		1,200 00	22		350 00
Manitowish Tel. Co.	Mindemoya.	6,435 00		7,448 00	2,406 52		2,170 51	200		1,021 82
Manitowish Northern Tel. Co.	Oakwood.			3,000 00				70		
Manse Grove Tel. Co.	Loaneville.	502 00		1,600 00	250 00		250 00	41		25 00
Maple Grove Tel. Co.	Shallow Lake.			1,700 95	187 65		186 90	17		5 00
Maple Leaf Tel. Co.	Oakwood.			665 00	45 00		45 00	20		45 00
Maple Leaf Line.	Sonya.			162 00	16 38		16 38	7		
Maple Shade Tel. Co.	Woodstock.			200 00	63 00		63 00	8		
Mariposa Tel. Union.	Oakwood.			700 00	900 00		850 00	170		700 00
Martintown Tel. Co.	Martintown.			663 38				26		
Marsca Tel. Co.	Martintown.	663 38		8,500 00	1,685 07	121 00	627 75	140		400 75
Marystown Tel. Co., Ltd.	Leamington.	2,250 00	1,500 00	17,716 89	3,770 75		3,770 75	381		1,150 00
Masscy Station Tel. Co., Ltd.	Leamington.	15,030 00	19,500 00	8,000 00	1,200 00	50 00	700 00	100		400 00
Meath Tel. Asso.	Milford.	500 00		600 00	113 75	25 07	858 45	3		67 90
Medonte Man. Tel. System.	Spanish Mills.			2,270 90	221 20		221 20	36		5 50
Melamedon Tel. Asso.	Colben.			18,432 38	3,670 60		1,852 80	372		650 00
Melamedon Tel. Co.	Corbeillon.	2,700 00		2,750 00	125 00		100 00	43		25 00
Melville Tel. Co.	Metcalfe.	18,900 00	20,000 00	21,500 00	4,500 00	125 00	2,159 00	371		1,125 00
Mills Tel. Co.	Coldwater.			1,000 00	106 80		31 50	1		
Minesing Tel. Asso.	Thamesford.	3,850 00		7,060 00	1,301 60	231 70	1,065 36	105		600 00
Mink Lake Tel. Co.	Minesing.	420 00		3,850 00	409 00	276 86	369 00	113		
Minto Tel. Co.	Eganville.	3,350 00		450 00	85 00		85 00	14		10 00
Mississippi Tel. Co., Ltd.	Harristown.	2,660 00		6,740 00	1,361 00	101 00	782 00	171		100 00
Milling Tel. Co.	Leamark.			4,346 00	1,095 00	72 75	605 00	107		500 00
Molesworth Tel. Co., Ltd.	Napanee.	990 00		600 00	168 00		110 00	14		15 00
Monk Municipal Tel. Co.	Wrexeter.	30,000 00	4,600 00	3,475 00	1,119 00	100 00	450 00	80		162 00
Monk Tel. Co.	Beauport.			4,377 93	355 00	113 00	409 77	40		3,116 00
Montville-Dempsey Tel. Co.	Carp.			25,000 00	6,028 48	703 80	5,470 81	456		2,200 00
Mono Mills Tel. Asso.	Stratford.	9,000 00		5,300 00	1,342 00	2 25	770 00	87		600 00
Mooresburg-Desboro Tel. Asso.	Mono Mills.			9,000 00	500 00	36 40	600 00	138		600 00
	Desboro.			100 00	10 00		10 00	12		

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Mooresville Tel. Co.	13,543 00	35,865 00	2,000 00	790 00	450 00	200 00	54	3,150 00
Moore Mun. Tel. Assn.	14,000 00	12,000 00	1,000 00	4,200 00	30 00	4,500 00	770	1,500 00
Moore Private Line	3,640 00	4,600 00	14,000 00	70 00	54 75	30 00	13	745 15
Morningstar Tel. Co.	6,870 00		14,000 00	2,720 00	188 59	2,600 00	290	3,004 58
Morningtown & Wellshy Tel. Assn.			3,125 00	1,749 74	1,419 10	5,663 64	130	
Mount Albert Tel. Co., Ltd.			25,683 00	6,315 05			7	
Mount Forest, Wellington & Grey Tel. Co.			10,832 72	3,216 33		1,029 94	164	201 00
Mount Granite Tel. Club			700 00	156 63	1 25	39 46	1	22 00
Mount Horob Tel. Co.			627 83	115 56			11	
Mossow Tel. Assn.			2,800 00	66 80	400 00	111 72	23	238 00
Murray-Brighton Tel. Co.			22,181 20	3,036 23	586 23	1,678 20	114	460 25
Muskoka Tel. System			3,500 00	587 50	419 90	1,000 00	245	800 00
Muskoka, Victoria & Haliburton Tel. Co.	3,000 00		3,524 00	668 40	126 45	683 50	32	12 00
Muskoka River Tel. System	570 00		400 00	50 00		50 00	7	10 00
Muskat Tel. Assn.			390 54	184 00		184 00	19	
Mutual Tel. Assn.			250 00	54 00		54 00	9	
McDonald Mun. Tel. Co.	1,740 00	2,400 00	3,050 00	225 00	41 25	225 00	73	170 00
McDonald Tel. Co.			1,740 00	187 50		187 50	27	
McHardy Private Line			650 00	400 00	70 00	286 00	26	
McKillop, Logan & Hibbert Tel. Co.	13,845 00	5,700 00	20,835 26	5,377 95	1,019 01	3,043 43	450	2,310 00
McKillop Tel. System			28,975 00	6,075 00	300 00	5,650 00	360	525 00
McNab Tel. Assn.	4,065 00		5,565 00	693 30	22 15	276 00	130	200 00
Nelson Tel. Co.	10,000 00	10,000 00	23,350 00	4,273 57	250 00	1,735 20	235	1,073 00
New California Tel. Co.			2,175 00	672 00		672 00	61	100 00
New Dundee Tel. Co.	4,300 00		8,762 00	2,650 20		1,742 66	176	608 00
New Glasgow Tel. Co.	2,600 00		6,500 00	920 00	150 00	933 00	145	150 00
Niagara District Tel. Co., Ltd.	16,225 00		29,526 00	6,769 90		5,162 85	549	3,178 17
Nissouri Tel. Co.	3,695 00		5,600 00	1,856 65	317 00	1,923 60	166	729 00
Noble Tel. Line			350 00	15 00		8 00	6	
Noisy River Tel. Co.	25,998 65		38,766 97	10,566 21	283 58	5,654 55	639	3,456 31
Norfolk County Tel. Co.	43,300 00	9,000 00	92,904 72	21,571 45	4,210 82	13,982 29	1,347	7,517 10
Norfolk & Tilsonburg Tel. Assn.	6,115 00		9,000 00	2,859 37	397 40	2,186 00	275	991 00
Norland Tel. Co.	230 00		366 00	27 30	18 15	17 50	27	
North Bonchere Tel. Assn.			800 00	75 00		75 00	13	5 60
North Brant Tel. Assn.			1,600 00	41 00		35 00	43	20 00
North River Tel. Co. (Mun.)			2,241 80	530 50	277 31	281 27	48	93 00
Northcott Farmers Tel. Co.	1,200 00		1,200 00	90 00	90 00	90 00	45	90 00
North Cavan Tel. Co.	450 00		450 00				9	
North East Clark			1,000 00	100 00		100 00	22	80 00
North Eashhope Mun. Tel. System			27,853 85	2,465 00	274 36	2,487 51	417	1,900 00
North Elderslie Tel. Assn.			2,500 00	95 00		95 00	34	10 00
North Eastern Tel. Assn.			900 00	28 00		28 00	19	8 50
Normanby Tel. Assn.			490 00	81 00	3 15	3 00	20	3 00
Northern Mutual Tel. Co.			2,440 00	90 00		90 00	34	24 00
Northern Tel. Co.	1,125 00		1,105 16	30 00		30 00	14	30 00
North Horton Tel. Co.	1,950 00		1,761 00	641 66	60 70	315 04	55	106 50
North Huron Tel. Co., Ltd.	20,000 00	2,455 33	26,081 75	5,983 66		4,260 44	461	1,049 35
North Mutual Tel. Line of Cavan			772 00	68 83		68 83	17	51 00
North Renfrew Tel. Co.	1,680 00		1,900 00	892 25	141 65	700 00	48	700 00

TABLE I.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—Continued.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.		Revenue.	Long Distance Receipts.		Operating Expenses.	Number of Telephones.		Employees and Remuneration.
				\$	cts		\$	cts		Central.	Magneto.	
<i>Ontario—Con.</i>												
North Wellington Tel. Co., Ltd.	Arthur	5,892 00		8,250 00		1,741 41		1,301 69		127	4	406 80
Oak Flats and Verona Tel. Co.	Verona			800 00		11 25		11 25			17	3 75
Oldfields Tel. Line	Dundalk	325 00		325 00		100 00		60 00		12	1	
Oliver Mun. Tel. Co.	Murillo	6,821 90		9,750 00		2,148 15		927 75		98	3	750 00
Onnence Tel. Co.	Onnence	1,365 00		1,978 00		577 70	29 00	379 71		45	1	67 00
Oro Tel. Co., Ltd.	Oro Station	6,575 00		11,100 00		2,336 70	109 00	2,185 80		228	4	821 90
Orono Tel. Co.	Orono	7,250 00		12,000 00		796 22	196 35	917 63		285	2	820 00
Orr-Stanhoff Tel. Asso.	Chesley	408 81		408 81		5 00		5 00		20	1	
Oseola Tel. Asso.	Colden	1,000 00		1,000 00		58 00		58 00		15	1	10 00
Osprey Mun. Tel. System	Fewersham		12,500 00	12,500 00		573 30	310 00	980 00		182	2	600 00
Otonabee Mun. Tel. Asso.	Keene		25,000 00	25,000 00		1,410 70	118 29	1,074 77		285	5	1,012 43
Old Ferry Road Tel. Co.	Perth	5,500 00		4,500 00		89 40	17 50	89 40		35	1	87 00
Palace Road Tel. Asso.	Napanee	2,500 00		2,150 00		411 00	2 00	255 00		37	1	45 00
Park Hill Tel. Co.	Woodville	800 00		1,950 00		70 00		70 00		32	2	70 00
Park Hill Tel. Asso.	Park Hill	13,000 00		800 00		90 00	39 75	96 00		21	1	18 00
Passmore-Fowler Tel. Line	North Bay			12,500 00		1,978 72	37 00	1,516 07		184	3	850 00
Passmore Tel. Co.	Colden			327 20		107 00		107 00		6		
Peabody Tel. Co.	Chesley			900 00		72 00		72 00		16	1	72 00
Pleasant View Tel. Co.	Owen Sound	450 00		765 00		79 50	15 55	79 55		16	1	2 50
Pleasant Valley Tel. Co.	Napanee	1,350 00		450 00		55 00		55 00		10		
Peerless Central Line	Little Britain			1,350 00		180 00		175 00		24		
Peerless Tel. Asso.	Woodstock			150 00		150 00				10		
Pefferlaw Tel. Co.	Pefferlaw			175 00		46 00		46 00		6		
Pelee Is. Mun. Tel. System	Pelee Island			3,100 00		650 00		275 00		106	1	250 00
Peoples Tel. Co., Ltd.	Woodstock		6,218 12	6,853 00		1,305 16	126 08	1,305 16		104	2	885 20
Peoples Tel. Co. of Forest.	Proton	8,750 00		351 56		84 12		84 12		11		
Peoples Tel. Co., Ltd.	Forest	9,455 00		9,375 00		1,123 75	555 40	1,171 50		318	4	498 16
Percy Mun. Tel. System	Maynooth	13,700 00		15,800 00		5,947 09	333 25	3,124 80		475	6	2,390 50
Perth & Christies Lake Tel. Asso.	Warkworth			17,570 90		3,633 50	340 82	3,553 11		175	16	1,880 00
Perry Tel. System	Perth	1,410 00		40,000 00		1,631 00		1,115 72		428	4	1,109 00
Pine Grove Tel. Asso.	Napanee			1,760 67		386 13	23 21	321 14		69	2	130 00
Pioneer Tel. Co., Ltd.	Orrilla	5,083 00		3,000 00		603 00		400 00		46		
Pioneer Tel. Asso.	Thornton	6,000 00		525 00		70 00		70 00		12		
Plum Hollow & Florida Tel. Co.	Woodstock			6,315 38		917 53	134 06	1,004 66		90	3	613 16
Plummer, Aberdeen & Galbraith Tel. Co.	Athens			650 00		255 55		242 55		22		
		6,000 00		20,000 00		2,000 00		1,500 00		300	3	900 00
	Oplar	3,410 00		3,410 00		431 75	3 00	421 80		43	3	205 00

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Company Name	3,450 00	335 00	335 00	3,450 00	970 00	3,450 00	5,450 00	335 00	335 00	335 00	50	1	133 65
Plummer & Lefroy Mun. Tel. System													
Pontypool Tel. Co.	970 00	1,090 00	292 90								37		
Port Hope Tel. Co., Ltd.	9,120 00	15,848 00	2,511 58								256		928 00
Port Hoover Central Line		675 00	97 50								20		64 50
Porcupine Tel. Lines, Ltd.	30,000 00	35,493 58	9,581 93								215		7,008 74
Port Arthur Tel. Dept. (Mun.)	337,500 00	352,161 54	45,883 36								48		29,040 66
Port Rowan Tel. Co.			1,419 19								152		700 00
Port Stanley Tel. Co.	610 00	1,000 00	362 48								46		100 00
Princeton & Drumbo Tel. Co	20,000 00	35,750 00	7,525 62								591		2,187 96
Progressive Agricultural Tel. System		1,700 00	106 00								14		15 00
Queens Line Tel. Assn. No. 1		1,000 00	47 35								17		22 00
Queens Line Tel. Assn. No. 2		850 00	60 00								20		49 25
Queens Line Tel. Assn. No. 3			32 00								6		
Quinlan Tel. Assn.	6,000 00	6,000 00	1,550 00								101		
Railton Tel. Line		200 00									1		
Rainy River Tel. Co.	23,875 00	23,518 78	2,024 48								78		1,260 00
Ravenscliffe Tel. Co., Ltd	2,350 00	2,367 05	559 98								44		123 87
Richardson Private Line		1,500 00	205 00								4		
Richards Landing		1,000 00	100 00								20		
Riverside Tel. Co.		217 80	65 85								8		
Rivdale Tel. Assn.	590 00	590 00	164 25								15		
Rochester Mun. Tel. Assn.		16,884 00	4,039 00								470		1,935 00
Roche Fenche Tel. Co.		1,262 00	121 50								17		
Robison Tel. Co.	835 00	835 00	93 00								30		23 20
Rockwood & Oustie Tel. Co.	4,000 00	4,200 00	918 00								2		171 18
Rocktown Tel. Assn.	1,585 55	1,585 95	476 00								34		10 00
Romney Tel. System	900 00	1,000 00	216 00								25		50 00
Rosedale Tel. Co.	800 00	800 00	30 60								18		54 52
Rose Tel. Co.	1,200 00	1,460 00	140 00								14		50 00
Rosseau Independent Tel. Co.		4,500 00	1,261 00								77		960 00
Rox Tel. Co.		890 00	125 80								17		15 00
Rosedale Rural Tel. Co.	1,160 00	1,160 00	250 00								20		
Roxborough Tel. Co.	6,700 00	13,452 35	2,368 83								216		1,050 00
Russell Tel. System		2,500 00	700 00								100		200 00
Russell Tel. Co.	14,500 00	15,000 00	3,000 00								200		1,262 00
Renfrew & Shamrock Tel. Co.	1,617 50	1,552 25	162 50								17		15 00
Rydal Bank Tel. Co.	1,500 00	800 00	60 00								14		13 00
Salem Tel. Assn.		140 00	24 00								4		
Salkeld-Andrews Tel. Co.	115 00	350 00	35 00								5		
Sandwich W. Tel. Assn.		115 00									6		
Saugeen Tel. Co.	3,000 00	9,900 00	1,740 00								91		320 00
Seventh Line Tel. Assn.	300 00	300 00	30 00								6		
Scarboro Tel. Co., Ltd.	8,200 00	48,675 40	5,478 70								15		10 00
Schoenberg Tel. Co., Ltd.	22,225 00	36,990 00	4,161 62								470		1,950 00
Sebright Tel. Co.	3,850 00	3,850 00	450 00								292		1,324 00
Seotch Line & Miraville Tel. Assn.		2,000 00	650 00								60		350 00
Second Line Drummond Tel. Assn.	1,100 00	1,100 00	121 00								56		
Scratch & Palmer Tel. Assn.	200 00	200 00	50 00								22		29 65
Selby Tel. Co.	2,850 00	5,500 00	1,330 00								127		250 00
Section Tel. Assn.			81 00								13		



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Station & N. Gwillimbury Tel. Co.	2,340 00	4,900 00	2,017 42	1,060 04	33	552 54
Tara-Keady Tel. Co.	1,043 50	1,043 50	154 00	134 00	1	10 00
Tarbut Mun. Tel. System.	1,759 00	2,841 00	581 00	620 00	3	318 00
Tarentorus Tel. Co., Ltd.	5,000 00	1,100 00	400 00	175 00	1	35 00
Tay Mun. Tel. System.	5,739 24	1,186 84	1,350 50	1,260 20	1	561 20
Temiskaming & N. Ont. Ry. Com.	97,891 90	97,891 90	2,199 82	14,321 22	10	6,552 73
Temiskaming Tel. Co.	50,124 00	113,056 70	42,892 70	10,671 10	43	17,531 45
Thamesville Tel. Co., Ltd.	7,500 00	32,354 55	7,421 53	834 00	7	2,618 35
Thedford Arkona & E. Lambton Tel. Co.	10,000 00	15,073 35	5,069 70	189 90	5	1,540 00
Thompson Private Line.	Elm Tree.	300 00	10 00		3	
Tilbury W. Mun. Tel. System.	63,738 43	63,738 43	3,014 32	414 47	5	2,200 00
Townline & Seventh Line Tel. Co.	Beachburg.	450 00	45 50		9	
Tuckersmith Mun. Tel. System.	Seaforth.	43,947 76	10,078 75	275 00	4	1,435 00
Tye & Barr Tel. System.	Milverton.	13,300 00	2,061 30	1,945 51	3	650 90
Ungers Tel. Line.	St. Williams.	350 00	22 00		12	
Uxley Tel. Co., Ltd.	Uxley.	5,453 00	340 00	200 00	82	50 00
Union Tel. Asso.	Cobden.	600 00	200 00	200 00	1	17 00
Union Tel. Club.	Owen Sound.	665 00	135 90		10	
Union Tel. Co., Ltd.	Drayton.	8,335 00	4,323 45	248 95	346	1,500 00
United Tel. Co.	Denbeld.	35,000 00	6,747 95	599 83	7	3,122 70
Uptergrove Tel. Co.	Uptergrove.	728 00	108 60	108 60	13	
Urban & Rural Tel. Co.	Rothwell.	25,519 87	7,932 49	371 61	7	2,594 50
Upper Adamston Tel. Co.	Renfrew.	1,038 27	25 50	25 50	17	17 00
Valentia Central Line.	Valentia.	1,675 00	200 00	162 00	55	15 00
Violet Hill Tel. Asso.	Camilla.	660 00	85 00	85 00	14	17 00
Village Tel. Line.	Little Britain.	450 00	50 00		15	50 00
Verner Tel. Co.	Verner.	300 00	90 00	40 00	9	
Vespra Mun. Tel. Co.	Barrie.	9,500 00	2,400 00	1,000 00	159	140 00
Walt Township Mun. Tel. System.	Raymond.	10,000 00	600 00	600 00	1	35 00
Wallacetown & Lake Shore Tel. Asso.	Wallacetown.	3,600 00	2,653 24	130 00	4	825 75
Walsingham Cen. & Pl. Rowan Tel. Co.	Port Rowan.	800 00	65 00	65 00	26	65 00
Waterloo Mun. Tel. System.	Preston.	21,236 71	1,744 00	1,744 57	331	1,210 00
Welland County Tel. Co., Ltd.	Bridgeburg.	31,060 94	14,082 29	6,929 72	13	5,650 00
West Garafraxa Tel. Co.	Belwood.	3,754 47	593 00	593 00	70	277 36
Westmeath & Beachburg Tel. Co.	Beachburg.	1,700 00	180 00	180 00	35	35 00
West Williams Tel. Asso.	Beachburg.	2,104 70	249 42	7 00	7	20 00
Westport Tel. Co.	Westport.	7,728 41	2,509 59	18 90	5	564 42
Wheatley Tel. Co.	Wheatley.	16,960 00	2,555 30	23 95	300	870 45
Whitfield Mun. Tel. System.	Whitfield.	17,935 25	3,427 24	47 34	324	1,726 00
White's Tel. Line.	North Bay.	3,865 00	401 70	401 70	39	117 44
Willberforce Tel. Co.	Leamington.	365 00	60 00		12	
Wiarion & Lake Charles Tel. Co.	Eganville.	1,200 00	115 00	115 00	22	75 00
Windham Tel. System.	North Keppel.	3,000 00	300 00	30 00	43	
Windham Tel. Co.	Clifford.	14,000 00	2,500 00	20 00	5	1,100 00
Wilson Private Line.	Delhi.	1,750 00	300 00	5 00	27	
Woodbridge & Vaughan Tel. Co.	Milton.	130 00	40 00	36 00	6	
Woodford Tel. Club.	Woodford.	33,263 27	8,229 95	300 85	585	3,491 95
Woodville Glen Tel. Co.	Woodville.	2,117 00	240 00	240 00	28	20 00
		1,143 95	111 35	111 35	27	16 35

TABLE I.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—*Continued.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.
								Central.	Magneto	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.
<i>Ontario—Con.</i>										
Wolford Tel. Co.	Easton's Corners.....	3,710 00	600 00	4,550 00	340 00	40 00	370 00	79	3	300 00
Wolftown Tel. Assn.	Cobden.....	720 00		563 00	260 50	13 30	185 00	20	1	30 00
Wroxeter Tel. Co., Ltd.	Wroxeter.....	19,980 75		14,690 00	2,962 59	112 93	1,679 38	310	2	1,172 40
Yarker Tel. Co.	Moscow.....			2,400 00	120 00		120 00	60	1	120 00
Yarmouth Tel. Co., Ltd.	New Sarum.....	2,670 00		3,028 76	1,228 06		1,066 70	85	4	359 10
Zion Line Tel. Assn.	Cobden.....	755 00		550 00	336 56		278 22	21		
Zorra Tel. Assn.	Embro.....	3,620 00		6,900 00	2,481 52		1,692 64	142	2	1,061 47
Total.....		2,179,729 38	2,278,857 19½	790,478 21½	1,036,113 92	97,912 95	723,386 61	149,854	123,643	7,383,739,602 74



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TABLE 2.—Statement of Wire Equipment—Urban and Rural.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized		Copper Wire.		Galvanized.		Copper Wire.	
		Single Wire.	Over-head.	Under-ground.	Sub-marine.	Single Wire.	Over-head.	Under-ground.	Sub-marine.
<i>Ontario.</i>									
"A" Line Tel. Co.	Harmony	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Aberdeen-Plummer Centre Tel. Co.	Plummer	13 50							
Admaston Tel. Asso.	Admaston Station	42 50							
Addison Tel. Co.	Addison	13 00							
Algonquin Park Tel. Line	Toronto	101 00							
Aldborough Tel. Asso.	Rothney	61 00							
Alba Tel. Asso.	Pembroke	192 00							
Allenford Tel. Co.	Allenford	160 00							
Algoma Eastern Ry. Co.	Sault Ste Marie	118 00			186 00			2 50	
Algoma Central & H.B. Ry. Co.	Sault Ste Marie				604 50				
Almie Tel. Co.	Almie Harbour	195 60							
Alice Tel. Co.	Pembroke	199 00							
Anawick Tel. Co., Ltd	Rosemeath	20 00							
Amable Tel. System	Hepworth	44 00							
Amaranth Tel. Asso.	Grand Valley	11 00							
Ansonia & Thessalon Tel. Co.	Grand Valley	40 00							
Apsley Tel. Co.	Bruce Mines	31 00							
Ardrea Tel. Asso.	Apsley	42 00							
Armstrong Tel. Co.	Orillia	61 00							
Arran No. 1 Tel. Co.	Earleton	10 00							
Ashgrove Tel. System	Tara	68 00							
Ayr Tel. Co.	Georgetown	3 00							
Ayrton Tel. Asso.	Ayr	172 00							
"B" Tel. Co., Ltd.	Ayrton	8 00							
Back Line Tel. Co.	Montreal	125,532 00		503 00					
Balacaya Tel. Club	Richards Landing	129,155 00	294,388 00						
Balderson Tel. Asso.	McLanethon	3 00							
Balsam Hill Tel. Co.	Balacaya	43 00							
Barrie-Angev Tel. Line	Balderson	45 00							
Barrie Is. Tel. Co.	Rentrew	14 00							
Barrett Tel. Asso.	Barrie Island	57 00							
Barton & Binbrook Tel. Co., Ltd.	Port Rowan	25 00							
	Hamilton	202 00							

\*These figures relate to Ontario only.

TABLE 2.—Statement of Wire Equipment—Urban and Rural—Continued.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized		Copper Wire.		Galvanized		Copper Wire.	
		Single Wire.	Under-ground.	Over-head.	Sub-marine.	Single Wire.	Under-ground.	Over-head.	Sub-marine.
<i>Ontario—Con.</i>									
Beaver Line.	Woodville.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Beaver Valley Tel. System	Fairmount.					5 00			
Beatty Tel. Co.	Garden Hill					400 00			
Beechwith & Montague Tel. Co.	Franktown					90 00			
Beeton Tel. Co.	Beeton					65 00			
Belmont Tel. System	Haydock.					800 00			
Belmont Tel. Co.	Belmont					26 00			
Bellrock & Verona Tel. Co.	Verona					181 00			
Bethany Tel. Co.	Bethany					7 00			
Bethel Tel. Asso.	Dundalk					115 00			
Bethesda Tel. Co.	Bowmanville.					7 50			
Bethesda & Stouffville Tel. Co.	Stouffville.					6 00			
Blanchard Private Line.	Carrington			100 00		285 00		50 00	
Blenheim & S. Kent Tel. Co., Ltd.	Blenheim					20 00			
Blind Line.	Woodford	40 00	42 00			608 00			
Blyth Mun. Tel. Co.	Blyth.	7 00	1 00	117 00		601 00	9 00		
Bolbraygon Tel. Co.	Bolton			90 00		40 00			
Bolton Tel. Co., Ltd.	Woodstock					730 00			
Bond Cormers Tel. System	Chesley					2 50			
Bond Tel. Co.	Milton					13 50			
Bonsfield Private Line	Bowesville					1 50			
Bowesville Tel. Asso.	Elmwood.					28 00			
Bowman Tel. System.	Elmwood.					86 00			
Bracebridge and Muskoka Lakes Tel. Co.	Bracebridge					250 00			
Bradden Tel. Asso.	Latta.					258 00	19 00		
Brighton Tel. Line.	Hanover.					100 00			
Brighton Mun. Tel. System	Brighton					256 00			
Bromley Line Tel. Asso.	Bromley Line.					30 00			
Bromley Tel. Asso.	Colden.					36 00			
Brookdale Tel. Co.	Napanee.					16 00			
Brooke Mun. Tel. System.	Inwood.	7 00		3 00		813 00			
Brougham and Grattan Tel. Co., Ltd.	Hyndford					18 00			
Bruce Mun. Tel. System	Tiverton		210 00	310 00		580 00	20 00		
Brussels Morris and Grey Mun. Tel. Co.	Brussels	57 00		2 00		430 00			
Burgessville Tel. Co.	Woodstock.					606 00			



TABLE 2.—Statement of Wire Equipment—Urban and Rural—Continued.

Name of Company.	Address.	Urban.			Rural.		
		Galvanized.		Sub-marine.	Copper Wire.		Sub-marine.
		Single Wire.	Miles.		Over-head.	Under-ground.	
<i>Ontario Con.</i>							
Drummond Centre Tel. Asso.	Perth						
Dunville Consolidated Tel. Co.	Dunville			269 00			
Dunstable Tel. Asso.	Dunstable	20 00					
Dunvach and Dutton Tel. Asso.	Dutton						
E. Darlington Tel. Co.	Rowmanville						
E. Grey Tel. Co.	Markdale						
E. Larher Tel. Co.	Grand Valley	8 00					
E. Middlesey Tel. Co., Ltd.	Thornedale	8 00		31 00			
E. Woodville Tel. Asso.	Woodville						
Eden Tel. Co.	Woodville						
Edenvale Tel. Co.	Edenvale						
Eldgar Tel. Line	Laurel						
Elderslie-Salem Tel. Asso.	Dobbington						
Elton Union Tel. Asso.	Lorneville						
Elmsley S. Tel. Co.	Lombardy						
Elgin-Chaffey's Lock Tel. Co.	Chaffey's Lock						
Elizabeth Bay Tel. Co.	Elizabeth Bay						
Ellis Tel. Co.	Cannington						
Erno Mun. Tel. Co.	Erno						
Enterprise Tel. Asso.	Steection	1 00					
Enterprise Tel. Co.	Enterprise	82 00		172 00			
Erie Tel. Co., Ltd.	Selkirk						
Ernestown Tel. Co., Ltd.	Odesa						
Ersst Private Line	New Hanluing						
Euphrasit Mun. Tel. System	Markdale						
Everett Tel. Co.	Everett						
Evergreen Tel. Co.	Douglas						
Excelsior Tel. Asso.	Woodstock						
Fallis Tel. Line	Millbrook						
Falkirk Tel. Asso.	Donfield						
Fairview Tel. Co.	Antin Mills						
Fairview Tel. Asso.	Woodstock						
Farmers Union Tel. Co.	Richardson Landing						
Fenelon Tel. Asso.	Cameron						
Fenella Tel. Co., Ltd.	Fenella						





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Lake of Bays & Haliburton Tel. Co.....					95 00
Lake Shore Tel. System.....					
Lake Simcoe Tel. Co.....		36 00	2 00		15 00
Laird Mun. Tel. System.....					30 00
Lambton Tel. Co., Ltd.....		11 00			151 00
Lambeth Tel. Co.....					14 00
Lanark & Carleton Tel. Co.....					443 00
Lanark & Ransey Tel. Co.....					60 00
Lansdowne Tel. Co., Ltd.....				6 00	400 00
Lavant-Dalhousie Tel. Asso.....					115 00
La Vallée Mun. Tel. Co.....					99 50
Lee Valley Tel. Co.....					20 00
Leeds & Frontenac Tel. Co., Ltd.....					450 00
Leeds & Grenville Tel. Co.....		10 00	25 00		515 00
Leith & Annap Tel. Club.....					50 00
Lepasse Tel. Co.....					9 00
Lennox Tel. Co.....					135 00
Lighting Tel. Asso.....					16 00
Linwood Tel. Co.....					40 00
Little Britain Tel. Union.....					
Long Lake Tel. Co.....					157 50
Lucknow & Kinloss Tel. Co.....					11 00
Lyons Private Line.....					24 00
Lyndhurst Tel. Co.....				0 25	79 00
Lyndoch Curlholme & Walsingham Tel. Co.....					
Lyndoch.....					6 00
Maberly Tel. Co.....					8 00
Madawaska Tel. Asso.....					27 00
Maidstone Mun. Tel. System.....					250 00
Malahide & Bayham Tel. Asso.....					205 00
Mallorytown Tel. Co.....					300 00
Manitoulin & N. Shore Tel. Co.....				2 57	175 00
Manitoulin Tel. Co.....				1 25	200 00
Manitowish Northern Tel. Co.....					48 00
Manse Grove Tel. Co.....					21 00
Maple Grove Tel. Co.....					13 50
Maple Leaf Tel. Co.....					10 00
Maple Leaf Line.....					1 00
Maple Shade Tel. Co.....					4 50
Mariposa Tel. Union.....					120 00
Martinson Tel. Co.....					16 00
Martintown Tel. Co.....				1 00	91 50
Mersea Tel. Co.....					282 00
Marysburg Tel. Co.....				10 00	110 00
Massy Station Tel. Co., Ltd.....					8 00
Meath Tel. Asso.....					42 00
Medonte Mun. Tel. System.....					496 00
Melancthon Tel. Asso.....					56 00
Metcalfe Tel. Co.....					225 00
Millard Tel. Line.....		2 00			20 00
Mills Tel. Co.....					60 00
Thamesford.....					





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Nelson Tel. Co.	Milton				275 00
New California Tel. Co.	Kingsville				60 00
New Dundee Tel. Co.	New Dundee				249 00
New Glasgow Tel. Co.	Rodney				164 00
Niagara District Tel. Co., Ltd.	Jordan Station	0 50			326 50
Nissouri Tel. Co.	Thamesford				78 00
Noble Tel. Line	Sutton West				6 00
Noisy River Tel. Co.	Glencairn				824 00
Norfolk County Tel. Co.	Waterford				1,568 00
Norfolk & Tilsonburg Tel. Asso.	Tilsonburg	169 00		223 00	
Norland Tel. Co.	Norland				141 00
North Bonnehore Tel. Asso.	Renfrew				15 00
North Brant Tel. Asso.	Elmwood				8 00
North River Tel. Co. (Mun.)	Lovering				16 00
Northcot Farmers Tel. Co.	Northcot				20 00
North Cayvan Tel. Co.	Ida				16 00
North East Clark Tel. Co.	Orono				6 00
North Easthope Mun. Tel. System	Stratford				18 00
North Elderslie Tel. Asso.	Dobbinton				572 00
North Eastern Tel. Asso.	Haley's Station				44 00
Normanby Tel. Asso.	Ayton				8 00
Northern Mutual Tel. Co.	Marmora				8 00
Northern Tel. Co.	Korah				10 00
North Horton Tel. Co.	Renfrew				14 00
North Huron Tel. Co., Ltd.	Wingham				48 00
North Mutual Tel. Line of Cavan	Bethany				270 50
North Renfrew Tel. Co.	Bealzburg				16 00
North Wellington Tel. Co., Ltd.	Arthur	14 00			13 00
Oak Flats & Verona Tel. Co.	Verona				85 00
Oldfield Tel. Line	Dundalk				18 00
Oliver Mun. Tel. Co.	Murillo				3 50
Omenace Tel. Co.	Omenace				150 00
Oro Tel. Co., Ltd.	Oro Station				50 00
Orono Tel. Co.	Orono				101 00
Orr-Stuenhoff Tel. Asso.	Chesley				300 00
Osceola Tel. Asso.	Cobden				13 00
Osprey Mun. Tel. System	Feversham				16 00
Otonabee Mun. Tel. Asso.	Keene				65 00
Old Ferry Road Tel. Co.	Perth				252 00
Palace Road Tel. Asso.	Napanee				82 00
Palestine Tel. Co.	Woodville				17 00
Park Head Tel. Co.	Park Head				50 00
Park Hill Tel. Asso.	Parkhill				16 00
Passmore-Fowler Tel. Line	North Bay				92 25
Pastine Tel. Co.	Cobden				2 50
Peabody Tel. Co.	Chesley				11 00
Pleasant View Tel. Co.	Owen Sound				22 00
Pleasant Valley Tel. Co.	Napanee				16 00
Peerless Central Line	Little Britain				15 00
Peerless Tel. Asso.	Woodstock				3 00
Pefferlaw Tel. Co.	Pefferlaw				2 00
					62 00



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Roch Fenclue Tel. Co.	Beachburg.				8 00
Robison Tel. Co.	Silverwater				14 00
Rockwood & Oustie Tel. Co.	Rockwood.				40 00
Rocktown Tel. Asso.	Shelburne.				42 00
Romney Tel. System.	Wheatley.				25 00
Rosedale Tel. Co.	Fenelon Falls.				14 00
Rose Tel. Co.	Rydal Bank.				32 00
Rosseau Independent Tel. Co.	Rosseau.	20 00			25 00
Rox Tel. Co.	Cobden.				7 00
Rosedale Rural Tel. Co.	Sydenham.				6 50
Roxborough Tel. Co.	Sandringham.		10 00		70 00
Russell Tel. System.	Baillieboro.				60 00
Russell Tel. Co.	Napan.		0 50		89 00
Renfrew & Shamrock Tel. Co.	Shamrock.	1 00			31 00
Rydal Bank Tel. Co.	Rydal Bank.				11 00
Sagmaw Tel. Co.	Cannington.				2 00
Salem Tel. Asso.	Bowmanville.				7 00
Salkeld-Andrews Tel. Co.	Goderich.				2 50
Sandwich W. Tel. Asso.	Loisleville.				150 00
Saugeen Tel. Co.	Southampton.				8 00
Seventh Line Tel. Asso.	Beachburg.				7 00
Scarboro Tel. Co., Ltd.	West Hill.				500 00
Schomberg Tel. Co., Ltd.	Schomberg.		26 00		312 00
Sebright Tel. Co.	Sebright.				86 00
Scott Line & Miraville Tel. Asso.	Perth.				40 00
Second Line Drummond Tel. Asso.	Perth.				16 00
Scratch & Palmer Tel. Asso.	Kingsville.				3 00
Selby Tel. Co.	Newburgh.				88 00
Section Tel. Asso.	Kingsville.				4 00
Shumiah Tel. Com.	Port Arthur.				224 00
Silcoote Tel. Club.	Annan.			0 25	36 00
Shamrock Central Line.	Little Britain.	0 50			7 00
Sidney Bell Tel. Asso.	Belleville.				28 00
Sitzer Tel. Co.	Milton West.				2 50
Slate River Tel. System.	Slate River.				58 75
Snake River Tel. Asso.	Cobden.				43 00
Sonya Tel. Co.	Cresswell.				9 00
South Brant Tel. Co.	Walkerton.				9 00
South Bruce Tel. Co., Ltd.	Teeswater.				293 00
South Colchester Tel. Asso.	Harrow.				6 00
South Crosby Tel. Co.	Elgin.	5 00	6 50		308 00
South Diagonal Tel. Co.	Owen Sound.				78 00
Southwald & Dunwich Tel. Co.	Shedden.	5 00			123 00
South Elderslie Tel. Asso.	Chesley.			0 50	18 00
South Gosfield Tel. Co.	Kingsville.				122 00
South Leeds & Pittsburg Tel. Co.	Gananoque.				70 00
South Malahide Tel. Co.	Aylmer West.				600 00
South Plantagenet Tel. Co., Ltd.	Riceville.				204 00
South McNaughton Tel. Asso.	Renfrew.				16 00
Sparta Tel. Co.	Sparta.				140 00
Spicy River Tel. Asso.	Owen Sound.				2 25

TABLE 2.—Statement of Wire Equipment—Urban and Rural—Concluded.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized		Copper Wire.		Galvanized		Copper Wire.	
		Single Wire.	Over-head.	Under-ground.	Sub-marine.	Single Wire.	Over-head.	Under-ground.	Sub-marine.
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
<i>Ontario—Con.</i>									
Springbank Tel. Co., Ltd.	Fordwich					160 00			
Spring Creek Tel. Assn.	Woodstock					2 00			
Sprague Tel. Co.	Mountain View	1 00				465 00			
Stormont Tel. Co.	Aultsville					14 00			
St. Johns Tel. System	London					140 00	1 00		
St. Marys, Medina & Kirkton Tel. Co.	Kirkton		12 00			775 00			
Straiton Tel. Co.	Straiton Station					34 00			
Stroud Tel. Co., Ltd.	Stroud					168 00	1 00		
St. Vincent Twp. Mun. Tel. System	Meaford					220 00			
Swale Private Line	Warton	1 00				19 00			
Sullivan & Benitek Tel. Co.	Chesley					10 00			
Sullivan & Elderslie Tel. Co.	Chesley					6 00			
Sunderland Tel. Co.	Sunderland	8 00	1 00			85 00			
Sunny Valley Tel. Co.	Chatsworth					2 50			
Sutton & N. Gwillimbury Tel. Co.	Newmarket	3 00				25 00			
Tara-Keady Tel. Co.	Tara					12 00			
Tarbutt Mun. Tel. System	MacLennan					45 00			
Tarentorus Tel. Co., Ltd.	Sault Ste. Marie					14 00			
Tay Mun. Tel. System	Victoria Harbour		5 50			155 00	12 00		
Temiskaming & N. Ont. Tel. Com.	Toronto	10 00				388 00			
Temiskaming Tel. Co.	New Liskeard	30 00	350 00			320 00			
Thamesville Tel. Co., Ltd.	Thamesville	25 00	4 50			245 00	10 00		
Theford, Arkona & E. Lambton Tel. Co.	Theford	20 00				254 00			
Thompson Private Line	Elm Tree					1 00			
Tilbury W. Mun. Tel. System	Comber					400 00	16 00		
Townline & Seventh Line Tel. Co.	Beachburg					10 00			
Tuckersmith Mun. Tel. System	Seaford					1,120 00			
Tye & Barr Tel. System	Milverton					178 00			
Ungers Tel. Line	St. Williams					7 00			
Udney Tel. Co., Ltd.	Udney					90 00			
Union Tel. Assn.	Cobden					5 00			
Union Tel. Club	Owen Sound					6 25			
Union Tel. Co., Ltd.	Drayton					300 00			
United Tel. Co.	Denfield					250 00			
Uptergrove Tel. Co.	Uptergrove					14 00			

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Urban & Rural Tel. Co.	4 00	25 00				513 00		
Upper Admaston Tel. Co.						11 50		
Valentia Central Line.						28 00		
Violet Hill Tel. Asso.						20 00		
Village Tel. Line.						3 00		
Verner Tel. Co.						1 00		
Vespra Mun. Tel. Co.						85 00		
Watt Township Mun. Tel. System.						274 00		
Wallacetown & Lake Shore Tel. Asso.						45 00		
Walsingham Cen. & Pl. Rowan Tel. Co.	6 50					13 00	6 50	
Waterloo Mun. Tel. System.		503 00	68 00			255 00		
Welland County Tel. Co., Ltd.	424 00					906 00		
West Garafraxu Tel. Co.						73 00		
Westmeath Tel. Asso.						13 00		
Westmeath & Beachburg Tel. Co.						36 00		
West Williams Tel. Asso.						165 00		
Westport Tel. Co.	10 00	20 00				200 00		
Wheatley Tel. Co.	5 00					300 00		
Widdifield Mun. Tel. System.						54 00		
Whites' Tel. Line.						12 00		
Willverorce Tel. Co.						24 00		
Warton & Lake Charles Tel. Co.						30 00		
Wrightman Tel. System.						110 00		
Windham Tel. Co.						36 00		
Wilson Private Line.						2 00		
Woodbridge & Vaughan Tel. Co.	35 00	10 00				400 00		
Woodford Tel. Club.						50 00		
Woodville Glen Tel. Co.						11 00		
Woodville.						49 00		
Wolford Tel. Co., Ltd.						11 00		
Wolford Tel. Asso.		11 00				232 00		
Wroxeter Tel. Co., Ltd.	5 00					29 00		
Yarker Tel. Co.						41 00		
Yarmouth Tel. Co., Ltd.						5 00		
Zion Line Tel. Asso.						57 00		
Zorra Tel. Asso.								
Total.	3,283 00	11,140 25	138,350 67	299,760 50	505 00	189,541 35	1,708 25	2,275 42
							2 25	18 00

TABLE 3.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.

Name of Company.	Address.	Capital Stock.		Funded Debt.	Cost Property and Equipment.		Revenue.		Long Distance Receipts.		Operating Expenses.		Number of Telephones.		Employees and Remuneration.		
		\$	cts.		\$	cts.	\$	cts.	\$	cts.	\$	cts.	Central.	Magneto.	No.	Amount.	\$
<i>Quebec.</i>																	
Arundel Tel. Co., Ltd.	Arundel	8,800 00		8,800 00	11,915 78		2,845 00	445 00	850 00		160		3	700 00			
Asbestos Tel. Co.	Asbestos	1,005 00			3,057 27		583 02	420 54	225 00		33		2	225 00			
Beauce Tel. Co.	Beauceville	50,000 00			58,432 00		12,037 00	6,119 00	11,819 60		476		23	5,063 00			
Bell Tel. Co., Ltd.	Montreal	18,000,000 00		11,149,000 00	40,664,504 00		8,193,182 00	2,887,342 00	6,135,479 00		72,022		3,330	1,965,512 56			
Bellevue Tel. Syndicat	Sherbrooke				531 50		91 40	8 50	74 80		9		1	10 00			
Belvidere Tel. Co.	Sherbrooke				450 00		40 35	1 35	160 00		21		1	10 00			
Blanchard Tel. Co.	St. Marc				140 00		160 00										
Bonaventure & Caspe Tel. Co.	Pasphebie	63,400 00		13,000 00	93,223 21		13,102 46	6,679 52	5,283 00		510		16	5,236 79			
Brompton Paper & Pulp Co.'s Line	East Angus				5,840 00		450 00	61 00	254 00		19		2	144 00			
Brunette Private Line	St. Charles River	1,000 00			1,500 00		200 00	29 00	70 00		26		1	20 00			
Canada & Gulf Terminal Ry. Tel. Line	Matane						91 44		91 44		15		3	500 00			
Campbells Bay Tel. Co.	Campbell's Bay	4,124 00		10,000 00	7,016 48		2,335 55		1,688 78		90		20	7,479 22			
Canadian Tel. Co.	Sawyerille	10,000 00			36,172 81		19,533 24	3,670 35	17,745 91		930		7				
Centreville Tel. Co.	Lachute				400 00		65 50		40 00		7						
Charlevoix & Saguenay Tel. Co.	Murray Bay	65,560 00			112,883 52		10,291 29	6,268 79	12,711 86		640		24	6,077 25			
Chenier Tel. Co.	Tingwick	4,085 00			7,385 74		2,277 85	20 00	494 75		132		3	254 75			
Chapau Tel. Co.	Chapau	4,750 00			6,904 97		1,111 05	49 35	478 80		78		2	375 00			
Chateau Richer Tel. Co.	Chateau Richer				250 00		100 00	100 00	75 00		13		1	25 00			
Ciuzen's Tel. Co.	Dunham				14,500 00		4,200 00	240 00	3,700 00		320		11	3,550 00			
Clarenceville North Tel. Co.	Clarenceville	500 00			550 00		72 67		71 58		16						
Clarenceville & Nuts Cornets Tel. Co.	Clarenceville				1,450 00		110 75		110 75		29		1	64 00			
Clarenceville & Wolf Ridge Tel. Co.	Clarenceville				400 00		19 50		19 50		12		1	1 50			
Clarenceville & St. Thomas Tel. Co.	Clarenceville				1,000 00		75 00		75 00		29						
Contrecoeur Tel. Co.	Contrecoeur	800 00		1,500 00	1,500 00		800 00	579 00	905 00		48		2	205 00			
Chatham Tel. Co.	Brownburg				645 00		80 00		80 00		14						
Cherry River Tel. Co.	Magog	398 92			298 92		80 25		80 25		18						
Compton Mutual Tel. Co.	Compton	750 00			750 00						15						
Chouinard Tel. System	St. Pamphile	800 00			800 00		82 00		82 00		5		2	34 00			
Courecelles Tel. Co.	Courecelles	1,850 00		1,540 00	3,390 00		375 00		375 00		83		2	275 00			
Carrier Tel. System	St. Pamphile				500 00		15 00		15 00		2						
Daigle Tel. Co.	Mausseau Station	800 00			800 00		38 00	8 00	40 00		5		5				
Danis Private Line	Barrette	14,766 22		348 28	15,110 50		2,427 50	1,231 45	975 95		92		6	955 75			

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Company Name	1,703 29	1,500 00	2,955 13	674 65	428 90	41 00	325 30
Davelnyville Tel. Co.	7,403 00	7,400 00	18,222 05	7,300 00	720 00	4,500 00	325 30
Dixville Tel. Co.	1,200 00	800 00	1,300 00	80 00	21 00	85 00	20 00
Drummondville Tel. Co.	37,400 00	108,700 00	131,976 41	32,073 56	13,410 61	34,002 91	20,776 00
Dorset Tel. Co.	2,500 00	Wakefield	2,450 25	531 18	15 90	199 72	105 00
Eastern Townships Tel. Co.	3,190 00	Fort Coulonge	5,500 00	300 00	60 00	212 06	165 00
East Wakefield Tel. Co.	28,467 00	Howick Station	62,683 41	6,256 58	5,390 88	5,390 88	4,119 25
Farmer's Tel. Co., Ltd.	9,270 00	Farnellton	14,000 00	1,609 47	864 00	864 00	761 00
Farmers' Tel. Co., Ltd.	1,200 00	Forterville	1,200 00	175 00	43 60	90 00	60 00
Forterville Tel. Co.	1,200 00	Forterville	300 00	60 00	60 00	60 00	60 00
Fourth Range Tel. Asso.							
Foster & Bondville Private Line							
Poster			300 00	189 36	88 15	63 00	15 00
Fitch Bay Tel. Line			1,200 00	450 00		210 00	130 00
Fitch Bay Tel. Line			2,000 00	250 85	26 50	200 00	150 00
Gaudet Tel. System	2,000 00		2,000 00	500 00	100 00	400 00	200 00
Garon Private Line			2,300 00	560 00		560 00	90 00
Garthby Tel. Co.			667 00	16 00		16 00	16 00
Geneva Tel. Asso.	672 00		1,500 00	375 00	100 00	175 00	50 00
Genard Private Line	1,500 00		4,030 00	1,300 00		1,155 00	525 00
Henryville Tel. Co.	2,990 00	1,040 00	411 16	57 50		57 50	
Hill Head Tel. Co.			10,000 00	3,000 00	200 00	2,500 00	1,820 00
Hill Tel. Lines			350 00	40 00		40 00	40 00
Hollow Glen Tel. Asso.			220 00	127 28		127 28	
Huntingville Tel. Asso.	400 00		3,000 00	300 00	25 00	200 00	200 00
Howard & Co.'s Private Line	3,000 00		10,000 00	4,000 00		3,500 00	1,500 00
Howard & Co.'s Private Line			211,396 47	26,817 67	9,728 97	14,972 73	9,500 00
Joliette Tel. Co.	108,700 00	50,000 00	200 00	28 75		25 01	
Kanouraska Tel. Co.			14,500 00	2,925 00	121 90	1,295 00	950 00
Katavale Tel. Co.			1,800 00	1,800 00		161 15	25 00
Kingsway Tel. Co.	1,800 00	1,800 00	1,725 00	164 15		67 43	2 60
Lachute Tel. Co.	1,625 00		288 94	67 43		330 73	
Lachute E. Mutual Tel. Asso.	230 24		1,500 00	365 36		1,005 00	1,005 00
Lac L'Avigian Tel. Asso.			12,226 32	2,350 00		265 20	
L'Avénir Tel. Co.	600 00	9,580 00	2,600 00	412 60	199 60		
L'Avénir Tel. Co.	2,600 00		304 12				
La Conception Tel. Co.	609 25		1,000 00	350 00	21 00	350 00	
Lake Valley Tel. Asso.	1,000 00		4,500 00	250 00		200 00	
Larocque Tel. Co.	3,500 00	2,150 00	4,200 00	585 00	64 85	450 00	160 00
Lambton Tel. Co.	2,400 00		4,000 00	1,200 00		1,000 00	500 00
Laurentide Tel. Co.	4,000 00	5,000 00	75,000 00	3,000 00		3,000 00	2,000 00
La Tuque Falls Tel. Co.			30,000 00	5,078 56	2,860 36	4,894 70	1,840 00
Lake St. Jean & Chirovimi Tel. Co.	75,000 00		3,000 00	850 00	300 00	350 00	350 00
Lievre River Tel. Co.	2,500 00	900 00	3,000 00	300 00		183 00	120 00
Little Nation Tel. Co.			5,301 86	1,202 36		297 90	125 00
Launier Tel. System	4,075 00		5,747 00	1,275 00	343 80	788 30	253 80
Loftière Tel. & Electric Co.	5,747 00		3,000 00	400 00	20 00	200 00	100 00
Loftière & Nicolet Tel. Co.	3,000 00		6,000 00	2,053 51	296 05	885 34	640 00
Legault Private Line							
Laroche-Dorchester Tel. Co.	6,000 00						

TABLE 3.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—Continued.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.	
								Central.	Magneto.	No.	Amount.
<i>Quebec—Con.</i>											
Matane and Gaspé Tel. Co.	Matane.....	\$ 5,000 00		\$ 5,511 40	\$ 871 26	246 75	\$ 123 24	13	1	1	\$ 91 60
Magog Tel. Asso.	Magog.....			400 00	50 00		45 00	14			
Maniwaki Tel. Co.	Maniwaki.....	2,200 00		2,200 00	50 00	40 00	40 00		2		30 00
Maniwaki Electric Tel. Co.	Maniwaki.....	31,850 00	49,000 00	15,467 49	3,195 74		2,255 66	108			1,560 00
Mayo & Blanche Tel. Co.	Buckingham.....	1,325 00		2,289 46	247 20	50 15	95 13	222	1		25 00
Meganite People's Tel. Co.	Inverness.....	30,600 00	12,537 27	48,000 00	8,129 00		5,623 40	770	8		4,500 00
Melbourne Ridge Tel. Co., Ltd.	Kingsbury.....	1,000 00		3,050 00	785 00	29 15	458 00	59	2		118 00
Milby Tel. Co.	Lemoyville.....			350 00	106 00	24 00	51 00	11			
Milot Tel. System.	St. Monique de Nicolet.....										
Milmore Tel. Co.	Sweetsburg.....			15,000 00	363 00	129 60	363 00	49			
Mountain View Tel. Asso.	North Hatley.....			570 00	164 20	12 18	151 85	175	3		2,200 00
Mount Royal Tel. Co.	Ville St. Laurent.....	20,000 00		23,000 00	4,527 25	240 00	3,951 00	244	1		8 00
National Tel. Co.	Levis.....	426,000 00	150,800 00	585,630 16	21,230 09	17,574 22	27,503 47	1,369	8		3,488 00
Neddecar Tel. Co.	North Temiscaming.....	747 60	300 00	1,171 90	336 90	93 90	269 48	19	2		11,579 00
Nicolet Tel. Co.	Nicolet.....	6,000 00		6,000 00	800 00		700 00	87	2		269 48
New London Tel. Asso.	Richmond.....			660 19	125 00		125 00	13			200 00
Notre Dame de Ham Tel. Co.	Notre Dame de Ham.....	2,850 00	3,600 00	5,040 75	501 00		501 00	80	3		80 00
North Ham Tel. Co.	North Ham.....	8,464 50	8,271 00	8,897 42	1,706 80	1 50	325 00	178	2		325 00
Olivers Corners Tel. Co.	Magog.....			550 00	123 80		110 70	10			
Orford Tel. Co.	Sherbrooke.....			300 00	90 00		50 00	6			
Parisville Tel. Co.	Parisville.....	1,800 00		1,800 00	365 00		338 61	32	2		117 10
Passumpsic Tel. Co.	Passumpsic.....			808 31	243 18	21 51	268 63	14			
Piche Tel. Line.	Brebois.....	250 00		400 00				12			
Pike River Tel. Co.	Stanbridge Station.....	1,873 66		1,873 66	293 00		60 00	28			
Permet Tel. System.	Woburn.....	2,500 00		2,500 00	200 00		100 00	23			60 00
Pinnacle Tel. Co.	Danville.....	1,731 00		1,731 00	509 11		469 11	35	1		31 50
Pontiac Tel. Co., Ltd.	Shawville.....	14,755 30		18,328 67	3,627 15	109 81	3,627 15	292	3		813 55
Portneuf Tel. Co.	St. Casimir.....	41,800 00		57,857 30	15,602 77	2,176 00	9,003 90	603	30		3,100 00
Pratte Tel. Co.	St. Celestin.....	10,000 00		10,000 00	1,860 85	539 55	1,226 00	51	5		936 00
Quebec-Orleans Tel. Co.	St. Famille.....			4,500 00	680 00		249 00	80	4		209 00
Richmond Hill Tel. Asso.	Richmond.....			450 00	50 00		20 00	8			
Rioridan Pulp & Paper Co., Ltd.	St. Jovite Station.....			8,750 00	300 00		300 00	22	1		300 00
Rupert & North Wakefield Tel. Co.	North Wakefield.....	3,000 00		3,000 00	700 00	50 00	400 00	70	5		200 00



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Shawmigan Valley Tel. Line	1,700 00	1,700 00	391 19	343 91	10	1,000	35	9,194 96
Saguenay & Quebec Tel. Co.	50,000 00	174,499 74	19,143 39	14,908 55	1,000	35		
Seabrook Private Line		200 00	40 00	40 00	1			
Seale Tel. Line		950 00	103 30		1			
S. Durham, Bethel & Davidson Hill Tel. Co.	700 00	700 00	60 00	10 00	8			
Soulanges Tel. Co.	7,300 00	7,300 00	833 00	429 12	80	2	327 22	
Stoke Tel. Asso.	800 00	800 00	60 00	60 00	12	1	40 00	
Stratford Tel. Co.	1,614 47	2,940 00	100 00	100 00	82	1	100 00	
St. Armand & Stanbridge Tel. Co.	600 00	600 00	60 00	60 00	24			
St. Camille & Wolfe Tel. Co.	3,500 00	4,000 00	10 00	35 11	130	2	35 00	
St. Catherine & St. Joseph Tel. Co.		4,000 00	800 00	150 00	40	5	300 00	
St. Catherine		4,000 00	800 00	150 00	40	5	300 00	
St. Cecile de Whitton Tel. Co.	2,400 00	2,400 00	165 00	159 00	60	3	60 00	
St. Claude de Riethmond	2,547 00	3,425 00	317 96	317 96	56	3	179 35	
St. Ephem Tel. Co.	3,000 00	7,000 00	1,060 00	250 00	98	2	250 00	
St. Elizabeth de Warwick Tel. Co.	2,800 00	3,200 00	2,800 00	644 00	65	3	588 00	
St. Evariste Tel. Co.	3,590 00	5,937 07	659 93	669 93	136	2	187 71	
St. Francois Xavier de Brompton Tel. Co.	500 00	2,300 00	60 00	60 00	40	1	60 00	
St. Fabien Tel. Co.	1,200 00	1,200 00	400 00	200 00	12			
St. Adrien de Ham Tel. Co.	1,500 00	1,500 00	350 00	370 00	50	3	100 00	
St. Alphonse de Winslow Tel. Co.	600 00	2,480 00	820 07	177 50	40			
St. Anne des Monts Tel. Co.		3,500 00	933 20	560 45	48	2	320 00	
St. Gabriel Tel. Co.								
St. Gerard Tel. Co.	1,200 00	1,200 00	600 00	240 00	30	2	240 00	
St. George East Tel. Co.	2,000 00	2,500 00	100 00	56 00	42	1	56 00	
St. George de Windsor Tel. Co.	6,800 00	10,000 00	525 00	525 00	145	3	385 00	
St. Henri de Masconche Tel. Co.	500 00	6,450 00	200 00	240 00	200	2	240 00	
St. Helene de Chester Tel. Co.	3,600 00	750 00	275 00	88 00	18	1	72 00	
St. Julien de Wolfstown Tel. Co.	7,000 00	4,000 00	1,000 00	750 00	92	3	175 00	
St. Luc Tel. Co.		1,800 00	225 00	230 00	93	2	123 00	
St. Lucie Tel. Co.		7,000 00	1,325 00	650 00	75	4	575 00	
St. Lucie Tel. Co. - Doncaster	450 00	450 00			4			
St. Marys Tel. System	8,100 00	25,000 00	1,500 00	400 00	175	3	450 00	
St. Madeleine Tel. Co.	900 00	210 00	84 00	84 00	14			
St. Magloire Tel. Co.	1,258 28	1,250 00	39 70	39 70	42	1	25 00	
St. Maurice & Champlain Tel. Co.	48,916 80	48,871 00	2,735 79	8,261 63	225	16	3,451 83	

TABLE 3.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—*Concluded.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.		
								Central.	Magneto		No.	Amount.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.		
<i>Quebec—Con.</i>												
St. Norbert d'Athabaska Tel. Co.	St. Norbert d'Athabaska.	2,200 00	1,188 00	3,816 40	805 70	.....	516 40	113	1	61 70		
St. Ours Tel. Co., Ltd.	St. Ours.	1,558 00	.....	7,008 00	2,400 00	160 00	2,000 00	150	12	1,200 00		
St. Paul de Chester Tel. Co.	St. Paul de Chester.	4,500 00	5,500 00	10,000 00	1,960 00	696 00	1,800 00	196	3	580 00		
St. Perpetue Tel. Co.	St. Perpetue.	1,500 00	.....	1,500 00	205 00	.....	205 00	40	1	160 00		
St. Philémon Tel. Co.	Berthier en bas.	1,050 00	1,050 00	4,000 00	1,909 51	993 85	912 80	50	10	300 00		
St. Romain Tel. Co.	St. Romain de Winslow.	1,150 00	1,960 00	2,100 00	50 00	10 00	40 00	49	2	40 00		
St. René de Tingwick Tel. Co.	St. René de Tingwick.	2,000 00	.....	3,000 00	130 00	.....	130 00	70	2	130 00		
St. Sébastien d'Éberville Tel. Co.	St. Sébastien.	2,520 00	.....	5,700 00	1,510 00	75 00	605 00	131	3	605 00		
St. Sabine d'Éberville Tel. Co.	St. Sabine d'Éberville.	12,215 00	17,515 00	20,036 71	1,920 00	105 45	1,498 61	240	2	1,021 34		
St. Samuel and St. Clothilde de Horton Tel. Co.	St. Clothilde de Horton.	6,000 00	5,500 00	12,000 00	1,350 00	.....	600 00	115	1	250 00		
St. Samuel Tel. Co.	St. Samuel Gayhurst.	710 00	1,060 00	2,881 00	120 00	.....	120 00	45	3	120 00		
St. Victor de Tring Tel. Co.	St. Victor de Tring.	1,400 00	1,200 00	2,600 00	150 00	.....	150 00	60	1	150 00		
St. Sophie de Mégantic Tel. Co.	St. Sophie.	2,040 00	1,560 00	5,649 73	176 00	.....	167 00	116	2	167 00		
St. Wenceslas Tel. System.	St. Wenceslas.	4,000 00	.....	4,000 00	135 00	.....	100 00	9	1	80 00		
Tipping Private Line.	Clarenceville.	6,000 00	.....	6,000 00	1,800 00	200 00	600 00	120	3	300 00		
Tourist & River du Loup Falls Tel. Co.	Tourist & River du Loup Falls.	10,500 00	.....	10,500 00	1,608 30	.....	1,608 30	169	.....	.....		
Falls Tel. Asso. No. 2.	Falls Tel. Asso. No. 2.	800 00	.....	800 00	120 00	30 00	150 00	10	2	110 00		
Upper Lachute Tel. Co.	Upper Lachute.	800 00	.....	800 00	80 00	20 00	60 00	12	.....	.....		
Vale Perkins & Mansonville Lino.	Vale Perkins.	300 00	.....	300 00	47 50	3 50	30 00	4	.....	.....		
Villeuve Private Lino.	Lavallée.	.....	.....	300 00	65 00	25 00	70 00	10	1	80 00		
Wakefield & Masham Tel. Co.	Masham Mills.	3,250 00	.....	3,250 00	1,202 65	.....	944 00	84	4	390 00		
Warwick Tel. Co.	Warwick.	4,356 00	6,800 00	11,781 00	1,315 66	.....	1,315 66	200	2	325 00		
Wheeler Private Line.	St. Jovite Station.	.....	.....	500 00	60 00	.....	15 00	6	.....	.....		
Wilson Tel. Co.	Lachute.	570 00	.....	802 34	100 00	10 00	45 00	9	1	100 00		
Windsor Tel. Co.	Windsor.	3,744 00	12,000 00	3,744 00	165 00	.....	100 00	72	1	500 00		
Wotton Tel. Co.	Wootton Hill.	5,000 00	.....	5,000 00	550 00	.....	550 00	150	4	500 00		
Wright & Pontiac Tel. Co.	Luskville.	7,550 00	.....	9,774 70	1,381 65	658 50	1,325 61	143	4	1,065 40		
Yamaska Tel. Co.	St. Guillaume.	4,500 00	3,000 00	7,777 75	2,278 20	1,156 00	1,619 26	84	3	725 00		
Total.	.....	19,425,983	53,111,891,340	23,443,051,983	19,850,663	6712,978,743	19,638,636	11	72,022	30,988	2,103,876	21

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TABLE 4.—Statement of Wire Equipment—Urban and Rural.

Name of Company.	Address.	Urban.				Rural.					
		Galvanized		Copper Wire.		Galvanized.		Copper Wire.			
		Single Wire.	Miles.	Over-head.	Under-ground.	Sub-marine.	Single Wire.	Miles.	Over-head.	Under-ground.	Sub-marine.
<i>Quebec—Con.</i>											
Arundel Tel. Co., Ltd.	Arundel.										
Asbestos Tel. Co.	Asbestos.					300 00					
Beauce Tel. Co.	Beauceville.	161 00				11 00		0 50		0 50	
Bell Tel. Co., Ltd.	Montreal.			48,986 00	196,248 00	39,637 00	284 00				
Bellevue Tel. Syndicate.	Sherbrooke.					7 00					
Belvidere Tel. Co.	Sherbrooke.					2 50					
Blanchard Tel. Co.	St. Marc.					4 00					
Bonaventure & Gaspé Tel. Co.	Paspébiac.	400 00		209 00		390 00	1 50				
Brompton Paper & Pulp Co's Line.	East Angus.	5 00				45 00					
Brunette Private Line.	St. Charles River.					16 00		2 00			
Canada & Gulf Terminal Ry. Tel. Line.	Matane.					36 00					
Campbell's Bay Tel. Co.	Campbells Bay.					140 00					
Canadian Tel. Co.	Sawycerville.				75 00				1,075 00		
Centreville Tel. Co.	Lachute.					4 00					
Charlevoix & Saguenay Tel. Co.	Murray Bay.					838 00		100 00			5 00
Chénier Tel. Co.	Tingwick.					135 00		1 00		1 00	
Chapeau Tel. Co.	Chapeau.	2 00				77 00					2 50
Château Richer Tel. Co.	Château Richer.					2 50					
Citizens Tel. Co.	Dunham.			50 00		430 00					
Clarenceville North Tel. Co.	Clarenceville.					4 00					
Clarenceville & Nuis Corners Tel. Co.	Clarenceville.					26 00					
Clarenceville & Wolf Ridge Tel. Co.	Clarenceville.					10 00					
Clarenceville & St. Thomas Tel. Co.	Clarenceville.					9 00					
Contrecoeur Tel. Co.	Contrecoeur.					8 00					
Chatham Tel. Co.	Brownsburg.					6 00					
Cherry River Tel. Co.	Magog.					12 00					
Compton Mutual Tel. Co.	Compton.					7 00					
Cloumard Tel. System.	St. Pamphile.					30 00					
Courecelles Tel. Co.	Courecelles.					34 00					
Currie Tel. System.	St. Pamphile.					7 00					
Dagile Tel. Co.	Mansseau Station.					8 00					8 00
Danis Private Line.	Barrette.	75 00				35 00					
Daveluyville Tel. Co.	Daveluyville.	20 00				65 00					
Dixville Tel. Co.	Dixville.					12 00					
Drummondville Tel. Co., Ltd.	Drummondville.	100 00		150 00		76 00					

TABLE 4.—Statement of Wire Equipment—Urban and Rural—Continued.

Name of Company.	Address.	Urban.				Rural.		
		Galvanized		Copper Wire.		Galvanized Single Wire.	Copper Wire.	
		Single Wire.	Over-head.	Under-ground.	Sub-marine.		Over-head.	Under-ground.
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
<i>Quebec—Con.</i>								
Dorset Tel. Co.	St. Hilaire.					8 00		
Eastern Townships Tel. Co.	Sherbrooke.	398 00	922 00	71 00		1, 115 00	227 00	
East Wakefield Tel. Co.	Wakefield.					55 00		
Fort Coulonge Tel. Co.	Fort Coulonge		247 00			52 00		1 00
Farmers Tel. Co., Ltd.	Howick Station.					1, 004 00	24 00	
Farrington Tel. Co.	Farrington.					158 00	8 00	
Fortierville Tel. Co.	Fortierville.					6 00		
Fourth Range Tel. Asso.	Sherbrooke.					3 50		
Foster & Bondville Private Line	Foster.					5 00		
Fitch Bay Tel. Line	Fitch Bay.					37 00		
Gandet Tel. System	St. Fualde.					34 00		
Garon Private Line.	St. Gregoire.					42 00		
Garthby Tel. Co.	Garthby Station.					30 00		
Geneva Tel. Asso.	St. Andrews East.					21 00		
Girouard Private Line.	St. Barnabe Sud.					28 00		
Henryville Tel. Co.	Henryville.					57 00		
Hill Head Tel. Co.	Lachute.					150 00		
Hill Tel. Lines.	St. Armand West					8 00		
Hollow Glen Tel. Asso.	Breckenridge.					10 00		
Huntingville Tel. Asso.	Leunoxville					60 00		
Howard & Co's Private Line.	Sherbrooke.	2 00				210 00		
Joliette Tel. Co.	Joliette.					1, 820 00	1, 600 00	
Kamouraska Tel. Co.	Fraserville.	1, 250 00	130 00			4 00		
Katevale Tel. Co.	Katevale.					825 00		
Kingssey Tel. Co.	St. Felix de Kingssey.					8 00		
Lachute Tel. Co.	Lachute.					2 50		
Lachute E. Mutual Tel. Asso.	Lachute.					38 00		
Lac L'Aschigan Tel. Asso.	Montreal.					286 00		
L'Avenir Tel. Co.	L'Avenir.					21 00		
La Conception Tel. Co.	La Conception.					6 00		
Lake Valley Tel. Asso.	Asbestos.					10 00		
Larocque Tel. Co.	Douville.					45 00		
Lambton Tel. Co.	Lambton.		10 00			50 00		
Laurentide Tel. Co.	Pointe Gatineau.					200 00		
La Tuque Falls Tel. Co.	La Tuque.							

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Lake St. Jean & Chicoutimi Tel. Co.	400 00	4 00	500 00		
Lievre River Tel. Co.			67 00	92 00	
Little Nation Tel. Co.	66 00		4 00		
Lauzier Tel. System			11 00		
Lotbinière Tel. and Electric Co.			34 00	2 00	
Lotbinière and Nicolet Tel. Co.	37 00		11 00	33 00	
Logault Private Line			17 00		
Larochelle-Dorchester Tel. Co.			60 00		
Matane and Gaspé Tel. Co.			90 00		
Magog Tel. Assn.			10 00		
Maniwaki Tel. Co.	5 00		23 00	7 00	
Maniwaki Electric Tel. Co.			143 00		
Mayo and Blanche Tel. Co.			44 00		
Mégantic Peoples Tel. Co.			900 00		
Melbourne Ridge Tel. Co. Ltd.			48 00		
Milby Tel. Co.			4 00		
Milot Tel. System	15 00		41 00		
Milmore Tel. Co.			170 00	54 00	
Mountain View Tel. Assn.			18 50		
Mount Royal Tel. Co.	102 00	30 00	33 00		
Nedelaie Tel. Co.	8 00		14 00		
Nicolet Tel. Co.	24 00	59 00	4 00		
New London Tel. Assn.			10 00		
Notre Dame de Ham Tel. Co.			20 00		
North Ham. Tel. Co.			234 00		
Olivers Corners Tel. Co.			17 00		
Oxford Tel. Co.			7 00		
Parisville Tel. Co.			7 00		
Passumpsic Tel. Co.			15 70		
Piche Tel. Line			7 00		
Pike River Tel. Co.			17 00		
Perinet Tel. System			35 00		
Pinnacle Tel. Co.			43 00		1 00
Pontiac Tel. Co., Ltd.			398 00	3 00	1 00
Portneuf Tel. Co.	23 00		200 00		
Prairie Tel. Co.			81 00	2 00	1 00
Quebec-Orleans Tel. Co.			60 00		1 00
Richmond Hill Tel. Assn.			8 00		
Riordon Pulp and Paper Co., Ltd.			125 00		
Rupert and N. Wakefield Tel. Co.			30 00		
Shawinigan Valley Tel. Line			28 00		
Saguenay and Quebec Tel. Co.			489 00	180 00	
Scobie Private Line			2 00		
Scale Tel. Line	403 00	128 00	8 00		
S. Durham Bethel and Davidson Hill Tel. Co.			8 50		
Soulanges Tel. Co.			96 00	1 50	1 50
Stoke Tel. Assn.			14 00		
Stratford Tel. Co.			20 00		
St. Armand and Stanbridge Tel. Co.			14 00		14 00

TABLE 4.—Statement of Wire Equipment—Urban and Rural—Concluded.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized		Copper Wire.		Galvanized		Copper Wire.	
		Single Wire.	Over-head.	Under-ground.	Sub-marine.	Single Wire.	Over-head.	Under-ground.	Sub-marine.
<i>Quebec—Con.</i>									
St. Canille and Wolfe Tel. Co.	St. Canille.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
St. Catherine and St. Joachim Tel. Co.	St. Catherine.	50 00							
St. Cecile de Whittion Tel. Co.	St. Cecile Station	150 00							
St. Claude Mutual Tel. Co.	St. Claude de Richmond	49 50							
St. Ephrem Tel. Co.	St. Ephrem de Tring.	53 00							
St. Elizabeth de Warwick Tel. Co.	St. Elizabeth de Warwick.	36 00							
St. Evariste Tel. Co.	St. Evariste	12 50							
St. Francois Xavier de Brompton Tel. Co.	St. Francois Xavier.	162 00				26 00			
St. Fabien Tel. Co.	Panet.	9 00							
St. Adrien de Ham. Tel. Co.	St. Adrien de Ham	16 00							
St. Alphonse de Winslow Tel. Co.	Stormoway.	30 00							
St. Anne des Monts Tel. Co.	St. Anne des Monts	43 00							
St. Gabriel Tel. Co.	St. Gabriel de Brandon.	60 00							
St. Gerard Tel. Co.	St. Gerard.	30 00							
St. George East Tel. Co.	St. George East.	25 00							
St. George Windsor Tel. Co.	St. George de Windsor.	45 00							
St. Henri de Mascouche Tel. Co.	St. Henri de Mascouche.	39 00							
St. Helene de Chester Tel. Co.	St. Helene de Chester.	4 00							
St. Julien de Wolfstown Tel. Co.	Wolfstown.	24 00							
St. Luc Tel. Co.	Champlain.	55 00							
St. Lucie Tel. Co.	St. Lucie de Doncaster.	80 00							
St. Marys Tel. System.	St. Marys.	10 00							
St. Madeleine Tel. Co.	St. Madeleine.	70 00				5 00			
St. Magloire Tel. Co.	St. Magloire.	10 00							
St. Marc Tel. Co.	St. Marc.	8 00							
St. Maurice and Champlain Tel. Co.	Bathscan.	200 00	34 00						
St. Norbert d'Athabaska Tel. Co.	St. Norbert d'Athabaska.								
St. Ours Tel. Co., Ltd.	St. Ours.	75 00		1 00					
St. Paul de Chester Tel. Co.	St. Paul de Chester.					20 00	4 00		
St. Perpetue Tel. Co.	St. Perpetue.					247 00	3 00		
St. Philemon Tel. Co.	Berthier en bas.					12 00			
St. Roman Tel. Co.	St. Roman de Winslow.					54 00			
St. Remi de Tingwick Tel. Co.	St. Remi de Tingwick.					14 00			
St. Sebastien d'Iberville Tel. Co.	St. Sebastien.					11 00			
						59 00			



TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipment, etc.

Name of Company.	Address.	Capital Stock.		Funded Debt.	Cost Property and Equipment.		Revenue.		Operating Expenses.		Number of Telephones.		Employees and Remuneration.		Miles of Wire.
		\$	cts.		\$	cts.	\$	cts.	\$	cts.	Magneto.	No.	\$	cts.	
<i>Saskatchewan</i>															
Alameda Tel. Co.	Alameda.				12,250 00	1,384 00	1,199 00	90	1	335 00	461 00				
Allan Tel. Co.	Allan.	8,075 00			9,000 00	1,600 00	1,156 00	96	1	900 00	220 00				
Allendale Tel. Co.	Sintaluta.	11,560 00			2,005 00	300 00	184 00	20			56 00				
Aberdeen Tel. Co.	Aberdeen.	2,250 00			1,700 00	136 00	136 00	9			38 00				
Adelaide Tel. Co.	Rouleau.	4,475 00			2,400 00	364 00	461 00	22			61 00				
Andrew Tel. Co.	Carievale.	2,400 00			1,426 00	210 00	133 00	15			34 00				
Arm River Tel. Co.	Girvin.	1,625 00			2,700 00	1,000 00	167 00	26			64 00				
Abbotsford Tel. Co.	Wolseley.	2,800 00			5,255 00	832 00	386 00	41		93 00	144 00				
Ambassador Tel. Co.	Nokomis.	6,300 00			1,325 00	228 00	261 00	16			30 00				
Argyle Tel. Co.	Craik.	1,450 00			3,523 00		345 00	26			71 00				
Ardath Tel. Co.	Ardath.	2,700 00			5,683 00	1,792 00	1,013 00	58		75 00	95 00				
Aberdeen S.E. Tel. Co.	Aberdeen.	5,775 00			1,256 00			8			24 00				
Arm Tel. Co.	Craik.	1,500 00			1,500 00	165 00	155 00	11			22 00				
Asquith Tel. Co.	Asquith.	1,800 00			2,038 00	220 00	140 00	22			46 00				
Araç Tel. Co.	Regina.	2,300 00			1,650 00		32 00	11		32 00	23 00				
Arcadia Tel. Co.	Indian Head.	1,750 00			2,354 00	342 00	218 00	19			43 00				
Avonhurst Tel. Co.	Qu'Appelle.	3,375 00			5,250 00	259 00	280 00	27			160 00				
Adanae Tel. Co.	Adanae.	5,500 00		14,000 00	15,530 00	428 00	857 00	77			176 00				
Ardene Tel. Co.	Wawota.			2,200 00	2,098 00	85 00	156 00	11			26 00				
Assinboia Tel. Co.	Assinboia.			12,750 00	12,750 00	556 00	257 00	37			105 00				
Albatross Tel. Co.	Regina.			2,500 00	2,204 00	90 00	90 00	9			26 00				
Adams Tel. Co.	Grand Coulee.			1,000 00	1,642 00	179 00	33 00	11			23 00				
Albina Tel. Co.	Sintaluta.				1,086 00	80 00	40 00	8			18 00				
Alpha Tel. Co.	Montmartre.			5,000 00	3,045 00	250 00	213 00	24			42 00				
Abbey Tel. Co.	Abbey.			20,500 00	20,966 00	630 00	180 00	95			352 00				
Anicoupe Lake Tel. Co.	Webb.			12,500 00	12,046 00	255 00	405 00	46			198 00				
Avonlea Tel. Co.	Avonlea.			4,000 00	4,600 00	310 00	560 00	30			56 00				
Alida Tel. Co.	Alida.			23,200 00	24,088 00	1,216 00	458 00	95			420 00				
Avon Hills Tel. Co.	Kindersley.			6,500 00	6,785 00	184 00	150 00	23			92 00				
Brownhill Tel. Co.	Grenfell.	3,100 00			3,230 00	583 00	85 00	25			61 00				
Beaver Creek Tel. Co.	Hanley.	1,300 00			1,147 00	190 00	178 00	12	1		28 00				
Buffalo Hill Tel. Co.	Southey.	2,250 00			2,950 00	165 00	185 00	11			51 00				
Boggy Creek Tel. Co.	Lumsden.	2,775 00			2,880 00	228 00	197 00	26	1		60 00				
Bee Line Tel. Co.	Abermethy.	1,175 00			1,155 00		56 00	9			18 00				
Broadway Tel. Co.	Belle Plaine.	1,800 00			1,765 00	790 00	25 00	18			36 00				
Belbeck Tel. Co.	Moosejaw.	4,000 00			4,000 00	255 00	227 00	31			112 00				



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Balcarres S. Tel. Co.	3,500 00	3,500 00	167 00	35	84-00
Balcarres N. Tel. Co.	875 00	875 00	26 00	7	16-00
Balcarres W. Tel. Co.	1,250 00	1,005 00	14 00	9	19-00
Buffalo Lake Tel. Co.	2,475 00	2,475 00	324 00	26	80-00
Broderick Tel. Co.	7,600 00	1,360 00	1,128 00	63	227-00
Belleveue Tel. Co.	1,775 00	1,340 00	110 00	13	32-00
Buffalo Head Tel. Co.	3,825 00	4,000 00	167 00	28	72-00
Bonnie Blink Tel. Co.	1,200 00	1,058 00	170 00	11	24-00
Brownlee, Lake Valley & Eskbank Tel. Co.	2,500 00	414 00	171 00	23	59-00
Browning Tel. Co.	4,330 00	90 00	76 00	23	97-00
Brownlee-Avonmore Tel. Co.	1,950 00	152 00	139 00	19	43-00
Buffalo Plains Tel. Co.	3,325 00	210 00	194 00	21	70-00
Benson Tel. Co.	7,225 00	6,194 00	421 00	47	160-00
Bredenburg Tel. Co.	4,450 00	480 00	15 00	4	10-00
Bohann W. Tel. Co.	2,600 00	2,500 00	304 00	22	76-00
Bloomentfeldt Tel. Co.	4,250 00	4,300 00	379 00	32	80-00
Bode Tel. Co.	2,160 00	2,100 00	165 00	15	42-00
Bredthorne Tel. Co.	4,400 00	3,732 00	382 00	32	67-00
Brooklyn Tel. Co.	2,975 00	2,962 00	149 00	17	49-00
Brookdale Tel. Co.	1,125 00	1,077 00	110 00	9	17-00
Beverley Tel. Co.	1,650 00	1,050 00	20 00	12	19-00
Balcarres	3,200 00	3,180 00	59 00	23	37-00
Balcarres Hill Head Tel. Co.	4,400 00	4,304 00	192 00	24	60-00
Banbury Tel. Co.	3,500 00	3,400 00	225 00	24	38-00
Baring Tel. Co.	9,500 00	10,453 00	879 00	56	157-00
Bearty Tel. Co.	21,500 00	21,990 00	582 00	90	198-00
Beaver Tel. Co.	4,200 00	3,800 00	405 00	17	60-00
Bell Tel. Co.	10,000 00	10,078 00	600 00	47	170-00
Belvedere Tel. Co.	9,200 00	9,039 00	322 00	43	152-00
Bennet Tel. Co.	6,000 00	6,246 00	415 00	72	92-00
Bethune S.W. Tel. Co.	2,200 00	2,255 00	100 00	11	24-00
Beverley S. Tel. Co.	5,000 00	4,655 00	327 00	20	49-00
Bientait Tel. Co.	1,500 00	1,478 00	52 00	9	14-00
Big Butte Tel. Co.	5,800 00	5,705 00	249 00	27	98-00
Big Gully Tel. Co.	12,900 00	12,490 00	515 00	58	161-00
Bigford Tel. Co.	3,600 00	3,561 00	68 00	16	49-00
Black Lake Tel. Co.	6,000 00	6,510 00	86 00	31	99-00
Blackley Tel. Co.	11,700 00	11,071 00	427 00	53	152-00
Blucher Tel. Co.	10,400 00	10,623 00	67 00	61	170-00
Bonnie View Tel. Co.	11,000 00	11,025 00	725 00	52	152-00
Bounty Tel. Co.	2,000 00	1,950 00	48 00	10	21-00
Bredenburg	7,200 00	6,889 00	205 00	34	107-00
Bright Tel. Co.	8,500 00	8,419 00	453 00	41	187-00
Brookside Tel. Co.	7,500 00	7,224 00	413 00	38	95-00
Bulyea Tel. Co.	10,800 00	10,515 00	385 00	60	144-00
Butterton Tel. Co.	2,000 00	2,085 00	106 00	13	25-00
Bladworth	4,300 00	4,406 00	380 00	23	33-00
Beadle Tel. Co.	11,000 00	11,483 00	240 00	49	96-00
Banner Tel. Co.	2,000 00	1,980 00	60 00	10	27-00
Budapest Tel. Co.	10,500 00	10,601 00	696 00	60	174-00
Bellegarde Tel. Co.					

TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipment, etc.—*Con.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Operating Expenses.	Number of Telephones.		Employees and Remuneration		Miles of Wire.
							Magneto.	No.	Amount.		
<i>Saskatchewan—Con.</i>											
Bridgford Tel. Co.	Bridgford.			6,052 00	122 00	180 00	33				76-00
Battlevale Tel. Co.	Waseca.		3,800 00	3,705 00	130 00	120 00	23				42-00
Balgomrie Tel. Co.	Balgomrie.		26,900 00	26,938 00	861 00	443 00	101				376-00
Beaver Flats Tel. Co.	Waldack.		12,000 00	11,895 00	302 00	331 00	46				218-00
Burdick Tel. Co.	Moosajaw.		8,000 00	7,656 00	514 00	386 00	36				136-00
Bangor Tel. Co.	Bangor.		8,000 00	7,895 00	125 00	26 00	28				88-00
Big Arm Tel. Co.	Liberty.		7,500 00	6,988 00	310 00	248 00	33				84-00
Counce Tel. Co.	Pense.	1,300 00		1,336 00	234 00	223 00	13				14-00
Coburg Tel. Co.	Moosajaw.	750 00		750 00	94 00	106 00	7				14-00
Corinne Tel. Co.	Milestone.	3,075 00		3,075 00	639 00	411 00	42	1	100 00		102-00
Creelman Tel. Co.	Creelman.	6,375 00		6,473 00	1,708 00	1,562 00	97				197-00
Central Tel. Co.	Tregarva.	1,325 00		1,450 00	275 00	130 00	10				34-00
Condie Tel. Co.	Condie.	1,425 00		1,500 00	255 00	90 00	17				32-00
Capital Tel. Co.	Regina.	850 00		978 00	192 00	192 00	8				16-00
Cory Tel. Co.	Saskatoon.	3,000 00		3,000 00	494 00	212 00	25	1	154 00		54-00
Chickney Tel. Co.	Abernethy.	975 00		883 00	90 00	67 00	7				15-00
Carmel Tel. Co.	Moosajaw.	1,750 00		1,481 00	165 00	165 00	14				40-00
Couleo View Tel. Co.	Grand Coulee.	1,200 00		1,500 00	120 00	120 00	12				22-00
Chester Tel. Co.	Moosajaw.	3,825 00		4,217 00	151 00	151 00	30				104-00
Cupar Tel. Co.	Cupar.	1,100 00		1,170 00	280 00		11	1			18-00
Chevrot Tel. Co.	Chevrot.	1,100 00		1,200 00	16 00	16 00	10				24-00
Coldstream Tel. Co.	Regina.	2,875 00		3,780 00	460 00	437 00	23				70-00
Caron Tel. Co.	Caron.	5,875 00		5,781 00	125 00	197 00	47	1	160 00		110-00
Conquest Tel. Co.	Conquest.	8,275 00		9,781 00	4,349	1,109 00	85	1	735 00		177-00
Clear Springs Tel. Co.	Lobethal.	625 00		450 00		120 00	4				11-00
Candia Tel. Co.	Candia.	4,250 00		4,670 00	280 00	160 00	28				93-00
Cando Tel. Co.	Hitchcock.		4,500 00	4,500 00	187 00	402 00	18	1	335 00		68-00
Carnoustie Tel. Co.	Rocanville.		7,400 00	7,400 00	719 00	719 00	44				158-00
Castleton-Pennock Tel. Co.	Saltcoats.	4,700 00		4,537 00	220 00	144 00	22				66-00
Cedoux Tel. Co.	Cedoux.	8,000 00		8,237 00	571 00	527 00	40	1	170 00		80-00
Chamberlain Tel. Co.	Chamberlain.	11,000 00		11,289 00	995 00	991 00	63				185-00
Chandler Tel. Co.	Midale.	4,000 00		3,532 00	147 00	294 00	22				49-00
Clear Lake Tel. Co.	Sernams.	6,200 00		5,955 00	680 00	279 00	38				103-00
Colleston Tel. Co.	Prince Albert.	6,200 00		6,400 00	437 00	432 00	37				123-00
Colonsay Tel. Co.	Colonsay.	16,450 00		16,450 00	1,327 00	853 00	76				249-00
Cotham Tel. Co.	Dubuc.	5,500 00		6,300 00	220 00	150 00	30				96-00

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Crescent Tel. Co.	4,000 00	3,650 00	164 00	146 00	19		57-00
Crescent View Tel. Co.	2,100 00	1,984 00	130 00	74 00	13		22-00
Croesus Belle Tel. Co.	16,100 00	16,340 00	1,165 00	899 00	89	2	288-00
Cut Knife Tel. Co.	12,000 00	11,769 00	775 00	650 00	65		241-00
Clayton Tel. Co.	2,000 00	1,914 00	120 00	128 00	10		20-00
Clayton Tel. Co.	3,700 00	3,377 00	181 00	170 00	22		47-00
Coronation Tel. Co.	3,800 00	3,750 00	118 00	183 00	24		65-00
Cambridge Telephone Co.	8,000 00	7,759 00	645 00	539 00	47	1	108-00
Collax Tel. Co.	6,000 00	5,476 00	250 00	485 00	26		78-00
Creekside Tel. Co.	10,200 00	10,121 00	327 00	233 00	44		149-00
Collingswood Tel. Co.	5,500 00	5,184 00	115 00	413 00	26		68-00
Clair Tel. Co.	11,000 00	9,745 00	175 00	70 00	34		120-00
Cana Tel. Co.	11,500 00	11,833 00	635 00	580 00	50	1	175-00
Conger Tel. Co.	10,500 00	10,600 00	592 00	467 00	40		132-00
Carlton Tel. Co.	22,000 00	20,829 00	1,001 00	498 00	79		163-00
Carri Southern Tel. Co.	11,500 00	12,088 00	300 00	60 00	61		142-00
Central Butte Tel. Co.	15,000 00	14,216 00	500 00	108 00	51		245-00
Crosswoods Tel. Co.	10,700 00	10,700 00	330 00	320 00	47	2	150-00
Cullen Tel. Co.	8,500 00	8,590 00	172 00	50 00	35	1	135-00
Clover Hill Tel. Co.	1,350 00	1,645 00	697 00	741 00	12	1	30-00
Dalesboro Tel. Co.	1,275 00	6,000 00	828 00	800 00	27		28-00
Drinkwater-Briorcrest Tel. Co.	6,000 00	5,335 00	661 00	235 00	78		96-00
Dalmoney Tel. Co.	4,650 00	5,500 00	50 00	30 00	51		150-00
Dundurn Tel. Co.	500 00	375 00	3 00	3 00	3		10-00
Dairy Lane Tel. Co.	375 00	1,650 00	120 00	120 00	5		10-00
Dec Tel. Co.	1,650 00	3,500 00	502 00	502 00	12		53-00
Duff Tel. Co.	3,500 00	1,200 00	110 00	110 00	23	1	83-00
Deveron Tel. Co.	1,200 00	967 00	150 00	125 00	10		24-00
Davidson Western Tel. Co.	825 00	2,930 00	642 00	462 00	10		18-00
Dawdney Tel. Co.	2,750 00	6,343 00	457 00	480 00	23	1	63-00
Dubuc Tel. Co.	8,500 00	8,424 00	615 00	415 00	37		104-00
Dafoc-Copland Tel. Co.	8,500 00	9,627 00	940 00	712 00	51		99-00
Dabrymple Tel. Co.	9,800 00	12,218 00	708 00	670 00	53		164-00
Darwin Tel. Co.	12,300 00	7,296 00	560 00	460 00	52		207-00
Deep Lake Tel. Co.	7,500 00	2,779 00	460 00	426 00	26		208-00
Delisle Tel. Co.	3,100 00	1,953 00	23 00	465 00	56		74-00
Dewey Tel. Co.	1,800 00	1,800 00	140 00	126 00	6		20-00
Downing Tel. Co.	1,800 00	4,958 00	225 00	214 00	6		28-00
Drinkwater W. E. Tel. Co.	4,600 00	1,907 00	843 00	716 00	26		60-00
Dubuc Northern Tel. Co.	4,800 00	1,700 00	75 00	56 00	9		26-00
Dumas-Kennedy Tel. Co.	2,000 00	11,707 00	843 00	716 00	60	2	179-00
Dummer Tel. Co.	4,500 00	4,705 00	264 00	263 00	24		62-00
Dunham Tel. Co.	7,800 00	8,129 00	1,210 00	583 00	38	2	146-00
Duval-Dunkeld Tel. Co.	9,500 00	9,650 00	805 00	837 00	59	1	178-00
Duval-Long Lake Tel. Co.	5,500 00	5,620 00	133 00	133 00	19		70-00
Durban Tel. Co.	15,000 00	12,516 00	293 00	261 00	57	2	106-00
Dandy Rose Tel. Co.	5,700 00	5,613 00	275 00	240 00	31		76-00
Dublin Tel. Co.	6,000 00	5,740 00	975 00	775 00	29		77-00
Daybreak Tel. Co.	10,500 00	10,348 00	393 00	479 00	47	1	140-00
Deenhofm Tel. Co.	9,500 00	9,290 00	665 00	410 00	43		160-00
Davin Tel. Co.	13,500 00	13,085 00	860 00	601 00	64		168-00
Dilke Tel. Co.							

TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipment, etc.—*Con.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Operating Expenses.	Number of Tele-phones.		Miles of Wire.
							Magneto.	No.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.
<i>Saskatchewan—Con.</i>									
Druid Tel. Co.....	Druid		6,000 00	5,660 00	145 00	36 00	29		74-00
Doddsland Tel. Co.....	Doddsland		4,800 00	4,564 00	505 00	180 00	22		58-00
Edzell Tel. Co.....	Saskatoon	4,800 00		5,161 00	712 00	423 00	34		103-00
Eastview Tel. Co.....	Pasqua	2,400 00		2,494 00	200 00	200 00	13		26-00
Elmore Tel. Co.....	Elmore	6,800 00		6,400 00	1,312 00	730 00	83	1	170-00
Ellisboro Tel. Co.....	Ellisboro	3,750 00		3,700 00	288 00	260 00	32	1	100-00
Elgin Tel. Co.....	Moosomin	700 00		700 00	71 00	85 00	9		10-00
Empire Tel. Co.....	Cartevale	1,120 00		1,064 00	155 00	114 00	13		29-00
Edgeley Tel. Co.....	QuAppelle	4,500 00		4,236 00	625 00	354 00	34		207-00
Easthine Tel. Co.....	Abermethy	1,315 00		1,150 00	72 00	62 00	9		17-00
East Halbrite Tel. Co.....	Halbrite	3,200 00		3,246 00	260 00	150 00	80		50-00
East Fillmore Tel. Co.....	Fillmore	1,900 00		2,055 00	570 00	126 00	16		32-00
East Weyburn Tel. Co.....	Weyburn	522 00		522 00	40 00	55 00	5		10-00
East Carlyle Tel. Co.....	Carlyle	1,250 00		1,290 00	114 00	130 00	10		27-00
Elm Tel. Co.....	Rocanville	1,550 00		1,737 00	317 00	374 00	15		44-00
Eagle Creek Tel. Co.....	Asquith		10,200 00	9,030 00	584 00	499 00	46		186-00
Earl Grey-Sylvan Tel. Co.....	Earl Grey		5,200 00	4,029 00	160 00	136 00	23		63-00
East Borden Tel. Co.....	Borden	7,500 00		7,485 00	542 00	405 00	35	1	145-00
East Mount Tel. Co.....	Strassburg	9,000 00		8,367 00	764 00	922 00	52	1	170-00
East Milden Tel. Co.....	Milden	3,000 00		2,969 00	597 00	230 00	12	2	32-00
Edelane Tel. Co.....	Strassburg	5,700 00		4,825 00	546 00	410 00	30		81-00
Elbow Tel. Co.....	Elbow	11,000 00		10,851 00	858 00	595 00	65	1	133-00
Ellsworth Tel. Co.....	Macoun	5,000 00		4,199 00	668 00	457 00	32		84-00
Elstow Tel. Co.....	Macoun	11,000 00		10,950 00	1,799 00	1,416 00	53		222-00
Epic Tel. Co.....	Craik	1,800 00		1,800 00	120 00	65 00	10		34-00
Emscliffe Tel. Co.....	Wolesley	6,000 00		5,900 00	149 00	159 00	23		94-00
Ethelton Tel. Co.....	Kinslino	5,500 00		5,405 00	595 00	582 00	26		90-00
Eyebrow S.W. Tel. Co.....	Eyebrow	2,300 00		1,842 00	75 00	65 00	10		16-00
Eddy Tel. Co.....	Bulyea	4,000 00		3,806 00	158 00	250 00	26	1	52-00
Echo Tel. Co.....	Langenburg	11,000 00		1,040 00	542 00	536 00	69		207-00
Edgar Hill Tel. Co.....	Parkburg	6,800 00		8,652 00	170 00	50 00	33		100-00
Evans Tel. Co.....	Briercrest	6,400 00		6,292 00	140 00		29		76-00
Ernfoid Tel. Co.....	Ernfoid	14,000 00		12,715 00	310 00	125 00	52		167-00
Engfeld Tel. Co.....	Engfeld	9,500 00		11,125 00	245 00	535 00	49	1	166-00
Eastern Star Tel. Co.....	Webb	11,100 00		11,085 00	180 00	180 00	41		130-00
Fairlight Tel. Co.....	Fairlight	3,887 00		4,035 00	889 00	785 00	29		85-00

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Fleming N. Tel. Co.	2,825 00	570 00	575 00	77 00
Fleming S. Tel. Co.	3,625 00	706 00	463 00	93 00
Fairmede Tel. Co.	3,500 00	776 00	544 00	92 00
Forest Tel. Co.	3,125 00	530 00	446 00	86 00
Florence Tel. Co.	3,335 00	246 00	456 00	83 00
Farewell Tel. Co.	1,250 00	140 00	85 00	20 00
Foam Lake Tel. Co.	550 00	75 00	75 00	30 00
Foster Tel. Co.	2,500 00	323 00	154 00	46 00
Francis Tel. Co.	3,600 00	460 00	151 00	70 00
Fairview Tel. Co.	1,025 00	89 00	89 00	26 00
Fairplay Tel. Co.	1,775 00	318 00	25 00	42 00
Farmers' Tel. Co.	5,750 00	1,352 00	1,352 00	130 00
Foxleigh Tel. Co.	2,600 00	144 00	144 00	58 00
Farmington Tel. Co.	1,200 00	55 00	63 00	11 00
Francis N. Tel. Co.	3,500 00	390 00	497 00	51 00
Ferdale Tel. Co.	1,925 00	262 00	68 00	44 00
Fish Creek Tel. Co.	1,135 00	96 00	80 00	21 00
Fletwood Tel. Co.	1,275 00	325 00	413 00	61 00
Fairy Hill Tel. Co.	3,275 00	190 00	175 00	19 00
Fargo Tel. Co.	5,200 00	319 00	109 00	28 00
Fields Tel. Co.	5,400 00	4,461 00	210 00	22 00
Findlater Tel. Co.	2,800 00	150 00	72 00	69 00
Findlater	6,000 00	330 00	295 00	15 00
Finnie Tel. Co.	5,500 00	240 00	208 00	39 00
Fishing Lake Tel. Co.	2,700 00	3,383 00	190 00	23 00
Pletts Springs Tel. Co.	28,000 00	27,288 00	1,446 00	17 00
Flooding Tel. Co.	5,300 00	5,080 00	223 00	125 00
Forward Tel. Co.	7,500 00	7,447 00	487 00	475 00
Foxbury Tel. Co.	8,875 00	8,719 00	369 00	86 00
Francis E. Tel. Co.	9,000 00	8,146 00	475 00	31 00
Profisher Tel. Co.	4,000 00	4,300 00	514 00	154 00
Froude Tel. Co.	7,200 00	661 00	460 00	136 00
Flaxcombe N. Tel. Co.	2,800 00	2,787 00	794 00	17 00
Floral Tel. Co.	11,000 00	10,250 00	95 00	127 00
Fillmore Tel. Co.	14,000 00	14,832 00	654 00	48 00
Fluata Tel. Co.	6,600 00	5,800 00	168 00	26 00
Grey-Milestone Tel. Co.	2,100 00	5,800 00	517 00	184 00
Golden Flat Tel. Co.	3,325 00	2,603 00	260 00	208 00
Glen Ewen Tel. Co.	9,800 00	3,474 00	334 00	90 00
Greendale Tel. Co.	1,350 00	9,800 00	302 00	39 00
Grenfell Tel. Co.	2,290 00	2,605 00	1,510 00	110 00
Grassmere Tel. Co.	1,500 00	144 00	180 00	295 00
Graytown Tel. Co.	2,625 00	386 00	252 00	24 00
Glenside Tel. Co.	2,530 00	1,500 00	50 00	39 00
Grand View Tel. Co.	966 00	3,138 00	220 00	59 00
Grangers Tel. Co.	1,700 00	2,816 00	149 00	22 00
Grand Prairie Tel. Co.	1,800 00	910 00	207 00	48 00
Gardon Valley Tel. Co.	4,000 00	1,425 00	90 00	28 00
Gartmore-Zorra Tel. Co.	6,000 00	1,925 00	159 00	32 00
Gerald Tel. Co.	6,000 00	3,842 00	464 00	42 00
Gilead Tel. Co.	10,200 00	6,000 00	707 00	57 00
Gledhrow Tel. Co.	1,800 00	1,766 00	138 00	74 00
Delisle	9,832 00	702 00	250 00	23 00
			30 00	71 00
			879 00	24 00
				148 00

TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipment, etc.—*Con.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Operating Expenses.	Number of Telephones.	Employees and Remuneration		Miles of Wire.
								No.	\$	
<i>Saskatchewan—Con.</i>										
Glen Adelaide Tel. Co.	Wawota		7,700 00	7,795 00	433 00	375 00	39			136-00
Glenavon N. Tel. Co.	Glenavon		1,500 00	1,520 00	140 00	87 00	14			30-00
Glenavon S. Tel. Co.	Glenavon		16,000 00	17,351 00	945 00	459 00	84	2	250 00	258-00
Glenavon E. Tel. Co.	Glenavon		2,400 00	2,340 00	55 00	17 00	9			11-00
Glenford Tel. Co.	Glenfide		7,000 00	6,800 00	536 00	350 00	35			22-00
Glenrose Tel. Co.	Rattleford		11,000 00	10,820 00	900 00	558 00	35			127-00
Good Hope Tel. Co.	Waldron		12,700 00	12,200 00	889 00	555 00	61			162-00
Goodwater Tel. Co.	Goodwater		7,700 00	7,200 00	230 00	310 00	40			118-00
Gores Tel. Co.	Ogema		1,837 00	70 00	70 00	65 00	7			36-00
Govan Tel. Co.	Govan		16,500 00	17,712 00	2,268 00	2,114 00	106	1	1,200 00	287-00
Graham-Chatworth Tel. Co.	Saltcoats		10,200 00	10,298 00	451 00	384 00	46			178-00
Grand Bend Tel. Co.	Weyburn		7,000 00	7,110 00	110 00	267 00	31			102-00
Great Deer Tel. Co.	Borden		11,000 00	10,620 00	631 00	536 00	70	2	355 00	178-00
Great West Tel. Co.	Wapella		4,000 00	4,062 00	100 00	70 00	20			46-00
Green Farm Tel. Co.	Herbert		8,200 00	8,498 00	470 00	430 00	49			156-00
Guernsey Tel. Co.	Guernsey		21,000 00	17,460 00	652 00	782 00	85	1	100 00	275-00
Glenada Tel. Co.	Stoughton		13,000 00	13,304 00	196 00	371 00	62			220-00
Great Bend Tel. Co.	Radisson		7,000 00	7,755 00	441 00	375 00	40			116-00
Grovenland Tel. Co.	Lanigan		2,500 00	2,068 00	120 00	65 00	12			30-00
Garmoek Tel. Co.	Kedhler		13,000 00	13,256 00	457 00	280 00	46			165-00
Gladstone Tel. Co.	Bethune		15,400 00	14,610 00	506 00	528 00	75	1	150 00	220-00
Gidloo Tel. Co.	Saskatoon		7,000 00	7,163 00	165 00	467 00	30			100-00
Glen Eagle Tel. Co.	Asquith		8,000 00	8,131 00	145 00		29			128-00
Glen Morris Tel. Co.	Carlyle		10,500 00	10,605 00	565 00	415 00	56			146-00
Green Prairie Tel. Co.	Central Butte		29,500 00	32,216 00	535 00	246 00	123			492-00
Hay Creek Tel. Co.	Maple Creek	950 00		900 00	84 00	35 00	7			31-00
Hanley Tel. Co.	Hanley	2,930 00		2,930 00	403 00	231 00	17			67-00
Huron & Clinton Tel. Co.	Tuxford	3,400 00		3,724 00	49 00	579 00	26			85-00
Hill Farm Tel. Co.	Lemberg	4,125 00		4,450 00	320 00	328 00	32	2	45 00	98-00
Hepburn Tel. Co.	Hepburn	6,800 00		6,476 00	544 00	522 00	68			156-00
Huronville Farmers' Tel. Co.	Huronville	3,850 00		3,808 00	341 00	320 00	32			88-00
Hope Tel. Co.	Abernethy	875 00		860 00			5			10-00
Heward Tel. Co.	Heward	4,800 00		4,800 00	507 00	500 00	42			85-00
Highview Tel. Co.	Dumas	3,000 00		3,760 00	650 00	252 00	27	2	40 00	72-00
Haldonia Tel. Co.	Francis	1,175 00		858 00	90 00	202 00	10			20 00
Heil's Lake Tel. Co.	Lemberg	2,925 00		2,150 00	120 00	107 00	20			54-00

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Hursh Tel. Co.	800 00								9	1	53 00	18-00
Hazelcliffe Tel. Co.	1,600 00								19	1		42-00
Hayes Tel. Co.	800 00								8			15-00
Hallville Tel. Co.		10,000 00							50	1	600 00	190-00
Hanson Tel. Co.		4,000 00							20			46-00
Labor		3,981 00							50			95-00
Maryfield		5,633 00							27			37-00
High Rider Tel. Co.		2,800 00							13			106-00
Hildahl Tel. Co.		6,100 00							26			73-00
Hillcrest Tel. Co.		2,500 00							12			90-00
Hillsdale Tel. Co.		4,950 00							23			70-00
Hume Tel. Co.		4,000 00							20			44-00
Huron Tel. Co.		7,500 00							44			150-00
Hillier Tel. Co.		12,000 00							47			178-00
Hyde Tel. Co.		1,800 00							8			27-00
Hawarden Tel. Co.		10,000 00							57			142-00
Hub Tel. Co.		2,000 00							10			24-00
Hub Tel. Co.		9,500 00							33			133-00
Horse Lake Tel. Co.		31,000 00							139	1	145 00	491-00
Harris Tel. Co.		10,500 00							36			134-00
Hillside Tel. Co.		5,800 00							26			75-00
Hohenden Tel. Co.									41			22-00
International Tel. Co.	700 00								10			106-00
Ingewood Tel. Co.	5,000 00								30			96-00
Ideal Tel. Co.		6,800 00							12		60 00	22-00
Industrial Tel. Co.		2,000 00							19			81-00
Bradwell		4,600 00							30			65-00
Ingliside Tel. Co.		5,000 00							30	1	140 00	81-00
James Tel. Co.		3,800 00							31			63-00
Avanhoe Tel. Co.		500 00							5			11-00
Idylwyld Tel. Co.		9,000 00							37			110-00
Ituna Tel. Co.		7,200 00							31			95-00
Iola Tel. Co.		5,900 00							39	1	45 00	83-00
Ianiata Tel. Co.		9,500 00							42			130-00
Jesmond Tel. Co.									15	1	30 00	34-00
Kenlis Tel. Co.	1,250 00								13			25-00
Kenilworth Tel. Co.	1,200 00								11	1	135 00	28-00
Kenilworth Tel. Co.	1,375 00								10			30-00
Kinley Tel. Co.	1,250 00								12			12-00
Kendalton Tel. Co.		1,870 00							38			94-00
King Edward Tel. Co.	1,475 00								17	1	50 00	45-00
Key West Tel. Co.	4,000 00								10			32-00
Kindersley Tel. Co.	1,900 00								15			32-00
Kindersley Tel. Co.	1,900 00								10			82-00
Kennedy-High View Tel. Co.	1,600 00								42	1	200 00	246-00
Kaiser Tel. Co.		2,250 00							102			500 00
Kandahar Tel. Co.		8,000 00							52	1	360 00	152-00
Kansas Tel. Co.		16,900 00							54	2	400 00	160-00
Keelerville Tel. Co.		8,800 00							28			70-00
Keelerville Tel. Co.		8,800 00							27			72-00
Kenaston Tel. Co.		11,000 00							40	1	105 00	104-00
Kenaston Tel. Co.		12,100 00							21			40-00
Khedive Tel. Co.		12,721 00							32			89-00
Kindred Tel. Co.		5,000 00							21			46-00
Kindred Tel. Co.		5,000 00							32			89-00
Kingsley Tel. Co.		6,100 00							32			89-00
Kingsley Tel. Co.		8,000 00							32			89-00
Kronan Tel. Co.		4,300 00							32			89-00
Kronan Tel. Co.		4,300 00							32			89-00
Kilmory Tel. Co.		6,900 00							32			89-00
Kent Tel. Co.		6,900 00							32			89-00
Davidson		6,862 00							32			89-00

TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipment, etc.—*Con.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Operating Expenses.	Number of Tele-phones.		Employees and Remuneration.	Miles of Wire.
							Magneto.	No.		
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.	Miles.
<i>Saskatchewan—Con.</i>										
Kedleston Tel. Co.	Kedleston.		7,800 00	7,619 00	250 00	125 00	50			94-00
Kalamazoo Tel. Co.	Mortlach.		8,500 00	9,135 00	235 00	75 00	47			124-00
Long Grade Tel. Co.	Milestone.	780 00		775 00			12			23-00
Lang Mutual No. 1 Tel. Co.	Lang.	630 00		630 00		80 00	17			24-00
" " No. 2 "	"	850 00		595 00	204 00	204	17			32-00
" " No. 3 "	"	1,050 00		1,500 00	450 00		25			34-00
" " No. 4 "	"	1,300 00		1,300 00	130 00	100 00	27			28-00
" " No. 5 "	"	1,500 00		1,500 00			30			34-00
Lake Centre Tel. Co.	Strasbourg.	6,000 00		5,300 00	514 00	510 00	46	1	400 00	150-00
Laird Tel. Co.	Laird.	5,700 00		7,030 00	1,755 00	1,113 00	66	1	550 00	130-00
Lac Qui Parle Tel. Co.	Middle.	7,000 00		7,000 00	916 00	700 00	66	1	26 00	171-00
Lamsden Beach Tel. Co.	Lamsden.	2,400 00		1,725 00	315 00	293 00	19	1	75 00	37-00
Lake Tel. Co.	Abermethy.	600 00		650 00	80 00	100 00	8			16-00
Livingsstone Tel. Co.	Brownlee.	1,350 00		1,312 00	72 00	77 00	11			25 00
Laura Tel. Co.	Laura.	7,900 00		6,810 00	2,348 00	1,582 00	76	1	785 00	136-00
Little Bluff Tel. Co.	Moosomin.	1,525 00		2,165 00	250 00	132 00	15			43-00
Lorette Tel. Co.	Dallmaney.	700 00		681 00		5 00	7			14-00
Lortie Tel. Co.	Lortie.	1,650 00		1,581 00	50 00	164 00	13			36-00
Last Mountain Tel. Co.	Semans.	3,700 00		3,809 00	687 00	455 00	29			83-00
Lajord Tel. Co.	Lajord.		3,800 00	3,713 00	335 00	250 00	21			50-00
Lampman Tel. Co.	Lampman.		8,000 00	7,942 00	686 00	701 00	54			120-00
Lampman, N. Tel. Co.	"		4,500 00	4,654 00	250 00	208 00	24			76 00
Landon Tel. Co.	Langbank.		5,700 00	5,146 00	350 00	476 00	28			76-00
Langbank Tel. Co.	Langbank.		7,700 00	7,620 00	480 0	380 00	53	1	150 00	128-00
Lanigan Tel. Co.	Lanigan.		2,000 00	1,992 00	99 00	56 00	11			22-00
Latham Tel. Co.	Osage.		6,200 00	5,004 00	176 00	277 00	28			163-00
Lewiswyn Tel. Co.	Raymore.		10,500 00	10,660 00	392 00	445 00	49			176-00
Little Manitou Tel. Co.	Watrous.		3,700 00	2,245 00	80 00	165 00	16			27 00
Lockwood Tel. Co.	Lockwood.		1,700 00	17,200 00	634 00	352 00	99			209-00
Lovat Tel. Co.	Lovat.		2,500 00	2,365 00	65 00	62 00	12			15-00
Luton Tel. Co.	Dulac.		4,000 00	4,027 00	217 00	54 00	24			70-00
Lynne Tel. Co.	Langham.		7,300 00	7,258 00	825 00	903 00	34			112-00
Lone Corner Tel. Co.	Qu'Appelle.		3,500 00	3,330 00	202 00	177 00	15			58-00
Lewvan Tel. Co.	Lewvan.		7,200 00	7,021 00	565 00	507 00	36			101-00
Loch Ayr Tel. Co.	Bethune.		5,800 00	5,902 00	1,302 00	1,123 00	37			78-00
Logberg Tel. Co.	Calder.		5,300 00	4,442 00	110 00	127 00	16			56-00



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Laqueview Tel. Co.	2,200 00	2,207 00	140 00	152 00	14	31-00
Longlaketon Tel. Co.	3,200 00	3,055 00	215 00	62 00	20	52-00
Landshut Tel. Co.	4,000 00	4,224 00	215 00		21	64-00
Lanigan, N. W. Tel. Co.	4,800 00	5,030 00	253 00	250 00	22	47-00
Liberty Tel. Co.	5,500 00	5,374 00	238 00	393 00	36	82-00
Maple Leaf Tel. Co.		3,200 00	200 00	437 00	24	68-00
Moosomin E. Tel. Co.		850 00	182 00	187 00	12	16-00
Moosomin Tel. Co.		3,600 00	48 00	362 00	48	137-00
McTaggart Tel. Co.		4,244 00	797 00	1,089 00	53	126-00
Moosajaw, Grafton & Blue Hills Tel. Co.		6,747 00	1,313 00	1,135 00	50	220-00
Moose Mountain Tel. Co.		6,749 00	1,247 00	510 00	40	146 00
Moosejaw Enterprise Tel. Co.		4,875 00	836 00	150 00	10	18-00
Minnesota Tel. Co.		1,069 00	200 00	252 00	1	75-00
Markinch Tel. Co.		3,558 00	42 00	256 00	24	62-00
McFarlane Tel. Co.		3,272 00	2,494 00	111 00	12	30-00
Nokomis		1,380 00		67 00	8	17-00
Meadowdale Tel. Co.		470 00	98 00	156 00	21	35 00
McLean Tel. Co.		1,800 00	132 00		14	35 00
Midway Tel. Co.		1,350 00			14	18 00
Mount Pisgah Tel. Co.		510 00	86 00	80 00	8	24-00
Maple Grove Tel. Co.		1,025 00	125 00	110 00	10	37-00
Markineh, N. Tel. Co.		1,600 00	160 00	82 00	16	27-00
Markineh, S. Tel. Co.		1,456 00	111 00	73 00	11	11-00
Mountain Side Tel. Co.		489 00	70 00	32 00	5	238-00
Manor Tel. Co.	15,000 00	16,117 00	635 00	673 00	92	225-00
Maple Valley Tel. Co.	10,500 00	10,811 00	345 00	240 00	28	147-00
Marquis Tel. Co.	11,000 00	10,630 00	977 00	957 00	66	117-00
Maryfield Tel. Co.	7,000 00	6,530 00	270 00	467 00	36	74-00
Maymont	9,000 00	8,644 00	479 00	385 00	50	56-00
Macoun	4,200 00	4,049 00	502 00	518 00	31	82 00
Morrington Tel. Co.	4,150 00	4,203 00	216 00	189 00	18	269-00
Morris Tel. Co.	5,500 00	5,227 00	305 00	298 00	30	276 00
Morse Tel. Co.	15,000 00	13,775 00	887 00	1,055 00	76	210 00
Moose Creek Tel. Co.	18,000 00	17,740 00	925 00	840 00	84	74 00
Mair Tel. Co.	11,400 00	11,055 00	537 00	645 00	43	71 00
Montgomery Tel. Co.	4,500 00	3,385 00	325 00	303 00	25	176 00
Meskauw Tel. Co.	9,600 00	9,515 00	420 00	375 00	38	259-00
Marienthal Tel. Co.	17,000 00	15,688 00	145 00	408 00	85	25-00
Moon Lake Tel. Co.	2,500 00	2,647 00	120 00	120 00	13	76-00
Montmartre Tel. Co.	5,500 00	5,562 00	523 00	306 00	30	141-00
Middleton Tel. Co.	9,500 00	9,108 00	225 00	340 00	40	203-00
Marine Tel. Co.	11,800 00	11,105 00	350 00	350 00	45	183 00
Mountain View Tel. Co.	11,500 00	11,637 00	195 00	60 00	32	52 00
Mount Forest Tel. Co.	7,000 00	6,557 00	485 00	197 00	25	9-00
North Regina Tel. Co.		646 00	50 00		6	22-00
North Clarivale Tel. Co.		901 00	154 00	78 00	14	71 00
North Portal Tel. Co.		2,538 00	534 00	302 00	29	88 00
North Weyburn Tel. Co.		3,975 00	909 00	175 00	36	200-00
North Pense Tel. Co.		6,200 00	1,590 00	1,145 00	74	10 00
North Aberdeen Tel. Co.		517 00	60 00	170 00	5	66-00
North Halbrite Tel. Co.		4,292 00	285 00	303 00	21	150 00
North Yorkton Tel. Co.		5,686 00	520 00	410 00	45	

TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipment, etc.—*Con.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.	Miles of Wire.
							Magneto.	Phones.		
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.	Miles.
<i>Saskatchewan—Con.</i>										
North Antler Tel. Co.	Antler.	2,500 00		2,500 00	210 00	217 00	20			58-00
North Star Tel. Co.	Wapella.	1,375 00		1,375 00	20 00	25 00	11			35 00
North Kisbey Tel. Co.	Kisbey.	5,075 00		7,119 00	617 00	814 00	43			45-00
North Craven Tel. Co.	Craven.	3,075 00		2,893 00	365 00	111 00	23	1	365 00	55-00
North Wideawake Tel. Co.	Fort Qui Appelle.	1,582 00		1,582 00	90 00	38 00	9			30-00
North Langham Tel. Co.	Langham.	450 00		432 00	69 00	46 00	5			10-00
N. E. Weyburn Tel. Co.	Weyburn.	1,200 00		1,050 00	55 00	121 00	11			21-00
Nutana Tel. Co.	Saskatoon.	900 00		675 00	70 00	70 00	7			10-00
New Steinbach Tel. Co.	Alberden.	1,500 00		1,010 00	49 00	47 00	8			32-00
New Hastings Tel. Co.	Moosemin.	2,050 00		2,490 00	462 00	406 00	21			55 00
Nakomis Tel. Co.	Nokomis.	2,500 00		2,705 00	90 00	54 00	18			52-00
Newberry Tel. Co.	Archive.	3,375 00	7,500 00	3,277 00	449 00	437 00	29	1	75 00	54 00
Naisberry Tel. Co.	Melford.		13,000 00	7,750 00	485 00	519 00	53			116-00
Neidpalh Tel. Co.	Herbert.		26,000 00	13,040 00	582 00	593 00	70	2	332 00	192-00
New Imperial Tel. Co.	Imperial.		7,300 00	29,000 00	3,190 00	4,272 00	160		900 00	560-00
North Bienville Tel. Co.	Bienville.		11,000 00	5,850 00	800 00	800 00	29			82 00
North Churchbridge Tel. Co.	Churchbridge.		17,800 00	11,300 00	365 00	208 00	55	1	101 00	226-00
North Redvers Tel. Co.	Redvers.		1,800 00	17,667 00	1,479 00	1,123 00	76			181-00
North Tyvan Tel. Co.	Tyvan.		1,500 00	1,314 00	64 00	48 00	8			20 00
North Benson Tel. Co.	Benson.		13,000 00	12,108 00	578 00	624 00	55	1	300 00	178-00
New Deloraine Tel. Co.	Davidson.		10,000 00	9,993 00	169 00	53 00	52			178-00
Narrow Lake Tel. Co.	Wilkie.		14,000 00	12,473 00	206 00	315 00	53			218-00
North Forget Tel. Co.	Forget.		9,500 00	9,295 00	432 00	496 00	40			143-00
North Candiac Tel. Co.	Candiac.		1,600 00	1,461 00	50 00	65 00	10			18-00
Neelby Tel. Co.	Neelby.		3,200 00	3,300 00	100 00	100 00	20			51-00
North Lanigan Tel. Co.	Lanigan.		14,000 00	13,990 00	575 00	375 00	49			241-00
North Ceylon Tel. Co.	Ceylon.		9,000 00	9,427 00	394 00	308 00	44			99-00
North Ernfold Tel. Co.	Ernfold.		4,000 00	3,700 00	165 09	75 00	14			51-00
North Tel. Co.	Neudorf.		4,000 00	4,020 00	70 00	46 00	14			54-00
Okebena Tel. Co.	Drinkwater.	1,000 00		1,000 00	190 00	174 00	16			18-00
Oxbow Tel. Co.	Oxbow.	10,000 00		10,546 00	2,665 00	2,388 00	103	1	600 00	341-00
Overbrook Tel. Co.	Overbrook.	2,100 00		2,130 00	86 00	81 00	20			58-00
Odessa Tel. Co.	Odessa.		11,000 00	11,159 00	560 00	484 00	69			149 00
Outram Tel. Co.	Outram.		4,800 00	4,838 00	145 00	190 00	26			62 00
O. K. Tel. Co.	Colgate.		3,500 00	3,356 00	88 00	132 00	16		35 00	36-00
Orange View Tel. Co.	Watrous.		4,500 00	4,210 00	115 00	75 00	21			54 00

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Ormiston Tel. Co.	3,200 00	3,332 00	101 00	92 00	13		39 00
Oak Hill Tel. Co.	9,700 00	17,664 00	235 00	465 00	63	1	296 00
Old Guard Tel. Co.	2,400 00	2,100 00	75 00	153 00	10		36 00
Prairie Home Tel. Co.		2,000 00	284 00	151 00	16		44 00
Pioneer Tel. Co.		1,375 00	150 00	135 00	10		16 00
Pheasant Plains Tel. Co.		2,286 00	56 00	60 00	11		34 00
Pheasant Creek Tel. Co.		2,665 00	241 00	314 00	22	1	92 00
Pheasant Forks Tel. Co.		1,400 00	145 00	88 00	12	1	30 00
Pasqua Tel. Co.		900 00	40 00		8		14 00
Pasqua, S.E., Tel. Co.		1,500 00			8		22 00
Pengarth Tel. Co.		2,844 00	280 00	138 00	20	1	120 00
Prairieville Tel. Co.		1,000 00	296 00	172 00	12		22 00
Prospect Tel. Co.		1,178 00	150 00	75 00	10		27 00
Park Tel. Co.		680 00	90 00	93 00	9		12 00
Prairieview Tel. Co.		2,300 00	120 00	100 00	17		55 00
Prosperity Tel. Co.		1,450 00	250 00	171 00	12		31 00
Poplar Grove Tel. Co.		1,612 00	116 00	176 00	12		36 00
Poplar Tel. Co.		7,408 00	652 00	455 00	53	1	120 00
Pangman Tel. Co.		500 00	50 00	38 00	5		11 00
Potter Tel. Co.		6,234 00	217 00	141 00	34		112 00
Paswegin Tel. Co.	6,500 00	1,200 00	310 00	50 00	6		10 00
Pelly Tel. Co.	11,600 00	11,083 00	310 00	409 00	48		177 00
Pheasant Hills Tel. Co.	6,200 00	5,920 00	145 00	135 00	27		83 00
Phoenix Tel. Co.	22,200 00	23,215 00	678 00	751 00	94		416 00
Pibrook Tel. Co.	8,000 00	8,044 00	170 00	398 00	38	1	198 00
Pleasant Valley Tel. Co.	7,000 00	6,837 00	576 00	134 00	32		108 00
Pleasant View Tel. Co.	4,200 00	4,174 00	135 00	134 00	17		68 00
Plymouth Tel. Co.	3,200 00	2,733 00	180 00	76 00	16		33 00
Prairie Tel. Co.	4,700 00	4,693 00	275 00	290 00	29		114 00
Prairie Lea Tel. Co.	4,000 00	3,870 00	240 00	240 00	20		53 00
Prairie Lily Tel. Co.	2,200 00	1,875 00	832 00	456 00	12		20 00
Progressive Tel. Co.	7,700 00	7,712 00	170 00	220 00	34		123 00
Parkberg Tel. Co.	3,000 00	3,174 00	180 00	177 00	13		44 00
Petrolia Tel. Co.	9,500 00	9,957 00	401 00	323 00	44		168 00
Patience Lake Tel. Co.	10,000 00	9,942 00	510 00	380 00	53		143 00
Pelican Tel. Co.	13,400 00	13,225 00	722 00	656 00	74		182 00
Penzaance Tel. Co.	7,300 00	6,942 00	320 00	282 00	27		82 00
Prairie Queen Tel. Co.	14,000 00	14,068 00	237 00	306 00	70		260 00
Quill Plains Tel. Co.		4,288 00	583 00	456 00	23		91 00
Regina-Grand View Tel. Co.		1,277 00	313 00	308 00	25	1	32 00
Rouleau		653 00	120 00	110 00	9		17 00
Riverside Tel. Co.		3,100 00	334 00	338 00	24		60 00
Rose Plains Tel. Co.		4,068 00	676 00	525 00	37		97 00
Rose Valley Tel. Co.		1,981 00	391 00	281 00	24		78 00
Rough Bank Tel. Co.		2,500 00	315 00	325 00	21		112 00
Regina Beach Tel. Co.		1,800 00	280 00	169 00	14		47 00
Riga Tel. Co.		3,115 00	402 00	428 00	21	1	55 00
Red Fox Valley Tel. Co.		963 00		182 00	11		21 00
Rufus Tel. Co.		6,400 00	1,100 00	694 00	58		116 00
Rocanville Tel. Co.		1,649 00	419 00	121 00	15		30 00
Rouleau		1,100 00	90 00	82 00	9		20 00
Rudolph Tel. Co.							
Ruby Tel. Co.							

TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipment, etc.—*Con.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.		Revenue.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.		Miles of Wire.
				\$	cts.			Magneto.	No.	\$	cts.	
<i>Saskatchewan—Con.</i>												
Rosthern Tel. Co.	Laird	5,800 00		5,100 00		700 00	420 00	35				116-00
Reciprocity Tel. Co.	Pease	700 00		830 00		108 00	75 00	9				13-00
Richhams Tel. Co.	Nokomis	5,800 00		5,800 00		617 00	411 00	49				74-00
Rainmont	Rainmont		6,300 00	6,089 00		414 00	392 00	31				85-00
Raymore Tel. Co.	Raymore		9,500 00	9,022 00		537 00	334 00	40				106-00
Redrows Tel. Co.	Bukarues		1,200 00	1,186 00		38 00	35 00	6				19-00
Regal Tel. Co.	Swift Current		8,300 00	8,300 00		145 00	111 00	32				121-00
Renown Tel. Co.	Watrous		11,000 00	10,500 00		275 00	105 00	54				115-00
Rhein Tel. Co.	Rhein		4,000 00	3,850 00		269 00	142 00	16				66-00
Rice-ton Tel. Co.	Rice-ton		13,000 00	11,600 00		1,449 00	1,449 00	60	1	620 00		252-00
Rich Prairie Tel. Co.	Bienfait		6,200 00	5,763 00		230 00	138 00	23				88-00
Rockland Tel. Co.	Semaus		4,450 00	4,310 00		284 00	171 00	22				66-00
Rowdelta Tel. Co.	Caron		4,100 00	4,100 00		128 00	80 00	16				71-00
Raxboro Tel. Co.	Griffin		4,300 00	4,341 00		159 00	130 00	21				98-00
Rugg Tel. Co.	Outram		7,000 00	7,145 00		271 00	223 00	33		2	120 00	186-00
Rozalce Tel. Co.	Shellbrook		8,000 00	7,680 00		50 00	66 00	41				115-00
Rosebank Tel. Co.	Camduff		5,500 00	5,423 00		120 00	35 00	20				80-00
River Ayr Tel. Co.	Broadview		2,500 00	2,500 00		70 00	20 00	10				36-00
Ruddell Tel. Co.	Ruddell		6,000 00	5,989 00		302 00	227 00	32				84-00
Roekhaven Tel. Co.	Roekhaven		11,500 00	12,385 00		347 00	321 00	77	1	100 00		200-00
Koif Tel. Co.	Qu Appelle		1,500 00	1,305 00		110 00	85 00	8				16-00
Roger Tel. Co.	Gainsboro		1,700 00	1,600 00		80 00	75 00	8				22-00
Rosetown N. Tel. Co.	Rosetown		11,000 00	10,486 00		480 00	100 00	36				127-00
Riverbank Tel. Co.	Cabri		12,000 00	10,757 00		600 00	285 00	39				144-00
Range Line Tel. Co.	Gravelbourg		12,000 00	12,032 00		260 00	75 00	37				144-00
River Park Tel. Co.	Aberdeen		4,800 00	4,490 00		215 00	50 00	21				60-00
Riverdome Tel. Co.	Cabri		8,300 00	6,174 00		370 00	105 00	37				99-00
Round Lake Tel. Co.	Dulac		5,000 00	4,751 00		206 00	142 00	20				65-00
Red Jacket Tel. Co.	Moosomin		4,500 00	4,000 00		248 00	182 00	19				30-00
Saskatchewan Government Telephones.	Regina		5,671,106 68	5,671,106 68		908,697 62	472,831 37	*20,140		476,369,365,40		115,780-00
Sutherland Tel. Co.	Saskatoon		1,200 00	1,200 00		96 00	92 00	8				20-00
Swanston Tel. Co.	Govan		8,650 00	10,117 00		2,704 00	1,008 00	63				254-00
Springcreek-Covardale Tel. Co.	Moosomin		3,875 00	4,755 00		604 00	244 00	30				94-00
Saltcoats Tel. Co.	Saltcoats		6,975 00	9,595 00		1,075 00	973 00	84				288-00
Sunnyhill Tel. Co.	Briercrest		2,500 00	2,675 00		357 00	133 00	21				92-00
Silverton Tel. Co.	Camduff		1,825 00	1,825 00		575 00	125 00	23				46-00

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Stony Beach Tel. Co.	5,700 00	5,252 00	660 00	549 00	58	2	360 00	198-00
Sunnyside Tel. Co.	4,200 00	4,200 00	544 00	528 00	34	1	100 00	114-00
South Antler Tel. Co.	1,100 00	1,100 00	154 00	117 00	13			26-00
South Regina Tel. Co.	1,000 00	959 00	155 00	152 00	9			18-00
Stoughton Tel. Co.	4,900 00	4,951 00	618 00	152 00	49			94-00
Sedley Tel. Co.	2,975 00	3,175 00	362 00	357 00	29			86-00
Spring Coulee Tel. Co.	1,375 00	1,232 00	278 00	122 00	11			24-00
Sunny South Tel. Co.	1,250 00	1,300 00	232 00	151 00	14			31-00
S. Carrievale Tel. Co.	1,125 00	1,026 00	150 00	162 00	15			26-00
Stanley Tel. Co.	1,000 00	1,075 00	192 00	62 00	12			28-00
Springdale Tel. Co.	1,725 00	1,509 00	110 00	99 00	12			28-00
S. Gainsboro Tel. Co.	2,600 00	2,600 00	260 00	325 00	26			72-00
S. Welwyn Tel. Co.	1,000 00	1,450 00	65 00	65 00	11			16-00
Sherwood Tel. Co.	4,375 00	4,000 00	370 00	381 00	33	1	26 00	93-00
S. Pense Tel. Co.	1,200 00	1,181 00	117 00	185 00	11	1	25 00	32-00
St. Andrews Tel. Co.	1,100 00	1,095 00	190 00	118 00	11			32-00
Sarawak Tel. Co.	1,200 00	1,200 00	60 00	30 00	12			22-07
S. Arcola Tel. Co.	4,375 00	4,375 00	1,085 00	1,375 00	34	12		101-00
Stewart Valley-Leiman Tel. Co.	2,150 00	2,150 00	168 00	135 00	12	1		50-00
Sumise Tel. Co.	1,200 00	910 00	110 00	110 00	12			14-00
Summerhill Tel. Co.	1,500 00	1,240 00	237 00	122 00	13			26-00
Superior Tel. Co.	1,750 00	1,750 00	156 00	156 00	12			32-00
Sydenham Tel. Co.	2,050 00	2,100 00	308 00	308 00	21	1	50 00	47-00
Summerberry Tel. Co.	5,275 00	5,093 00	125 00	255 00	42			99-00
S. Boharum Tel. Co.	1,467 00	1,300 00	90 00	97 00	9			26-00
Semans Tel. Co.	5,550 00	5,410 00	435 00	313 00	40			116-00
Strassburg Tel. Co.	450 00	428 00	60 00	47 00	6			6-00
Sunny North Tel. Co.	1,250 00	1,049 00	152 00	74 00	10			25-00
Swift Creek Tel. Co.	1,200 00	1,200 00	77 00	77 00	12			24-00
Saline Tel. Co.	2,350 00	2,084 00	298 00	151 00	17			40-00
Springbrook Tel. Co.	1,250 00	1,087 00	100 00	72 00	10			24-00
S. Maryfield Tel. Co.	3,550 00	3,500 00	556 00	238 00	27			80-00
Sask River Tel. Co.	6,500 00	6,480 00	522 00	247 00	30			82-00
Sask View Tel. Co.	5,000 00	5,105 00	269 00	391 00	26			80-00
Scandinavian Tel. Co.	4,000 00	3,480 00	241 00	315 00	18			60-00
Seymour Tel. Co.	5,300 00	5,348 00	174 00	162 00	24			82-00
Schneider Tel. Co.	3,000 00	2,517 00	110 00	58 00	14			49-00
Seatonh Tel. Co.	7,600 00	8,293 00	1,036 00	699 00	62			270-00
Silton N. W. Tel. Co.	6,500 00	6,488 00	150 00	165 00	29			69-00
Sinnett Tel. Co.	2,500 00	2,269 00	64 00	128 00	11			30-00
S. Bethune Tel. Co.	5,300 00	5,307 00	350 00	321 00	31			74-00
S. Churchbridge Tel. Co.	12,000 00	11,075 00	371 00	287 00	72			126-00
S. Cupar Tel. Co.	4,000 00	3,262 00	193 00	189 00	18			45-00
S. Forget Tel. Co.	14,000 00	13,237 00	504 00	713 00	66			192-00
S. Kisbey Tel. Co.	6,500 00	6,255 00	364 00	622 00	48			130-00
S. Langham Tel. Co.	12,500 00	12,500 00	2,067 00	2,063 00	78			140-00
S. Melford Tel. Co.	6,000 00	5,572 00	250 00	165 00	27			62-00
S. Radisson Tel. Co.	7,000 00	7,169 00	350 00	197 00	46			150-00

\*Including 11,383 operated by central energy.



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Thorson Tel. Co.	5,700 00	5,786 00	820 00	877 00	28	92-00
Troy Tel. Co.	1,800 00	1,702 00	126 00	128 00	12	24-00
Trux Valley Tel. Co.	3,500 00	3,078 00	340 00	326 00	21	114-00
Tullymet Tel. Co.	6,000 00	5,982 00	260 00	178 00	26	131-00
Tyvan Tel. Co.	4,700 00	4,470 00	265 00	663 00	26	65-00
Tainage Tel. Co.	5,500 00	5,115 00	345 00	412 00	22	73-00
Tainagan	3,100 00	3,150 00	85 00	70 00	12	60-00
Tipperary Tel. Co.	3,100 00	7,461 00	165 00	46 00	33	128-00
Three Tel. Co.	7,500 00	10,908 00	384 00	284 00	51	141-00
Togo Tel. Co.	11,000 00	2,848 00	140 00	120 00	14	26-00
Tysdale Tel. Co.	3,100 00	750 00	92 00	77 00	11	8-00
Union Tel. Co.	34,500 00	33,310 00	1,580 00	1,100 00	150	546-00
Unity		1,500 00	164 00	186 00	11	34-00
Victoria Tel. Co.	1,850 00	1,813 00	265 00	141 00	26	52-00
Vanscoy Tel. Co.	400 00	400 00	48 00	83 00	5	10-00
Vernon Tel. Co.	2,850 00	2,845 00	288 00	188 00	24	69-00
View Hill Tel. Co.	6,100 00	8,415 00	1,151 00	1,199 00	65	153-00
Venn	1,650 00	1,549 00	73 00	73 00	11	30-00
Vandura	3,750 00	3,562 00	228 00	225 00	26	62-00
Vandura Tel. Co.	2,200 00	2,160 00	60 00	95 00	10	40-00
Vibank Tel. Co.	5,700 00	5,806 00	167 00	363 00	36	106-00
Valley Tel. Co.	2,200 00	2,325 00	110 00	320 00	11	33-00
Victor Tel. Co.	9,000 00	9,263 00	420 00	497 00	42	148-00
View Grand	4,000 00	3,243 00	130 00	50 00	13	48-00
Vineberg Tel. Co.	24,000 00	23,960 00	537 00	787 00	126	374-00
Virue Tel. Co.	25,000 00	25,432 00	1,300 00	1,024 00	114	364-00
Vanguard E. Tel. Co.	4,600 00	4,742 00	100 00	50 00	18	57-00
Verdun Tel. Co.	3,600 00	3,312 00	205 00	100 00	20	72-00
Valleyfield Tel. Co.	2,000 00	1,750 00	65 00	57 00	6	74-00
Valley View Tel. Co.	2,950 00	3,265 00	1,252 00	1,275 00	32	74-00
Westfield Tel. Co.	4,075 00	4,989 00	666 00	446 00	37	120-00
Wide Awake Tel. Co.	9,375 00	9,398 00	1,311 00	1,205 00	76	234-00
Weyburn Tel. Co.	6,250 00	7,335 00	1,497 00	2,032 00	70	268-00
Wilcox Mutual Tel. Co.	375 00	375 00	40 00	25 00	5	10-00
W. Weyburn Tel. Co.	4,575 00	4,575 00	846 00	522 00	47	150-00
Wheatland Tel. Co.	2,600 00	2,500 00	180 00	155 00	12	52 00
Wall Lake Tel. Co.	5,000 00	5,325 00	1,161 00	1,291 00	48	107-00
Willmar Tel. Co.	2,600 00	2,550 00	214 00	245 00	23	68-00
Wascana Tel. Co.	2,875 00	3,540 00	435 00	508 00	29	96-00
Wheatbelt No. 2 Tel. Co.	3,250 00	2,100 00	660 00	462 00	33	125-01
Wheatbelt No. 3 Tel. Co.	2,850 00	3,561 00	420 00	100 00	35	75-00
Welwyn Tel. Co.	1,200 00	1,032 00	485 00	468 00	19	24-00
Wheatfield Tel. Co.	1,650 00	1,650 00	125 00	125 00	9	34-00
W. Pioneer Tel. Co.	2,700 00	2,600 00	398 00	499 00	38	55-00
Waldheim Tel. Co.	5,100 00	5,100 00	704 00	618 00	35	146-00
W. View Tel. Co.	4,850 00	4,850 00	525 00	395 00	35	130-00
Weldon Tel. Co.	2,200 00	2,200 00	170 00	18 00	15	44-00
Woodlands Tel. Co.	1,800 00	1,400 00	220 00	214 00	11	36-00
Wildwood Tel. Co.	6,030 00	5,750 00	532 00	604 00	49	132-00
Windon Tel. Co.	1,625 00	1,600 00	125 00	82 00	10	26-00
Wreford Tel. Co.	1,200 00	1,875 00	105 00	79 00	10	29-00
Watrous Tel. Co.						

TABLE 5.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Wire Equipments, etc.—*Con.*

Name of Company.	Address.	Capital Stock.		Funded Debt.		Cost of Property and Equipment.		Operating Expenses.		Number of Tele-phones.		Employees and Remuneration.		Miles of Wire.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.	No.	Amount.	No.	\$	cts.	Miles.
<i>Saskatchewan—Con.</i>															
Wheat Plains Tel. Co.	Broderick	3,850 00				3,850 00		504 00	315 00	28				86 00	
Wilson Tel. Co.	Keeler	2,600 00				2,565 00		384 00	246 00	25				62 00	
Walpole Tel. Co.	Walpole			12,500 00		12,589 00		725 00	715 00	1			50 00	167 00	
Warman Tel. Co.	Warman			7,200 00		7,223 00		358 00	323 00	32				90 00	
Wawota Tel. Co.	Wawota			20,800 00		21,635 00		623 00	490 00	50				279 00	
Wessels Tel. Co.	Govan			6,400 00		6,422 00		1,015 00	469 00	39				103 00	
West Tel. Co.	Lemberg			1,000 00		918 00		70 00	80 00	7				12 00	
Westbrook-Gladwin Tel. Co.	Theodore			5,200 00		5,145 00		200 00	204 00	19				74 00	
W. Froude Tel. Co.	Froude			3,700 00		3,423 00		256 00	432 00	20				44 00	
W. Langham Tel. Co.	Langham			4,000 00		3,680 00		582 00	468 00	20				50 00	
W. Osage Tel. Co.	Osage			5,300 00		4,483 00		206 00	325 00	26				58 00	
Whitehood Tel. Co.	Whitehood			10,000 00		10,125 00		400 00	480 00	51				222 00	
Whitehood-St. Hubert Tel. Co.	Whitehood			22,000 00		21,225 00		693 00	268 00	84				267 00	
Wilberforce-Lampman Tel. Co.	Lampman			9,700 00		9,357 00		575 00	956 00	46				125 00	
Wilcox Independent Tel. Co.	Wilcox			2,200 00		2,523 00		324 00	132 00	18				20 00	
Willow Hill Tel. Co.	Davidson			8,200 00		8,200 00		150 00	140 00	28				104 00	
Willsmier Tel. Co.	Simpson			9,500 00		9,018 00		400 00	992 00	41				137 00	
Wood End Tel. Co.	Estevan			9,500 00		9,900 00		644 00	516 00	49				146 00	
Wild Rose Tel. Co.	Balcarres			2,200 00		2,225 00		110 00	44 00	10				31 00	
W. Halbrite Tel. Co.	Halbrite			4,000 00		3,677 00		113 00	82 00	7				44 00	
White Shore Tel. Co.	Landis			14,500 00		13,405 00		330 00	145 00	52				183 00	
W. Greystone Tel. Co.	Windthorst			15,000 00		14,942 00		580 00	978 00	65				430 00	
Wauchope Tel. Co.	Wauchope			2,700 00		2,420 00		169 00	280 00	11				30 00	
W. Beverley Tel. Co.	Beverley			3,000 00		2,900 00		128 00	50 00	16				33 00	
Weyburn Plains Tel. Co.	Weyburn			15,700 00		15,827 00		729 00	501 00	63				238 00	
Wheat Valley Tel. Co.	Success			4,500 00		4,225 00		240 00	187 00	19				45 00	
Willow Heights Tel. Co.	Bathford			21,500 00		19,182 00		940 00	612 00	65				321 00	
Yellow Grass Tel. Co.	Yellow Grass	7,050 00				7,050 00		2,500 00	2,100 00	165			1,800 00	396 00	
Yorkton Tel. Co.	Yorkton	9,900 00				10,000 00		1,695 00	184 00	95				268 00	
Young Tel. Co.	Young			13,500 00		13,500 00		678 00	798 00	81			479 00	450 00	
Zorra-McNutt Tel. Co.	McNutt			6,000 00		5,685 00		125 00	30 00	28				78 00	
Zelma Tel. Co.	Zelma			7,500 00		7,868 00		626 00	482 00	43				96 00	
Zangwell Tel. Co.	Young			15,000 00		14,719 00		387 00	250 00	66				194 00	
Zealandia Tel. Co.	Zealandia			13,000 00		12,586 00		565 00	360 00	56				160 00	
Total		831,339 00	8,994,681 68	9,792,579 68	1,204,057 02	711,829 37		43,657	644,405,664 40	†186,155 00					

†Including 11,383 operated by Central energy. ††75,000 urban miles 111,155 rural miles (estimated).



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TABLE 6.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.
								Central.	Magneto	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	No.	No.	\$ cts.
<i>Nova Scotia</i>										
Abercrombie Tel. Co.	New Glasgow...			1,144 10	41 15	64 90	72 90			
Alder Point Tel. Co.	Little Brac D'Or...	700 00		700 00	43 00	15 54	30 50	21		3
Antigonish Harbour Tel. Co.	Harbour Road...	200 00		600 00				6		1
Athol Tel. Co.	Athol...	326 00		369 00	199 00		194 00	13		
Barneys River Tel. Co.	Lagan...	4,600 00		1,934 17	104 20		104 20	25		1
Bass River Tel. Co., Ltd.	Bass River			1,200 00	270 00		100 00	30		1
Bayfield Road Tel. Co.	Bayfield...			100 00				6		
Bayview Tel. Co.	Pictou...	693 00		870 00	54 00		40 00	14		1
Beacon Hill & Milburn Tel. Co.	Milburn...			592 72	103 00		103 00	13		
Beaver Bank Tel. Co.	Beaver Bank...	554 85		554 85	90 90	22 00	98 17	9		1
Belleville Tel. Co.	Belleville North	600 00		1,061 40	379 53	91 15	377 14	21		
Belmont Tel. Co.	Belmont...	850 00		1,100 00	33 00		33 00	32		1
Big Pond Centre Tel. Co.	Big Pond Centre...	750 00		700 00	50 00	25 00	40 00	7		
Blandford Tel. Co.	Hubbards...	1,800 00		1,800 00	145 88	193 20	213 17	14		7
Broad Cove Tel. Co.	Broad Cove...	300 00		300 00	25 00	20 00	45 00	3		
Brookvale Tel. Co.	Brookvale...	360 00		430 00	45 00		3 00	9		1
Bridgetown & Dalhousie W. Tel. Co.	Dalhousie West	425 00		650 00	96 50		92 90	8		1
Brute Tel. Co., Ltd.	Tatamagouche...			1,526 16	208 50	12 44	208 50	30		2
Caledonia Mills Tel. Co.	Caledonia Mills...			885 00	64 28		64 00	10		
Caledonia Tel. Co.	Caledonia...			1,062 63	29 14		26 50	6		1
Cape D'Or Tel. Co.	Cape D'Or...				40 00		40 00	2		
Carlton Tel. Co., Ltd.	Kemptville...	1,500 00		2,000 00	450 00		316 00	15		4
Central New Annan Tel. Co.	Central New Annan			640 00	120 00		120 00	24		
Central West River Tel. Co.	West River Station			1,000 00	4 30			19		
Chaswood Tel. Co.	Chaswood...			75 00	10 00		10 00	5		
Clam Harbour & Owl's Hd. Tel. Co.	Owl's Head...	500 00		500 00	56 00		10 00	7		
Coastal Tel. Co.	Bay-side	2,000 00	2,000 00	3,284 00	629 00		412 82	20		2
Chedabucto Tel. Co.	Fort Shoreham...			1,963 90	9 00		9 00	19		
Cole Harbour & Woodlawn Tel. Co.	Dartmouth...	650 00		650 00	197 99		197 99	12		1
Cow Bay Tel. Co.	Cow Bay	700 00		750 00	11 00			12		
Cumberland Tel. Co.	Northport			2,750 00	1,156 50		376 00	80		2
Dean Tel. Co., Ltd.	Dean...	3,795 00		1,350 00	115 00	10 00	115 00	23		1
Denmark & Middleton Tel. Co.	Denmark...			825 00				18		
Earlton Tel. Co.	Earlton...			834 00	200 00	50 00	50 00	19		1
East Chezzetcook Tel. Co.	E. Chezzetcook...	110 00		110 00	11 50		5 00	2		
Eastern Cole Harbour Tel. Co.	Dartmouth...	1,259 55		160 00	160 00		160 00	16		1
East Inglesville Tel. Co.	Lawrencetown...			530 00	30 00		27 00	16		

TABLE 6.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—Continued.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.
								Central.	Magneto	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.
<i>Nova Scotia—Con.</i>										
East Leicester Tel. Co.	Oxford.			515 19	45 17		45 17		11	
East Pictou Tel. Co.	Little Harbour.	1,245 00		2,290 00	1,188 23		985 46		51	219 25
East River Tel. Co.	Sprynville.	3,385 58		3,810 58	975 27	26 00	844 90		2	300 00
East Stewiacke Tel. Co.	East Stewiacke.	320 00		320 00	78 03		78 03		23	6 00
East Victory Tel. Co.	East Victory.	700 00		700 00	65 00		65 00		8	
East Wentworth Tel. Co.	East Wentworth.	140 00		300 00					9	
Falls Tel. Co.	The Falls.			2,200 00	552 97		524 90		37	227 60
Farmers Tel. Co.	Grafton.			24,472 32	5,924 88		3,855 90		473	1,746 00
Forks Baddeck Tel. Co.	Baddeck Forks.			1,150 00	75 00		75 00		29	50 00
Fox Brook Tel. Co.	Stellarton.			440 82	5 90	2 40	5 90		8	
Fox Harbour Tel. Co.	Fox Harbour Point.	400 00		500 00	21 32		5 00		20	
Gammans Point Tel. Co.	Tor Bay.			135 00	22 00	10 50	5 00		6	
Glenegary Tel. Co.	Hopewell.			700 00	23 00		23 00		18	
Goffs & Oldham Tel. Co.	Goffs.	355 00		355 00	96 75		92 75		4	12 00
Grand Mira Tel. Co.	Grand Mira.			9,784 35	454 92	134 92	86 40		90	40 00
Hodson Tel. Co.	River John.			650 00	5 00		5 00		18	
Hammonts Plains Tel. Co.	Bedford.	500 00		800 00	131 85		107 34		11	10 00
Harrison Rd. Tel. Co.	Marcan.			300 00	200 00		15 00		9	
Harmony Tel. Co., Ltd.	Harmony.			632 00	49 70	10 00	59 71		14	12 00
Head of Wallace Bay Tel. Co.	Pugwash.			310 00	7 85	2 55	5 00		15	
Heathbell & Plainfield Tel. Co.	Scotsburn Station.			2,500 00	43 00		43 00		46	43 00
Heathton Tel. Co.	Glassburn.			2,422 71	3 15	3 45	5 00		39	
Hillsburn Tel. Co.	Hillsburn.			200 00	136 40		100 16		3	
Hillside Tel. Co.	Hillside.			900 00	12 00		12 00		15	
Hilden Tel. Co., Ltd.	Hilden.			1,200 00					16	
Hubbards East Tel. Co.	Halifax.			78 38	15 00		15 00		2	
Indian Point Tel. Co.	Indian Point.	150 00		150 00	36 00	16 00	50 00		2	
Isle Madam Tel. Co.	Arsheath.	2,500 00		3,128 00	829 90	300 00	639 00		27	305 00
Jeddore Tel. Co.	Musquodibit Har.			1,000 00	164 00		85 00		14	
Jordan Bay Tel. Co.	Jordan Bay.			875 00	50 00		25 00		11	9 00
Jordan Tel. Co.	Jordan Bay.	120 00		120 00	40 00		40 00		3	
Judique Tel. Co.	Judique North.			1,565 00	7 00	22 60	5 00		22	
Kursdale Tel. Co.	Granville Ferry.	700 00		729 32	260 50		50 00		21	50 00
Lake La Rose Tel. Co.	Annapolis Royal.	472 77		472 77	5 00				8	
Lakevale Tel. Co.	Lakevale.			2,476 00	137 00		64 00		29	69 00
Lawrencetown Tel. Co.	Lawrencetown.	1,712 50		1,946 73	396 16	291 89	546 73		36	
Lindsay Tel. Co.	New Glasgow.	353 00		500 00	214 72		3 50		11	
Lorne Tel. Co.	Hopewell.	420 00		635 00	45 00		45 00		36	35 00

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Lovatt Tel. Co.	300.00	1,380.00	7.00	55.00	5.00	1	5.00
Malagash Tel. Co.	1,800.00	3,065.00	1,019.45	7.00	7.00	15	270.00
Maitland & Noel Tel. Co.	3,770.00	3,300.00	1,318.25	450.00	446.55	47	450.00
Maple Leaf Tel. Co.	1,160.00	1,160.00	58.24		627.31	89	58.24
Mapleton Tel. Co.	1,850,000.00	1,850,000.00	3,821,642.73	229,761.70	58.24	29	58.24
Maritime Telegraph & Tel. Co., Ltd.			536,556.77	16,102	16,102	5,722	743,317,284.84
Meadowgreen Tel. Co.			933.00	86.00	86.00	15	
Medford Tel. Co.			500.00	85.00	85.00	17	
Melbourne Tel. Co.			934.90	255.00	227.30	12	40.00
Middle River Tel. Co.			2,825.45	378.40	385.17	70	215.08
Middle River & Hunters Mt. Tel. Co.	749.56	749.56	149.90		149.90	15	18.00
Millford Tel. Co.	250.00	250.00	178.00		178.00	10	148.00
Millville & Rogers Hill Tel. Co.	550.00	550.00				15	
Mineville Tel. Co.	477.70	477.70	47.25		47.25	7	
Mount Pleasant Tel. Co.			250.00	5.00		2	
Murehville Tel. Co.	300.00	507.00	20.00		20.00	16	15.00
Musquodoboit Har. Tel. Co.			650.00	125.00	110.00	26	15.00
Musquodoboit Har. Tel. Co.			2,911.00	244.00	50.00	38	50.00
Nine Mile River and Rawdon Tel. Co.	580.00	580.00	35.00		35.00	7	
New Truro Road Tel. Co.	700.00	690.00	195.00		150.00	11	40.00
New Albany Tel. Co.			1,461.51	25.74	10.00	17	7.00
New Cornwall Tel. Co.	5,500.00	5,500.00	1,273.49	199.99	921.09	43	598.89
New Ross Tel. Co.	1,000.00	1,000.00	287.50		150.00	20	
New Tuskent Tel. Co.	4,000.00	4,000.00	70.00		70.00	49	20.00
New Victoria Tel. Co.			1,000.00	100.00	100.00	22	
North Shore Tel. Co.			415.00	25.00	25.00	14	10.00
North Wallace Tel. Co.	600.00	604.50	47.45	7.30	43.45	10	11.85
Ohio Tel. Co.	400.00	350.00	65.50	40.00	20.00	5	
Ostrea Tel. Co.	325.00	690.00	113.60	60.00	50.00	1	30.00
Paradise West Tel. Co.			1,302.82	5.00	5.00	16	5.00
Pleasant Valley Tel. Co.	411.87	411.87	17.58	20.00	32.58	9	7.00
Pleasant Harbour Tel. Co.	1,010.00	4,150.00	1,492.00	454.02	1,146.18	50	255.00
Port La Tour Tel. Co.	200.00	155.00	45.00		6.00	2	35.00
Port Lorne Tel. Co.			150.00	130.00	130.00	6	
Port Medway Tel. Co.	650.00	950.00	35.00	10.00	40.00	7	
Princeport Tel. Co.			400.00		70.00	15	
Pugwash Junction Tel. Co.			1,184.00	66.21	66.21	13	
River Dennis Tel. Co.	1,350.11	1,710.11	170.20	7.55	170.20	27	34.00
Riverside Tel. Co.			926.50	75.82	75.82	12	
Roseway River Tel. Co.	540.00	540.00	300.00	70.00	303.87	17	30.60
Sackville Tel. Co., Ltd.	368.00	368.00	160.70	13.26	156.46	14	
Salem Tel. Co.			1,001.50	25.00	25.00	18	
Saltsprings Tel. Co.	500.00	1,000.00	375.00	6.00	305.00	19	20.00
Sandford & Short Beach Tel. Co.			700.00	70.00	70.00	13	
Springfield Tel. Co.			365.00	72.45	72.45	9	
South Alton Tel. Co.			3,000.00	600.00	500.00	70	500.00
South River Tel. Co.			1,700.00	20.00		4	
South West Margaree Tel. Co.			20.00	2.50		14	
St. Andrews Tel. Co.			1,805.80	246.00	246.00	33	12.00

TABLE 6.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.—*Concluded.*

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.
								Central.	Magneto.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	No.	\$ cts.	No.
<i>Nova Scotia—Con.</i>										
St. Ann's Tel. Co.	Quarry St. Ann's.			600 00	158 00	45 40	20 91		17	
St. Marys Tel. Co.	Glencig	1,655 50	1,030 00	2,580 15	532 00	7 00	532 00		33	199 45
Surrettes Island Tel. Co.	Batties-Amraut	400 00		729 72	155 00	120 88	111 24		9	32 72
Toney River Tel. Co.	Toney Mills.	500 00		500 00	55 61		55 61		15	
Tor Bay Tel. Co.	Larrys River			910 00	66 25	32 00	40 00		25	
Union Tel. Co.	Blor Mountain	2,160 00		3,350 00	865 65		747 77		60	160 00
Upper Sackville Tel. Co.	Sackville			300 00	60 00		60 00		14	10 00
Wallace Bay Tel. Co.	Pugwash			380 00	60 00		60 00		12	
Wallace River Tel. Co.	Wallace Bay	550 00		550 00	3 00	15 00	8 25		19	2 00
Wallace Union Tel. Co.	Wallace Station			300 00	30 00		30 00		10	
Wentworth Valley Tel. Co.	Wentworth Station	250 00		350 00	161 60		15 00		26	10 00
West Doyce Tel. Co.	West Doyce			200 00	50 00	25 00	5 00		1	
Westerly Tel. Co.	River John	528 00		528 00	85 00	40 00	5 00		13	
Western Head Tel. Co.	Western Head			250 00	135 00		117 40		8	10 00
West Middle River Tel. Co.	W. Middle River			400 00	45 00		45 00		6	
West New Annan Tel. Co.	West New Annan	620 00		620 00	146 80	47 30	112 00		17	12 00
Westport & Digby Tel. Co.	Mink Cove	2,000 00		2,000 00	4,400 00	3,000 00	775 00		110	500 00
West River Tel. Co.	Saltsprings	452 00		2,809 00	517 20		56 00		68	36 00
West Wentworth Tel. Co.	Greenville Station	560 00	360 00	1,089 68	150 00		100 00		48	
White Rock Tel. Co.	White Rock	303 26		294 26	62 58		62 58		5	
	Total	1,926,019 00	1,503,390 00	4,008,660 83	368,967 37	233,790 56	587,486 74	16,402	9,462	914,325,396 02



TABLE 7.—Statement of Wire Equipment—Urban and Rural—Continued.

Name of Company.	Address.	Urban.			Rural.		
		Galvanized		Copper Wire.	Copper Wire.		Sub-marine.
		Single Wire.	Miles.	Over-head.	Under-ground.	Over-head.	Under-ground.
<i>Nova Scotia—Con.</i>							
Eastern Cole Harbour Tel. Co.	Dartmouth.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
East Inglesville Tel. Co.	Lawrencetown.	224.00					
East Leicester Tel. Co.	Oxford.	18.00					
East Pictou Tel. Co.	Little Harbour	17.00					
East River Tel. Co.	Springville.	50.00					
East Stewiacke Tel. Co.	East Stewiacke.	120.00	1-25				
East Victory Tel. Co.	East Victory.	8.50					
East Wentworth Tel. Co.	East Wentworth.	12.50					
Falls Tel. Co.	The Falls.	6.00					
Farmers Tel. Co.	Grafton.	48.00	2.00				
Forks Baddeck Tel. Co.	Baddeck.	445.00					
Fox Brook Tel. Co.	Baddeck Forks.	43.00					
Fox Harbour Tel. Co.	Stellarton.	11.00					
Gammons Point Tel. Co.	Fox Harbour Point.	18.00					
Glangarry Tel. Co.	Tor Bay.	10.00					
Goffs & Oldham Tel. Co.	Hopewell.	18.00					
Hodson Tel. Co.	Goffs.	11.00					
Harrison Rd. Tel. Co.	Grand Mira.	155.00					
Harmony Tel. Co., Ltd.	River John.	11.00					
Head of Wallace Bay Tel. Co.	Bedford.	32.00					
Heathbell & Plamfield Tel. Co.	Muscau.	8.00					
Heatherton Tel. Co.	Harmony.	15.00					
Hillsburn Tel. Co.	Pugwash.	7.50					
Hillside Tel. Co.	Scotsburn Sta.	26.00					
Hidden Tel. Co., Ltd.	Glassburn.	51.00					
Hubbards East Tel. Co.	Hillsburn.	6.50					
Indian Point Tel. Co.	Hillside.	28.00					
Isle Madam Tel. Co.	Hidden.	20.00					
Jeddore Tel. Co.	Halifax.	1.00					
Jordan Bay Tel. Co.	Indian Point.	3.00					
Jordan Tel. Co.	Arshebat.	16.00	2.00				
Judique Tel. Co.	Musquodoboit Har.	20.00					
Karsdale Tel. Co.	Jordan Bay.	11.25					
	Jordan Bay.	8.00					
	Judique North.	23.00					
	Granville Ferry.	14.00					

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Lake La Rose Tel. Co.	Annapolis Royal					16-00
Lakevale Tel. Co.	Lakevale					22-00
Lawrencetown Tel. Co.	Lawrencetown					34-00
Linacy Tel. Co.	New Glasgow					7-00
Lorne Tel. Co.	Hopewell					13-00
Lovatt Tel. Co.	Salt Springs					20-00
Malagash Tel. Co.	North Shore					12-00
Matland & Noel Tel. Co.	Noel					64-00
Maple Leaf Tel. Co.	Merigomish					160-00
Mapleton Tel. Co.	Leamington					34-00
Maritime Telegraph & Tel. Co., Ltd.	Halifax	1,566-00	2,287-00	12,880-00	117-00	7,403-00
Meadow Green Tel. Co.	St. Andrews					4,835-00
Medford Tel. Co.	Medford					25-00
Melbourne Tel. Co.	Arcadia					9-00
Middle River Tel. Co.	Westville					13-50
Middle River & Hunter's Mt. Tel. Co.	Hunter's Mountain					100-00
Milford Tel. Co.	Milford					21-50
Millsville & Roger's Hill Tel. Co.	Scotshorn					14-00
Mineville Tel. Co.	Mineville					20-00
Mount Pleasant Tel. Co.	Weatherly					4-00
Murchyville Tel. Co.	Murchyville					5-00
Musquodobit Har. Tel. Co.	Musquodobit Harbour					20-00
Nine Mile River & Rawdon Tel. Co.	Elmsdale					14-00
New Truro Road Tel. Co.	Tatamagouche					70-00
New Albany Tel. Co.	New Albany					11-25
New Cornwall Tel. Co.	New Cornwall					7-50
New Ross Tel. Co.	New Ross					29-00
New Tusket Tel. Co.	New Tusket					47-00
New Victoria Tel. Co.	Hartford					27-00
North Shore Tel. Co.	Arisaig					112-00
North Wallace Tel. Co.	Fox Harbour					66-00
Ohio Tel. Co.	Lower Ohio					20-00
Ostrea Tel. Co.	Ostrea Lake					16-00
Paradise West Tel. Co.	Bridgetown					14-00
Pleasant Valley Tel. Co.	Brookfield					13-00
Pleasant Harbour Tel. Co.	Pleasant Harbour					26-00
Port La Tour Tel. Co.	Baccaro					17-00
Port Lorne Tel. Co.	Port Lorne					80-00
Port Medway Tel. Co.	Port Medway					8-00
Princeport Tel. Co.	Princeport					5-00
Pugwash Junction Tel. Co.	Pugwash Junction					6-00
River Dennis Tel. Co.	River Dennis					7-00
Riverside Tel. Co.	Lower Steviacke					26-00
Roseway River Tel. Co.	Upper Ohio					38-50
Sackville Tel. Co., Ltd.	Sackville					22-00
Salem Tel. Co.	Emmett					6-50
Salt Springs Tel. Co.	Salt Springs					24-00
Sandford & Short Beach Tel. Co.	Sandford					17-50
Springfield Tel. Co.	Vernal					20-00
South Alton Tel. Co.	South Alton					25-00
South River Tel. Co.	Upper South River					14-00
						53-00
						2-50

TABLE 7.—Statement of Wire Equipment—Urban and Rural—Concluded.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized.		Copper Wire.		Copper Wire.		Submarine.	
		Single Wire.	Over head.	Under ground.	Submarine.	Single Wire.	Over head.	Under ground.	
<i>Nova Scotia—Con.</i>									
South West Margaree Tel. Co.	S. W. Margaree.								
St. Andrews Tel. Co.	Stewiacke.								
St. Ann's Tel. Co.	Quarry St. Ann's.								
St. Mary's Tel. Co.	Glendg.								
Surrey's Island Tel. Co.	Battles-Amrauld.								
Toney River Tel. Co.	Toney Mills.								
Tor Bay Tel. Co.	Larry's River.								
Union Tel. Co.	Blue Mountain.								
Upper Sackville Tel. Co.	Sackville.								
Wallace Bay Tel. Co.	Pugwash.								
Wallace River Tel. Co.	Wallace Bay.								
Wallace Union Tel. Co.	Wallace Station.								
Wentworth Valley Tel. Co.	Wentworth Station.								
West Doyer Tel. Co.	West Doyer.								
Westerly Tel. Co.	River John.								
Western Head Tel. Co.	Western Head.								
West Middle River Tel. Co.	W. Middle River.								
West New Annan Tel. Co.	West New Annan.								
Westport & Digby Tel. Co.	Mink Cove.								
West River Tel. Co.	Salt Springs.								
West Wentworth Tel. Co.	Greenville Station.								
White Rock Tel. Co.	White Rock.								
Total.....		1,866.00	2,787.00	12,880.00	11,989.00	117.00	11,668.50	4,870.75	41.00



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TABLE 8.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Employees, etc.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment.	Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.	
								Central.	Magneto		No.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			\$ cts.	
<i>New Brunswick.</i>											
Acadia Tel. Co.	Rogersville.	4,000 00	5,000 00	3,000 00	400 00		350 00		21	2	50 00
Adamsville Tel. Co., Ltd.	Adamsville.	3,000 00		1,500 00	150 00	25 00	55 00		13	1	30 00
Belleisle Bay Tel. Co.	Hatfields Point	1,957 00	2,700 00	1,957 00	9 13	7 52	15 00		34	1	15 00
Berry's Mills Tel. Co.	Berry's Mills.	750 00		750 00	166 40	24 30	25 00		16	1	25 00
Blissville & Petersville Tel. Co.	Hoyt Station	2,500 00		2,050 00	400 00	40 00	155 88		30	2	120 00
Cambridge Tel. Co., Ltd.	Jemseg	1,350 00	600 00	2,050 00	256 85		100 00		11		
Canterbury & North Lake Tel. Co.	Fosterville	2,286 66		2,300 00	547 57		428 97		37	4	290 11
Consolidated Tel. Co., Ltd.	Bath	13,387 39		13,387 39	3,514 33		2,011 65		350	4	1,070 00
Corn Hill Tel. Co.	Corn Hill			768 00	6 20		6 20		27		
Dorn Ridge Tel. Co.	Burt's Corners			175 00					13		
Farmers' Tel. Co., Ltd.	Hartland	26,421 64		39,298 55	6,297 41		1,268 07		570	9	3,184 00
Flume Ridge Tel. Co.	Flume Ridge	400 00		400 00					14		
Grand Manan Tel. Co., Ltd.	Grand Manan	6,250 00		7,500 00	2,514 87	207 00	1,563 82		155	3	950 00
Jerusalem Mercantile Tel. Co.	Polleyhurst	1,000 00		992 53	125 70		37 15		40	2	34 85
Kingston Peninsula Tel. Co., Ltd.	Long Reach.	3,550 00		4,747 95	1,052 55	287 55	473 71		57	3	325 00
Morehouse-Blackville Tel. Co., Ltd.	Morehouse.	1,000 00		1,000 00	200 00		50 00		20	1	50 00
N. B. Coal & Railway Co.	Fredelieton				25 00				7		
N. B. Tel. Co., Ltd.	St. John	1,423,460 00	45,500 00	2,081,530 85	363,809 21	189,608 61	347,057 92	11,353	7,369	461	211,117 24
Norton & Springfield Tel. Co.	Norton	1,250 00		1,250 00	5 00		5 00		25		
Sherwood Tel. Line	Hillsboro	680 00		680 00	72 00		72 00		14		
South Branch Tel. Co.	Penobscotis.	900 00		900 00	12 00	4 00	10 00		22		
St. Martin's Rv. Co. Tel. Line	St. John				150 36	55 36	108 36		5		
St. Martin's Tel. Co., Ltd.	St. John	3,400 00		3,720 00	1,613 68		627 90		9	1	203 00
Sullivan Tel. Line.	Bonny River								2		
Tracy Tel. Co.	Tracy Station	1,000 00		1,000 00	150 00		50 00		25	1	20 00
Wellford & Hamstead Tel. Co.	Wellford	1,340 00		2,074 00	457 00		209 00		41		
West Isles Tel. Co.	Lord's Cove	3,500 00	4,000 00	4,000 00	1,560 00	300 00	1,000 00		95	4	800 00
Wickham & Springfield Tel. Co.	McDonald's Point	1,050 00		1,503 80	117 27	29 00	31 00		30	2	26 50
York & Carleton Tel. Co.	Debec	7,000 00		8,000 00	1,400 00	100 00	700 00		140	2	700 00
York & Charlotte Tel. Co., Ltd.	Harvey Station	1,500 00		500 00	64 90	64 90	100 00		90	1	100 00
Young's Cove Road Tel. Co.	Young's Cove Road	1,000 00		2,000 00	330 00	15 00	265 00		22	3	175 00
Total.....		1,512,252 69	57,800 00	2,180,325 07	383,438 03	190,767 94	359,801 63	11,353	9,304	508	219,585 70

TABLE 9.—Statement of Wire Equipment—Urban and Rural.

Name of Company.	Address.	Urban.			Rural.				
		Galvanized		Copper Wire.	Galvanized		Copper Wire.		
		Single Wire.	Over-head.	Under-ground.	Sub-marine.	Single Wire.	Over-head.	Under-ground.	Sub-marine.
<i>New Brunswick.</i>									
Acadia Tel. Co.	Rogersville	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Adamsville Tel. Co., Ltd.	Adamsville				50-00				
Belleisle Bay Tel. Co.	Hatfield Point				15-00				
Berry's Mills Tel. Co.	Berry's Mills.				22-00				
Blossville & Petersville Tel. Co.	Hoyt Station.				10-00				
Cambridge Tel. Co., Ltd.	Jemseg				48-00				3-75
Canterbury & N. Lake Tel. Co.	Posterville				21-00				
Consolidated Tel. Co., Ltd.	Bath				80-00				
Corn Hill Tel. Co.	Corn Hill				300-00				
Dorn Ridge Tel. Co.	Barb's Corners				18-00				
Farmers' Tel. Co.	Hartland				8-00				
Flume Ridge Tel. Co.	Flume Ridge				639-00	11-00			
Grand Manan Tel. Co., Ltd.	Grand Manan				120-00				
Kingston Mercantile Tel. Co.	Pulleyhurst				40-00				
Kingston Peninsula Tel. Co., Ltd.	Long Reach				144-00				
Morehouse-Blackville Tel. Co., Ltd.	Morehouse				25-00				
N. B. Coal & Railway Co.	Frederton				45-00				26-00
N. B. Tel. Co., Ltd.	St. John	6,758-89	776,856,222-59	6,287-80	41,804,358-86	4,525-06			
Norton & Springfield Tel. Co.	Norton				30-00				
Sherwood Tel. Line	Hillsboro				45-00				
South Branch Tel. Co.	Pendobiquis				11-00				
St. Martin's Ry. Co. Tel. Line	St. John				30-00				
St. Martin's Tel. Co., Ltd.	St. John				47-00	3-00			
Sullivan Tel. Line	Bonny River				6-00				
Tracy Tel. Co.	Tracy Station				20-00				
Wellsford & Haunstead Tel. Co.	Wellsford				62-00				
West Isles Tel. Co.	Lord's Cove				40-00	20-00			35-00
Wickham & Springfield Tel. Co.	McDonald's Point				40-00				
York & Carleton Tel. Co.	Debec				45-00				
York & Charlotte Tel. Co., Ltd.	Harvey Station				85-00				
Young's Cove Road Tel. Co.	Young's Cove Road				14-00				
Total		6,758-89	776,856,222-59	6,287-80	41,804,433-86	4,559-06			64-75



TABLE II.—Statement of Wire Equipment—Urban and Rural.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized		Copper Wire.		Galvanized		Copper Wire.	
		Single Wire.	Miles.	Over-head.	Under-ground.	Single Wire.	Miles.	Over-head.	Under-ground.
<i>Manitoba.</i>									
Bidford Farmers Line.	Deloraine.								
Brett Tel. Co.	Dugald.					20 00			
Clearwater Tel. Co., Ltd.	Clearwater.					2 50			
Coombs and Bryson Tel. Co.	Deloraine.					90 00			
Dugald Tel. Co., Line 23.	Dugald.					18 50			
Edie-Morrison Tel. Co.	Dugald.					10 00			
Gowancroft Tel. Co.	Pilot Mound.					9 00			
Independent Tel. Co.	Dugald.					2 50			
Lonsboro Tel. Co.	Pilot Mound.					12 50			
Louise Tel. Co.	Crystal City.	25 00		17 00		155 00			
Louise Tel. Assn.	Snowflake.					58 00			
Macdonald Tel. Co., Municipality of.	Sanford.					297 00		1 00	
Manitoba Coyt. Telephones.	Winnipeg.					46,572 00	13,646 00		
Manitoba Tel. Co.	Winnipeg.					22 00			
Manitoba Municipal Tel. Co.	Manitoba.					900 00	12 00		
Mountain Side Tel. Co.	Deloraine.			200 00		56 00			
Municipal Tel. Co.	Oak Bank.					5 00			
Oak Bank Tel. Co.	Dugald.					25 00			
Percy Tel. Co.	Dugald.					2 00			
Pipstone Municipal Tel. Co.	Reston.	3 00		23 00		1,067 00			
Plymouth Tel. Co.	Plympton.					12 50			
Prairie Grove Tel. Co.	Meadow Vale.					14 00			
Robertson Tel. Co.	Boissevain.					1 60			
Rosewood and St. Ann's Tel. Co.	St. Ann's.					2 00			
South Transcona Tel. Co.	Transcona.					8 50			
Steinbach Tel. Co.	Steinbach.					2 00			
Strathcona Municipal Tel. Co.	Belmont.			25 00		201 00			
St. Rose du Lac Tel. Co.	St. Rose du Lac.					2 00			
Sutherland Tel. Co.	Winnipeg.					7 00			
Thirlstane Tel. Co.	Deloraine.					10 00			
Union Farmers' Tel. Line.	Neepawa.					9 00			
Wallace Municipal Tel. Co.	Plympton.					7 00			
Wilson Tel. Co.	Virden.					1,200 00			
Winkler Tel. Co.	Dugald.					5 00			
	Winkler.					14 00			



TABLE 12.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.

Name of Company.	Address.	Capital Stock.	Paid-up Debt.	Cost Property and Equipment.		Revenue.		Long Distance Receipts.		Operating Expenses.		Number of Telephones.		Employees and Remuneration.	
				\$	cts.	\$	cts.	\$	cts.	\$	cts.	Central.	Magneto.	No.	Amount.
<i>Alberta.</i>															
Crossfield & Samstowen Tel. Co.	Crossfield.....	1,692 00		1,401 00	11 00	11 00				30 00		17	1	30 00	
Govt. of Alberta Tel. Lines.	Edmonton.....		9,340,499 98	9,466,454 03	670,329 62	162,599 56	595,748 63				11,998	16,982	163,403	228 03	
Edmonton, City of, Tel. Dept.	Edmonton.....		1,916,710 52	1,768,633 31	231,457 02	1,749 27	65,240 34			8,269			55	54,857 89	
Olds Independent Tel. Co.	Olds.....	5,000 00		1,400 00	109 00	109 00				100 00		17			
North Western Tel. Co., Ltd.	Lake Saskatchewan.....	24,700 00		33,778 35	481 00	481 00	266 45			480 00		60	2	480 00	
Runworth Tel. Co.	Acme.....	1,462 00		1,410 00	450 00	450 00				150 00		23	1	15 00	
Shandro Tel. Co., Ltd.	Shandro.....	6,000 00		6,000 00	450 00	450 00				180 00		28	1	120 00	
Western General Electric Co., Ltd.	Red Deer.....	91,200 00		25,340 60	8,120 31	8,111 68	3,411 68			9,067 10		268	7	3,537 38	
Total.....		130,054 00	11,256,940 50	10,998,850 29	891,416 95	167,726 96	669,005 07			20,267	17,395	530	462,267 80		

\*Automatic.

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TABLE 13.—Statement of Miles of Wire Equipment—Urban and Rural.

Name of Company.	Address.	Urban.				Rural.					
		Galvanized		Copper Wire.		Galvanized.		Copper Wire.			
		Single Wire.	Miles.	Over-head.	Under-ground.	Sub-marine.	Single Wire.	Miles.	Over-head.	Under-ground.	Sub-marine.
<i>Alberta.</i>											
Crossfield & Samstoun Tel. Co.	Crossfield.										
Govt. of Alberta Tel. Lines.	Edmonton.	3,404-00		25,624-00	23,726-00			18-50			
Edmonton, City of; Tel. Dept.	Edmonton.			16,283-00	34,156-00			55,988-00	2,056-00		
Olds Independent Tel. Co.	Olds.							29-00	290-00		
North Western Tel. Co., Ltd.	Lake Saskatchewan.							40-00			
Rumworth Tel. Co.	Aerne.							75-00	3-00		
Shandro Tel. Co., Ltd.	Shandro.	165-00	12-00	206-00				27-00			
Western General Electric Co., Ltd.	Red Deer.							24-00			
<b>Total</b>		3,569-00	706-00	42,143-00	57,882-00			36,201-50	2,406-00		

TABLE 14.—Statement of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost Property and Equipment		Revenue.	Long Distance Receipts.	Operating Expenses.	Number of Telephones.		Employees and Remuneration.
				\$	cts.				Central.	Magneto.	
<i>British Columbia.</i>											
British Columbia Tel. Co., Ltd.	Vancouver	2,500,000 00	2,433,333 33	6,222,189 85	1,217,680 38	172,284 11	1037,476 96	38,065	1,005	843	602,358 36
Chilliwack Tel. Co.	Chilliwack	45,743 00		59,907 25	11,773 36	1,071 48	6,361 29		701	8	4,922 35
Creston Power, Light & Tel. Co., Ltd.	Creston	21,700 00		9,381 56	1,905 61		1,088 22		96	4	888 00
Delta Tel. Co.	Leather	11,800 00		14,692 86	3,820 00		2,225 00		188	2	1,255 00
Edgewood Tel. Co.	Edgewood	845 00		2,229 00	192 00		114 20		17	2	82 40
Fort George & Alberta Tel. & E.L. Co.	Prince George	40,900 00		52,137 12	6,010 62		5,728 35		162	4	3,726 15
Kootenay Tel. Lines, Ltd.	Cranbrook	126,580 00	31,000 00	170,127 28	19,773 67	15,888 32	26,235 34		1,230	19	14,127 70
Mission City Tel. Co.	Mission City	11,780 00		21,413 11	4,532 86	117 30	3,089 95		209	6	1,869 80
Okanagan Tel. Co., Ltd.	New Westminster	400,500 00		397,781 16	12,580 21	10,111 19	23,464 94		1,744	30	16,817 34
Prince Rupert Mun. Tel. System	Prince Rupert		40,000 00	52,524 46	23,800 52		14,634 24	684	5	12	9,787 20
Queensland Tel. Co.	Queensland	10,565 00		11,661 46	848 70	1 20	848 56		40	2	607 50
Revelstoke, Trout Lake & Big Bend Tel. Co.	Revelstoke	52,616 31		43,379 23	8,942 72	69 20	4,940 29		294	6	2,198 75
Sorrento Tel. Co.	Notch Hill			909 00	96 00		25 00		10		
Ucluellet Tel. Co.	Ucluellet	4,085 00		1,351 55	147 00		61 81		25	1	47 00
Total		3,224,054 31	2,504,333 33	7,059,606 89	1,345,073 65	199,848 80	126,264 15	38,719	8,729	939	658,387 55
<i>Yukon Territory.</i>											
Yukon Tel. Syndicate	Dawson	65,000 00		170,179 78	32,363 29		16,439 67		300	7	9,934 00



TABLE 15.—Statement of Miles of Wire Equipment—Urban and Rural.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized		Copper Wire.		Galvanized.		Copper Wire.	
		Single Wire.	Submarine.	Over-head.	Under-ground.	Single Wire.	Submarine.	Over-head.	Under-ground.
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
<i>British Columbia.</i>									
British Columbia Tel. Co., Ltd.	Vancouver.	7,240 00	2,795 00	76,732 00	43,800 00			604 00	881 00
Chilliwack Tel. Co.	Chilliwack.	135 00		289 00	11 00				14 00
Creston Power, Light & Tel. Co., Ltd.	Creston.	200 00			25 00	1 00			
Delta Tel. Co.	Ladner.	5 00	2 00			0 50			
Fidgewood Tel. Co.	Fidgewood.								
Fort George & Alberta Tel. & El. Co.	Prince George.	350 00							
Kootenay Tel. Lines, Ltd.	Cranbrook.	655 00						352 00	
Mission City Tel. Co.	Mission City.								
Okanagan Tel. Co., Ltd.	New Westminster.	758 50	19 17	5,737 00					
Prince Rupert Mun. Tel.	Prince Rupert.	109 00	64 00	1,020 00	3 00				6 25
Quesnel Tel. Co.	Quesnel.	14 00							
Revelstoke, Trout Lake & Big Bend Tel. Co.	Revelstoke.							136 00	129 00
Sorrento Tel. Co.	Notch Hill.								
Uchelet Tel. Co.	Uchelet.								
Total.		9,466 50	2,880 17	83,778 00	43,839 00	1 50		1,092 00	890 25
<i>Yukon Territory.</i>									
Yukon Tel. Syndicate.	Dawson.	190 00		42 00					
								48 00	



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TABLE 17.—Statement of Miles of Wire Equipment—Urban and Rural.

Name of Company.	Address.	Urban.				Rural.			
		Galvanized		Copper Wire.		Galvanized		Copper Wire.	
		Single Wire.	Over-head.	Under-ground.	Sub-marine.	Single Wire.	Over-head.	Under-ground.	Sub-marine.
<i>Prince Edward Island.</i>									
Argyle Tel. Co.	Strathgartney	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Augustine Cove & Tyron Tel. Co.	Cape Traverse				25 00				
Bangor Tel. Co.	Bangor				25 00				
Bear River & St. Margarets Tel. Co.	St. Margarets				14 00				
Belmont Tel. Co.	Belmont				36 50				
Casampec Tel. Co.	Casampec				32 00				
Cavendish Tel. Co.	Bay View				19 00				
Cherry Hill & Hillshow Head Tel. Co.	Cherry Hill				13 00				
Darnley Tel. Co.	Darnley				17 50				
Ellerslie-Conway Tel. Co.	Bideford				44 00				
Grand River Tel. Co.	Grand River				30 00				
Greenwich & Cable Head Tel. Co.	Cable Head West				18 00				
Hamilton Tel. Co.	Hamilton				17 00				
Hope River Tel. Co.	St. Anns				4 00				
Kingston & Clyde River Tel. Co.	North River				24 00				
Lunkletter Tel. Co.	Summerside				8 50				
Lot 7 Co-op. Tel. Co.	Cape Wolf				26 50				
Lower Tyron Tel. Co.	Victoria				16 00				
Malpeque Tel. Co.	Malpeque				10 00				
Marie Midgell & Milburn Tel. Co.	Morell				21 00				
Mt. Albion Tel. Line.	Mount Albion				10 00				
Mt. Carmel & Egmont Bay Tel. Co.	Wellington				24 00				
Muddy Creek Tel. Co.	Muddy Creek				12 50				
Newport-Launching Tel. Co.	St. Georges				18 00				
Northam Pt. Hill & Arlington Tel. Co.	Northam				20 00				
North Shore Tel. Co.	St. Peter's Bay				7 50				
O'Leary Brae & West Point Tel. Co.	Coleman				33 00				
Prince Edward Island Tel. Co.	Charlottetown	83 56	110 42	1,144 26	842 16			987 34	
Savage Harbour Tel. Co.	French Village				20 00				
Sturgeon Tel. Co.	Sturgeon				4 00				
West River Tel. Co.	Canoe Cove				10 00				
York Point Tel. Co.	Cornwall				36 00				
Total		83 56	110 42	1,144 26	1,427 66			987 34	

TABLE 18.—Income Account for the year ended June 30, 1917.

Name of Telephone Company.	Gross Revenue.		Operating Expenses.		Net Operating Revenue.		Additions.				Total.		Gross Corporate Income.			
	\$	cts.	\$	cts.	\$	cts.	Outside Operations.	Rents.	From Securities Held.	Other Income.	\$	cts.	\$	cts.		
<i>Nova Scotia.</i>																
Maritime Telegraph & Tel. Co., Ltd.	738,693	77	564,213	58	174,480	19	14,038	70	8,796	02	5,680	50	6	13	203,001	54
<i>New Brunswick.</i>																
New Brunswick Tel. Co., Ltd.	536,400	39	327,266	86	209,133	53	13,838	60	8,371	59			8,735	84	240,079	56
<i>Prince Edward Island.</i>																
Prince Edward Island Tel. Co., Ltd.	63,737	96	51,126	64	12,611	32							3,846	73	16,458	0
<i>Quebec.</i>																
Bell Telephone Co., Ltd.	10,689,867	00	5,748,425	00	4,941,442	00			303,589	00	87,368	00	390,957	00	5,332,399	00
Charlevoix & Saguenay Tel. Co., Ltd.	16,463	08	9,711	86	6,751	22			100	00					6,851	22
Eastern Townships Tel. Co., Ltd.	45,514	17	34,002	94	11,511	23									11,511	23
Gaspe & Bonaventure Tel. Co., Ltd.	13,102	46	7,653	55	5,448	91									5,448	91
Kamouraska Tel. Co., Ltd.	26,817	67	14,972	73	11,844	94									11,844	94
Megantic People's Tel. Co., Ltd.	9,129	00	5,523	44	3,605	56					346	50			3,952	06
National Tel. Co., Ltd.	38,814	31	27,503	47	11,310	84									11,310	84
Saguenay-Quebec Tel. Co., Ltd.	21,512	71	11,469	69	10,043	02			187	96					10,230	98
<i>Manitoba.</i>																
Macdonald Tel. Co.	5,806	23	3,088	47	2,717	76									2,717	76
Strathcona Tel. Co.	6,680	96	3,172	24	3,508	72									3,508	72
<i>British Columbia.</i>																
British Columbia Tel. Co., Ltd.	1,389,964	49	997,476	96	392,487	53									392,487	53
Chilliwack Tel. Co., Ltd.	14,263	55	4,307	70	9,955	85			200	00			1,381	29	11,537	14
Kootenay Telephone Lines, Ltd.	35,681	99	26,235	34	9,426	65									9,426	65
Okanagan Tel. Co.	52,394	40	23,464	94	29,529	46									30,063	95
Prince Rupert Tel. Co.	23,800	52	14,634	23	9,166	28									9,166	28
<i>Alberta.</i>																
City of Edmonton Tel. Dept.	233,206	29	65,240	34	167,965	95									167,965	95
Western General Electric Co., Ltd.	11,551	99	9,000	35	2,551	64									2,551	64

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Ahmie Tel. Co., Ltd.	728 90	351 17	377 73					377 73
Becton Tel. Co., Ltd.	9,086 40	8,556 67	539 73					539 73
Bethesda and Stouffville Tel. Co., Ltd.	11,058 95	5,767 03	5,291 92					6,621 13
Blenheim and South Kear Tel. Co., Ltd.	8,079 34	4,275 19	3,804 15		1,329 21			3,804 15
Brussels, Morris and Grey Tel. Co.	10,814 88	6,163 98	4,650 90					4,650 90
Dunville Consolidated Tel. Co., Ltd.	20,253 02	13,517 02	6,736 00		3,324 37			10,060 37
Erie Tel. Co., Ltd.	18,064 13	10,400 94	7,663 19		116 93			7,780 12
Goderich Rural Tel. Co., Ltd.	8,017 22	3,984 33	4,032 89					4,032 89
Ingersoll Tel. Co., Ltd.	21,103 58	12,527 31	8,578 27	180 00				8,758 27
Metcalfe Tel. Co., Ltd.	4,625 00	2,150 00	2,475 00					2,475 00
Monk Rural Tel. Co., Ltd.	6,822 28	5,148 86	1,673 42					1,673 42
Norfolk County Tel. Co., Ltd.	25,722 27	13,982 29	11,739 98					11,739 98
Schomberg Tel. Co., Ltd.	3,988 00	2,091 50	1,896 50	22 00				1,918 50
Temiskaming Tel. Co., Ltd.	42,822 71	28,933 11	13,859 60					13,939 60
Welland County Tel. Co., Ltd.	13,973 46	7,121 03	6,852 43	422 23				7,274 66
Total.....	14,179,205 08	8,073,460 77	6,103,744 31	27,877 30	18,138 80	309,469 50	106,870 49	6,568,160 40

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TABLE 18.—Income Account for the year

Name of Telephone Company.	Deductions.			
	Taxes.	Interest on Bonds.	Other Deductions.	Total Deductions.
<i>Nova Scotia.</i>				
Maritime Telegraph & Tel. Co., Ltd.	\$	cts.	\$	cts.
			84,000 00	84,000 00
<i>New Brunswick.</i>				
New Brunswick Tel. Co., Ltd.	19,791 06	2,487 50		22,278 56
<i>Prince Edward Island.</i>				
Prince Edward Island Tel. Co., Ltd.	341 83	3,000 00		3,341 83
<i>Quebec.</i>				
Bell Telephone Co., Ltd.	386,754 00	557,450 00		944,204 00
Charlevoix & Saguenay Tel. Co., Ltd.		2,883 17		2,883 17
Eastern Townships Tel. Co., Ltd.		9,042 00		9,042 00
Gaspé & Bonaventure Tel. Co., Ltd.		840 00		840 00
Kamouraska Tel. Co., Ltd.		4,591 33	263 90	4,855 23
Megantic Peoples Tel. Co., Ltd.		750 00	1,238 26	1,988 26
National Tel. Co., Ltd.		7,540 00		7,540 00
Saguenay-Quebec Tel. Co., Ltd.	364 39	10,220 00	4,183 04	14,767 43
<i>Manitoba.</i>				
Macdonald Tel. Co.		1,800 00		1,800 00
Strathcona Tel. System		1,560 00	280 00	1,840 00
<i>British Columbia.</i>				
British Columbia Tel. Co., Ltd.		109,499 99	40,000 00	149,499 99
Chilliwack Tel. Co., Ltd.	337 36	693 66	1,721 10	2,752 12
Kootenay Telephone Lines, Ltd.	210 75	2,500 00		2,710 75
Okanagan Tel. Co.	1,362 61		7,937 53	9,300 14
Prince Rupert Tel. Co.		5,434 72	2,500 00	7,934 72
<i>Alberta.</i>				
City of Edmonton Tel. Dept.		91,909 47		91,909 47
Western General Electric Co., Ltd.	66 75			66 75
<i>Ontario.</i>				
Almie Tel. Co., Ltd.	115 00	178 00		293 00
Beeton Tel. Co., Ltd.	152 39		100 00	252 39
Bethesda and Stouffville Tel. Co., Ltd.	192 31	942 97	476 16	1,611 44
Blenheim and South Kent Tel. Co., Ltd.	83 90	509 23		593 13
Brussels, Morris and Grey Tel. Co.		1,858 46		1,858 46
Dunville, Consolidated Tel. Co., Ltd.	337 91	1,404 00	380 97	2,122 88
Erie Tel. Co., Ltd.	280 39	1,046 01		1,326 40
Goderich, Rural Tel. Co., Ltd.	50 70	2,391 86		2,442 56
Ingersoll Tel. Co., Ltd.	192 26	2,100 00	1,321 76	3,614 02
Metcalf Tel. Co., Ltd.			181 00	184 00
Monk Rural Tel. Co., Ltd.			321 95	321 95
Norfolk County Tel. Co., Ltd.	184 21	644 78	35 15	864 14
Schomberg Tel. Co., Ltd.	20 00	561 00		581 00
Temiskaming Tel. Co., Ltd.	874 25	1,156 36	9,510 84	11,541 45
Welland County Tel. Co., Ltd.	233 55	727 92	105 20	1,066 67
Total	411,945 62	909,722 43	70,559 86	1,392,227 91

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ended June 30, 1917—Concluded.

Net Corporate Income.		Disposition of Net Income.					Balance to Profit and Loss.	
Income.	Loss.	Dividends.		Sinking Fund.	Reserve.	Total.	Cr.	Dr.
		Common Stock.	Preferred Stock.					
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
119,001 54		51,000 00	60,000 00			111,000 00	8,001 54	
217,801 00		112,951 40			103,990 17	216,941 57	859 43	
13,116 22		7,205 25				7,205 25	5,910 97	
4,388,195 00		1,440 000 00		2,310 000 00	71,635 00	3,821,635 00	566,560 00	
3,968 05					3,000 00	3,000 00	968 05	
2,469 23				3,600 00		3,600 00		1,130 77
4,608 91							4,608 91	
6,989 71				6,989 71		6,989 71		
1,963 80					1,930 63	1,930 63	34 17	
3,770 84					4,413 72	4,413 72		642 88
	4,536 45							4,536 45
917 76							917 76	
1,668 72				1,112 10		1,112 10	556 62	
242,987 54		120,000 00	60,000 00	20,931 53	40,000 00	240,931 53	2,056 01	
8,785 02		4,574 30			4,000 00	8,574 30	210 72	
6,715 90							6,715 90	
20,763 81		16,019 39			15,203 75	31,223 14		10,459 33
1,231 56							1,231 56	
76,056 48				54,545 74	11,939 90	66,485 64	9,570 84	
2,464 89				485 70	1,979 19	2,464 89		
84 73							84 73	
287 34							287 34	
5,009 69		2,058 40			1,401 70	3,460 10	1,549 59	
3,211 02		1,505 00			1,706 02	3,211 02		
2,792 44							2,792 44	
7,937 49		3,150 00	1,846 38			4,996 38	2,941 11	
6,453 72		1 60			2,415 05	2,416 65	4,037 07	
1,590 33		296 25				296 25	1,294 08	
5,144 25		2,172 00	273 00		5,195 01	7,640 01		2,495 76
2,291 00		1,790 00				1,790 00	501 00	
1,351 47					1,300 00	1,300 00	51 47	
10,875 84		3,461 00			3,500 00	6,964 00	3,911 81	
1,327 50		1,333 61				1,333 64	3 86	
2,418 15		4,009 92				4,009 92		1,591 77
6,207 99		2,899 50			3,108 92	6,008 42	199 57	
5,180,468 94	4,536 45	1,774,430 65	122,119 38	2,397,664 78	276,719 06	4,570,933 87	625,855 58	20,856 96

TABLE 19.—Statement, by Provinces, of Capital, Cost, Revenue, Operating Expenses, Number of Telephones, Employees, etc.

Province	Capital Stock.		Funded Debt.		Cost of Property and Equipment.		Revenue.		Long Distance Receipts.		Operating Expenses.		Number of Telephones.		Employees and Remuneration.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	Central.	Magneto.	No.	Amount.	
Nova Scotia	1,926,019	00	1,503,390	00	4,008,669	83	568,967	37	233,790	56	587,486	74	16,102	9,162	914	325,346	02
New Brunswick	1,512,252	69	57,800	00	2,189,325	07	385,438	03	190,767	91	359,801	63	11,353	9,304	508	219,585	70
Prince Edward Island	155,805	31	51,100	00	245,505	52	10,351	79	25,083	20	53,017	95	1,360	1,127	90	22,341	56
Quebec	19,425,983	53	11,891,340	23	43,051,983	19	8,509,663	67	2,978,743	19	6,388,636	11	72,622	30,695	3,988	2,103,876	21
Ontario	2,179,729	38	2,278,837	19	5,790,178	21	1,036,113	92	97,912	95	723,386	61	149,854	123,643	7,383	3,739,602	71
Manitoba	26,130	29	11,106,941	87	11,142,604	34	1,543,257	64	372,004	09	1,459,558	52	31,110	18,737	1,487	935,537	28
Saskatchewan	831,339	00	8,994,681	68	9,792,579	68	1,204,057	62	.....	.....	711,829	37	11,383	32,274	644	405,664	40
Alberta	130,054	00	11,256,910	50	10,998,850	29	891,116	95	467,726	96	669,005	07	29,267	17,395	530	462,267	80
British Columbia	3,224,054	34	2,504,333	33	7,059,666	80	1,345,073	65	199,848	80	1,126,264	15	38,719	8,729	939	658,387	55
Yukon	65,000	00	.....	.....	170,179	78	32,363	29	.....	.....	16,439	67	.....	300	7	9,934	00
Total	29,476,367	51	49,645,334	80	94,469,533	80	15,556,403	93	4,565,877	69	12,095,425	82	352,770	251,366	16,490	8,882,593	26



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TABLE 20.—Statement, by Provinces, of Miles of Equipment—Urban and Rural.

Province.	Urban.						Rural.					
	Galvanized.			Copper Wire.			Galvanized.			Copper Wire.		
	Single Wire.	Single Wire.	Submarine.	Overhead.	Underground.	Submarine.	Single Wire.	Single Wire.	Overhead.	Underground.	Submarine.	
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
Nova Scotia.....	1,866-00	2,787-00	117-00	12,880-00	11,989-00	117-00	11,668-50	4,870-75	417-50		41-00	
New Brunswick.....	6,758-89	776-85	44-80	6,222-59	6,287-80	44-80	6,433-86	4,559-06			64-75	
Prince Edward Island.....	83-56	110-42		1,144-26			1,427-66	987-34				
Quebec.....	4,137-00	481-00		50,820-00	196,365-00	285-50	55,533-70	2,367-50	1,878-00	2-50	10-25	
Ontario.....	3,283-00	11,140-25	505-00	138,350-67	299,760-50	505-00	189,541-35	1,708-25	2,275-42	2-25	18-00	
Manitoba.....	28-00	528-00		36,920-00	73,359-00		52,014-50	13,638-00	1-00			
Saskatchewan.....	3,559-00			41,400-00	30,041-00		76,115-00	35,000-00				
Alberta.....	3,569-00	706-00		42,113-00	57,882-00		36,201-50	12,406-00				
British Columbia.....	9,466-50	2,880-17	1-50	83,778-00	43,839-00	1-50	4,919-65	5,059-00	1,092-00	143-00	830-25	
Yukon.....	190-00			42-00			319-00	48-00				
Total.....	32,940-95	19,409-69	953-80	413,670-52	719,553-30	953-80	434,174-72	80,663-90	5,663-92	147-75	1,024-25	

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